Monthly Energy Review

The Monthly Energy Review (MER) presents an overview of the Energy Information Administration's recent monthly energy statistics. The statistics cover the major activities of U.S. production, consumption, trade, stocks, and prices for petroleum, natural gas, coal, electricity, and nuclear energy. Also included are international energy and thermal and metric conversion factors.

Publication of this report is in keeping with responsibilities given to the Energy Information Administration (EIA) in Public Law 95–91 (Department of Energy Organization Act), which states, in part, in Section 205(a)(2), that:

"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 *MER* is intended for use by Members of Congress, Federal and State agencies, energy analysts, and the general public. EIA welcomes suggestions from readers regarding data series in the *MER* and in other EIA publications.

Related publications: Other monthly EIA reports are *Petroleum Supply Monthly, Petroleum Marketing Monthly, Natural Gas Monthly, Electric Power Monthly, and International Petroleum Statistics Report.*

Readers of the *MER* may also be interested in EIA's *Annual Energy Review*, where many of the same data series are provided annually beginning with 1949. Contact our National Energy Information Center at 202-586-8800 for more information.

Ordering Information

Complimentary subscriptions and single issues are available to certain groups of subscribers, such as public and academic libraries; Federal, State, local, and foreign governments; EIA survey respondents; and the media. For further information and for answers to questions on energy statistics, contact:

National Energy Information Center, EI-30
Energy Information Administration
Forrestal Building, Room 1E-238
Washington, DC 20585
202-586-8800
Fax: 202-586-0727
Internet E-Mail: infoctr@eia.doe.gov
TTY: For people who are deaf
or hard of hearing: 202-586-1181
9 a.m. to 5 p.m., eastern time, M-F

This publication and other EIA publications may be **purchased** from the Superintendent of Documents, U.S. Government Printing Office. Orders may be directed to:

Superintendent of Documents
U.S. Government Printing Office
P.O. Box 371954
Pittsburgh, PA 15250-7954
202-512-1800
Fax: 202-512-2250
7:30 a.m. to 5:00 p.m., eastern time, M-F

The Monthly Energy Review (ISSN 0095-7356) is published monthly by the Energy Information Administration, 1000 Independence Avenue, SW, Washington, DC 20585, and sells for \$98.00 per year (price subject to change without advance notice). Periodical postage paid at Washington, DC 20066-9998, and additional mailing offices. POSTMASTER: Send address changes to Monthly Energy Review, Energy Information Administration, El-30, 1000 Independence Avenue, SW, Washington, DC 20585-0623.

Electronic Access

The *Monthly Energy Review* is available on the Energy Information Administration's website in a variety of formats:

- ASCII text, Lotus (wk1), and Excel (XLS) versions of the data tables (http://www.eia.doe.gov/mer)
- A portable document format (pdf) file of the entire report including text, tables, and graphs

(http://www.eia.doe.gov/bookshelf/multi.html)

• ASCII comma delimited files (previously available on diskettes) (ftp://ftp.eia.doe.gov/pub/energy.overview/monthly.energy/current.mer)

For information about the Energy Info Disc, call 1-800-STAT-USA. This CD-ROM contains over 200 reports, databases, and models.

Timing of Release: *MER* data are normally released in the afternoon of the third-to-last workday of each month and are usually available electronically the following day.



Monthly Energy Review

May 2000

Energy Information Administration
Office of Energy Markets and End Use
U.S. Department of Energy
Washington, DC 20585

Contacts

The Monthly Energy Review is prepared in the Integrated Energy Statistics Division of the Office of Energy Markets and End Use, Energy Information Administration, under the direction of Katherine E. Seiferlein, 202-586-5695 (kitty.seiferlein@eia.doe.gov). Questions and comments specifically related to the Monthly Energy Review may be addressed to Chuck Allen, 202-586-5828 (chuck.allen@eia.doe.gov), Diane Perritt, 202-586-2788 (diane.perritt@eia.doe.gov), or Michelle Burch, 202-586-5850 (michelle.burch@eia.doe.gov).

For assistance in acquiring data, please contact the **National Energy Information Center at 202-586-8800 or infoctr@eia.doe.gov.** Questions about the collection, processing, or interpretation of the information may be directed to the following subject specialists:

Section	1.	Energy Overview	Dianne R. Dunn	202-586-2792 dianne.dunn@eia.doe.gov
Section	2.	Energy Consumption	Dianne R. Dunn	202-586-2792 dianne.dunn@eia.doe.gov
Section	3.	Petroleum	Michael Conner	202-586-1795 michael.conner@eia.doe.gov
Section	4.	Natural Gas	Ann M. Ducca	202-586-6137 ann.ducca@eia.doe.gov
Section	5.	Oil and Gas Resource Development	Robert F. King	202-586-4787 robert.king@eia.doe.gov
Section	6.	Coal	Mary L. Lilly	202-426-1154 mary.lilly@eia.doe.gov
Section	7.	Electricity		
		Electric Utilities	Melvin E. Johnson	202-426-1172 melvin.johnson@eia.doe.gov
		Nonutility Power Producers	Barbara A. Rucker	202-426-1192 barbara.rucker@eia.doe.gov
		Retail Sales	Deborah Johnson	202-426-1235 deborah.johnson@eia.doe.gov
Section	8.	Nuclear Energy	John R. Moens	202-426-1247 john.moens@eia.doe.gov
Section	9.	Energy Prices		
		Petroleum	Patricia Wells	202-586-4885 patricia.wells@eia.doe.gov
		Natural Gas	Roy Kass	202-586-4790 roy.kass@eia.doe.gov
		Electricity Retail Prices	Deborah Johnson	202-426-1235 deborah.johnson@eia.doe.gov
		Electricity Fossil-Fuel Receipts	Kenneth M. McCleve	ey 202-426-1144 kenneth.mcclevey@eia.doe.gov
Section	10.	International Energy		
		Petroleum Production	Patricia Smith	202-586-6925 patricia.smith@eia.doe.gov
		Petroleum Consumption and Stocks	H. Vicky McLaine	202-586-9412 harriet.mclaine@eia.doe.gov
		Nuclear Electricity Gross Generation	John R. Moens	202-426-1247 john.moens@eia.doe.gov

Contents

			Page
Energy Pl	ug:	Motor Gasoline Assessment 2000	ix
Section	1.	Energy Overview	1
Section	2.	Energy Consumption	23
Section	3.	Petroleum	41
Section	4.	Natural Gas	71
Section	5.	Oil and Gas Resource Development	81
Section	6.	Coal	85
Section	7.	Electricity	93
Section	8.	Nuclear Energy	109
Section	9.	Energy Prices	115
Section	10.	International Energy	135
Appendix	Α.	Thermal Conversion Factors	151
Appendix	В.	Metric and Other Physical Conversion Factors	161
Appendix	C.	Carbon Dioxide Emission Factors for Coal	165
Appendix	D.	List of Features	167
Glossary			173

Tables

Section	1	Energy Overview	Page
1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10	1.	Energy Overview Energy Summary for February 2000 Energy Overview Energy Production by Source Energy Consumption by Source Energy Net Imports by Source Merchandise Trade Value Cost of Fuels to End Users in Constant (1982-1984) Dollars Overview of U.S. Petroleum Trade Energy Consumption per Dollar of Gross Domestic Product Motor Vehicle Mileage, Fuel Consumption, and Fuel Rates	11 13 15
1.11 1.12		Heating Degree-Days by Census Division	18
G 4•	•		
2.1 2.2 2.3 2.4 2.5 2.6	2.	Energy Consumption Energy Consumption Summary for February 2000 Energy Consumption by End-Use Sector Residential and Commercial Energy Consumption Industrial Energy Consumption Transportation Energy Consumption Energy Input at Electric Utilities	25 27 29 31
Section	3.	Petroleum	
3.1		Petroleum Overview 3.1a Field Production, Stock Change, Petroleum Products Supplied, and Stocks 3.1b Imports, Exports, and Net Imports	
3.2		Crude Oil Supply and Disposition 3.2a Supply	46 47
3.3		Petroleum Imports From 3.3a Bahrain, Iran, Iraq, and Kuwait	49 50 51 52 53
3.4		Total Non-OPEC, and Total Imports	
3.5 3.6		Distillate Fuel Oil Supply and Disposition	
3.7 3.8 3.9 3.10		Jet Fuel Supply and Disposition. Liquefied Petroleum Gases Supply and Disposition. Propane and Propylene Supply and Disposition. Other Petroleum Products Supply and Disposition.	63
Ω4°		Notes and Con-	
4.1 4.2 4.3 4.4 4.5	4.	Natural Gas Natural Gas Overview Natural Gas Production Natural Gas Trade by Country Natural Gas Consumption by End-Use Sector Natural Gas in Underground Storage	73 74 75 76 77
5.1 5.2	5.	Oil and Gas Resource Development Oil and Gas Drilling Activity Measurements. Oil and Gas Wells Drilled	82 83

Tables (Continued)

Section	6	Coal	Page
6.1	υ.	Coal Overview	87
6.2		Coal Consumption by End-Use Sector	88
6.3		Coal Stocks.	89
Section	7.	Electricity	
7.1		Electricity Overview	95
7.2 7.3		Electricity Net Generation	97 98
7.3 7.4		Electricity Net Generation at Nonutility Power Producers	99
7.5		Electricity End Use	101
7.6		Consumption of Fossil Fuels To Generate Electricity	103
7.7		Consumption of Fossil Fuels To Generate Electricity at Electric Utilities	104
7.8 7.9		Consumption of Fossil Fuels To Generate Electricity at Nonutility Power Producers Electric Power Sector Stocks of Coal and Petroleum	105 107
g	0		
Section 8.1	8.	Nuclear Energy Nuclear Power Plant Operations	111
8.2		Nuclear Generating Unit	112
Section	9.	Energy Prices	
9.1 9.2		Crude Oil Price Summary	117 118
9.2		Landed Costs of Crude Oil Imports From Selected Countries	120
9.4		Motor Gasoline Retail Prices, U.S. City Average	121
9.5		Refiner Prices of Residual Fuel Oil	122
9.6		Refiner Prices of Petroleum Products for Resale	122
9.7 9.8		Refiner Prices of Petroleum Products to End Users	123
7.0		9.8a Northeastern States	124
		9.8b Selected South Atlantic and Midwestern States	125
0.0		9.8c Selected Western States and U.S. Average	126
9.9 9.10		Retail Prices of Electricity Sold by Electric Utilities	128 129
9.10		Natural Gas Prices	131
7.11		1 marat Gas 1 1000	101
Section:	10.	International Energy World Oil Production	
10.1		10.1a OPEC Members	136
		10.1b Persian Gulf Nations, Non-OPEC, and World	137
10.2		Petroleum Consumption in OECD Countries	141
10.3		Petroleum Stocks in OECD Countries	143
10.4		Nuclear Electricity Gross Generation 10.4a Regions and World	145
		10.4b North, Central, and South America	146
		10.4c Western Europe	147
		10.4d Eastern Europe and Former U.S.S.R.	148
		10.4e Africa and Far East	149
Append	ix	A. Thermal Conversion Factors	
A1.		Approximate Heat Content of Petroleum Products	151
A2. A3.		Approximate Heat Content of Crude Oil, Crude Oil and Products, and Natural Gas Plant Liquids	152
A3. A4.		Approximate Heat Content of Petroleum Products, Weighted Averages	153 154
A5.		Approximate Heat Content of Coal	155
A6.		Approximate Heat Rates for Electricity	156

Tables (Continued)

Annendix	B. Metric and Other Physical Conversion Factors	Page
	Metric Conversion Factors	162
	Metric Prefixes	
В3.	Other Physical Conversion Factors	163
	C. Carbon Dioxide Emission Factors for Coal	
C1.	Average Carbon Dioxide Emission Factors for Coal by Sector	165

Figures

Section	1.	Energy Overview	Page
1.1		Energy Overview	2
1.2		Energy Production	4
1.3		Energy Consumption	6
1.4		Energy Net Imports	8
1.5		Merchandise Trade Value	10
1.6		Cost of Fuels to End Users in Constant (1982-1984) Dollars	12
1.7		Overview of U.S. Petroleum Trade	14
1.8		Energy Consumption per Dollar of Gross Domestic Product	16
1.9		Motor Vehicle Fuel Rates	17
Section	2.	Energy Consumption	
2.1		Energy Consumption by End-Use Sector	24
2.2		Residential and Commercial Energy Consumption.	26
2.3		Industrial Energy Consumption	28
2.4		Transportation Energy Consumption	30
2.5		Energy Input at Electric Utilities	32
Section	3.		
3.1a		Petroleum Overview	44
3.1b		Petroleum Overview.	45
3.2		Finished Motor Gasoline	56
3.3 3.4		Distillate Fuel	58
3.4		Residual Fuel	60 62
3.6		Jet Fuel	64
3.7		Propane and Propylene.	66
C4!		Natural Con	
4.1	4.	Natural Gas Natural Gas	72
4.1		Naturai Gas	12
Section	5.		0.1
5.1		Oil and Gas Resource Development Indicators	81
Section	6.		0.4
6.1		Coal	86
	7.	Electricity	
7.1		Electricity Overview	94
7.2		Electric Utility Retail Sales of Electricity	100
7.3		Electricity End Use	100
7.4 7.5		Consumption of Fossil Fuels To Generate Electricity. Electric Power Sector Stocks of Coal and Petroleum	102
7.3		Electric Power Sector Stocks of Coal and Petroleum	106
Section	8.	Nuclear Energy	110
8.1		Nuclear Power Plant Operations	110
	9.	Energy Prices	•••
9.1		Petroleum Prices.	116
9.2 9.3		Retail Prices of Electricity Sold by Electric Utilities	127
			127
9.4		Natural Gas Prices	130
Section	10.	International Energy	100
10.1		Crude Oil Production	138
10.2 10.3		Crude Oil Production by Selected Country	139
10.3		Petroleum Consumption in OECD Countries Petroleum Stocks in OECD Countries	140 142
10.4		Nuclear Electricity Gross Generation	144
10.5		11401041 L10041011 01000 001101411011	177

Section 1. Energy Overview

Energy production during February 2000 totaled 5.5 quadrillion Btu, a 0.8-percent decrease from the level of production during February 1999. Production of coal decreased 5.7 percent, crude oil and natural gas plant liquids combined increased 4.6 percent, and natural gas increased 2.6 percent. Production of all other forms of energy combined were down 2.8 percent from the level of production during February 1999.

Energy consumption during February 2000 totaled 8.0 quadrillion Btu, 5.4 percent above the level of con-

sumption during February 1999. Consumption of coal increased 8.9 percent, natural gas increased 6.6 percent, and petroleum products increased 3.9 percent. Consumption of all other forms of energy combined increased 0.9 percent from the level 1 year earlier.

Net imports of energy during February 2000 totaled 1.8 quadrillion Btu, 4.1 percent above the level of net imports 1 year earlier. Net imports of petroleum increased 2.7 percent but net imports of natural gas fell 2.7 percent. Net exports of coal fell 4.0 percent from the level in February 1999.

Table 1.1 Energy Summary for February 2000

(Quadrillion Btu)

		February		Cumulative January Through February						
	2000	1999	Percent Change ^a	2000	2000 Daily Rate	1999	1999 Daily Rate	Percent Change ^a		
Production	5.477	5.522	-0.8	11.256	0.188	11.383	0.193	-2.8		
Coal	1.857	1.969	-5.7	3.720	.062	3.915	.066	-6.6		
Natural Gas (Dry)	^F 1.546	E 1.507	2.6	F 3.226	.054	3.170	.054	.0		
Crude Oilb and Natural Gas Plant Liquids	E 1.206	E 1.152	4.6	E 2.480	.041	2.415	.041	1.0		
Other ^c	.869	.894	-2.8	1.830	.031	1.883	.032	-4.4		
Consumption	7.981	7.573	5.4	16.590	.276	16.166	.274	.9		
Coal ^d	1.771	1.627	8.9	3.705	.062	3.495	.059	4.2		
Natural Gase	E 2.317	2.173	6.6	E 4.925	.082	4.783	.081	1.2		
Petroleum Productsf	2.981	2.870	3.9	6.052	.101	5.984	.101	5		
Other ^g	.911	.903	.9	1.908	.032	1.904	.032	-1.5		
Net Imports	1.837	1.764	4.1	3.679	.061	3.667	.062	-1.3		
Coal ^h	081	085	-4.0	180	003	184	003	-3.9		
Natural Gas	E .261	.268	-2.7	E .573	.010	.570	.010	-1.2		
Petroleum ⁱ	1.615	1.572	2.7	3.209	.053	3.260	.055	-3.2		
Other ^j	E .043	.009	367.2	E .077	.001	.021	.000	259.6		

a Based on daily rates prior to rounding.

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

1

Sources: Tables 1.3, 1.4, and 1.5.

Please Read: Due to a lack of consistent monthly historical data, some renewable energy sources are not included in production and consumption. For 1998 consumption, for example, 3.5 quadrillion Btu of renewable energy used by electric utilities to generate electricity for distribution and 0.1 quadrillion Btu for ethanol blended into motor gasoline are included, but an estimated 3.4 quadrillion Btu used by residential, commercial, and industrial consumers is not. See Note 12 at the end of Section 2 for details.

b Includes lease condensate.

 $^{^{\}mbox{\scriptsize c}}$ Includes electricity generated by nonutility nuclear units.

d Includes coal consumed by "Other Power Producers." See Table 6.2.

e Includes supplemental gaseous fuels.

f Products obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds.

g "Other" is hydroelectric and nuclear electric power; electricity generated for distribution from wood, waste, geothermal, wind, photovoltaic, and solar thermal energy; and net imports of electricity and coal coke.

h Minus sign indicates exports are greater than imports.

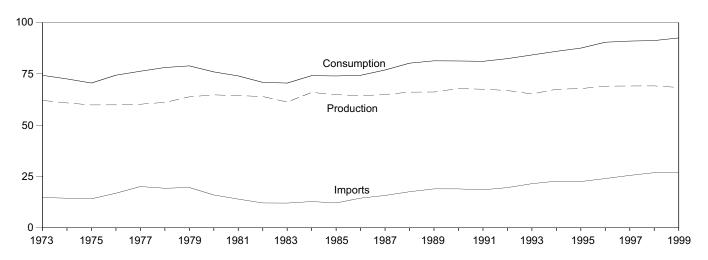
ⁱ Crude oil, lease condensate, petroleum products, pentanes plus, unfinished oils, gasoline blending components, and imports of crude oil for the Strategic Petroleum Reserve.

j "Other" is net imports of electricity and coal coke.

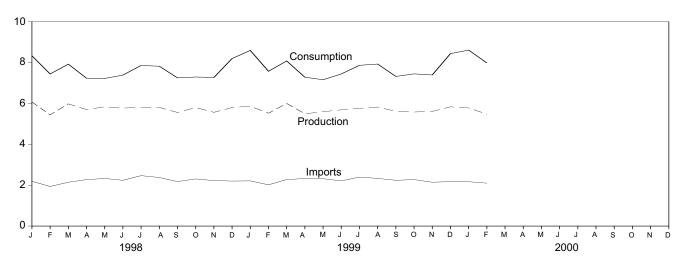
E=Estimate. F=Forecast.

Figure 1.1 Energy Overview

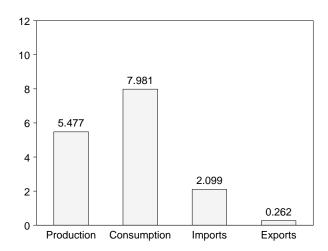
Consumption, Production, and Imports, 1973-1999



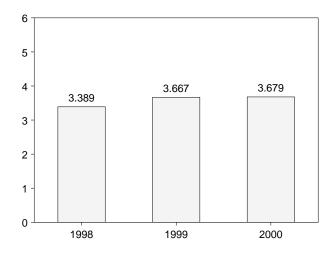
Consumption, Production, and Imports, Monthly



Overview, February 2000



Net Imports, January and February



Note: Because vertical scales differ, graphs should not be compared. Source: Table 1.2.

Table 1.2 Energy Overview

	Production	Consumption ^a	Imports	Exports	Net Imports
973 Total	62.059	74.282	14.731	2.051	12.680
974 Total	60.835	72.543	14.731	2.223	12.190
974 Total	59.860	72.545 70.546	14.413	2.359	11.752
	59.891	74.362			
76 Total			16.837	2.188	14.648
77 Total	60.218	76.289	20.090	2.071	18.019
78 Total	61.103	78.089	19.254	1.931	17.323
79 Total	63.801	78.898	19.616	2.870	16.746
80 Total	64.761	75.955	15.971	3.723	12.247
81 Total	64.422	73.990	13.975	4.329	9.646
82 Total	63.963	70.848	12.092	4.633	7.460
83 Total	61.279	70.524	12.027	3.717	8.310
34 Total	65.962	74.144	12.767	3.804	8.963
35 Total	64.871	73.981	12.103	4.231	7.872
86 Total	64.349	74.297	14.438	4.055	10.382
87 Total	64.952	76.894	15.764	3.853	11.911
B8 Total	66.105	80.219	17.564	4.415	13.149
89 Total	^b 66.161	^b 81.358	18.950	4.767	14.182
90 Total	67.873	81.289	18.946	4.865	14.081
91 Total	67.509	81.115	18.489	5.157	13.332
92 Total	66.899	^c 82.422	19.568	4.957	14.611
93 Total	65.199	84.222	21.489	4.283	17.206
94 Total	67.502	85.988	22.713	4.075	18.638
		87.561			
95 Total	67.813		22.532	4.536	17.995
96 Total	69.021	90.417	23.985	4.657	19.328
97 Total	69.097	90.977	25.516	4.574	20.942
98 January	6.070	8.333	2.190	.414	1.776
February	5.442	7.441	1.937	.324	1.614
March	5.978	7.921	2.144	.366	1.778
April	5.699	7.235	2.273	.375	1.897
May	5.835	7.223	2.327	.406	1.920
June	5.771	7.385	2.240	.377	1.863
	5.809	7.859			2.096
July			2.467	.371	
August	5.805	7.820	2.374	.333	2.041
September	5.559	7.250	2.176	.351	1.825
October	5.798	7.294	2.305	.359	1.946
November	5.565	7.269	2.223	.313	1.910
December	5.799	8.197	2.201	.354	1.847
Total	69.130	91.231	26.857	4.344	22.513
99 January	^R 5.861	^R 8.593	2.210	.307	1.903
February	R 5.522	7.573	2.017	.253	1.764
	R 5.999	R 8.079	2.276	.292	1.984
March					
April	R 5.494	7.283	2.325	.357	1.967
May	R 5.594	7.158	2.317	.305	2.012
June	^R 5.686	_ 7.441	2.210	.322	1.889
July	^R 5.757	^R 7.866	2.395	.323	2.073
August	^R 5.823	^R 7.927	2.331	.334	1.997
September	R 5.613	7.321	2.238	.308	1.929
October	^R 5.580	R 7.446	2.274	.350	1.925
	R 5.610	7.393	2.144	.324	1.820
November					
Total	^R 5.832 ^R 68.372	^R 8.437 ^R 92.516	2.174 26.911	.356 3.831	1.818 23.080
00 January	5.779	R 8.609	R 2.169	R .327	R 1.843
February	5.477	7.981	2.099	.262	1.837
2-Month Total	11.256	16.590	4.268	.589	3.679
99 2-Month Total	11.383	16.166	4.227	.560	3.667
98 2-Month Total	11.513	15.774	4.127	.738	3.389

^a 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.

b Beginning in 1989, includes electricity generated by nonutility nuclear

See Table 6.2.

R=Revised.

Notes: For definitions, see Notes 1 through 4 at end of section. Totals may not equal sum of components due to independent rounding. Geographic coverage is the 50 States and the District of Columbia. Sources: Production: Table 1.3. Consumption: Table 1.4. Imports and Exports: Tables 3.1b, 4.3, 6.1, A2-A6, and Section 2, "Energy Consumption Notes and Sources," Notes 8 and 9. Net Imports: Table 1.5.

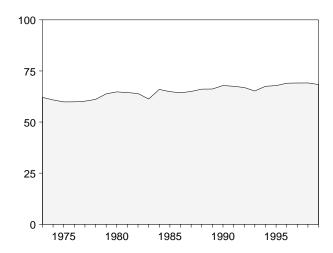
Please Read: Due to a lack of consistent monthly historical data, some renewable energy sources are not included in production and consumption. For 1998 consumption, for example, 3.5 quadrillion Btu of renewable energy used by electric utilities to generate electricity for distribution and 0.1 quadrillion Btu for ethanol blended into motor gasoline are included, but an estimated 3.4 quadrillion Btu used by residential, commercial, and industrial consumers is not. See Note 12 at the end of Section 2 for details.

units.

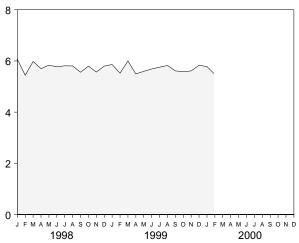
^c Beginning in 1992, includes coal consumed by "Other Power Producers."

Figure 1.2 Energy Production

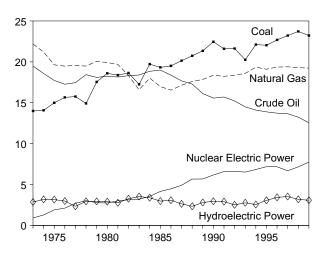
Total, 1973-1999



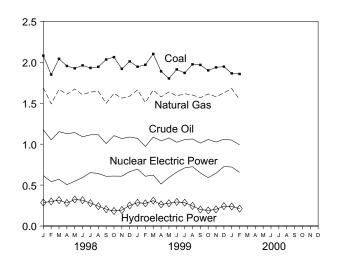
Total, Monthly



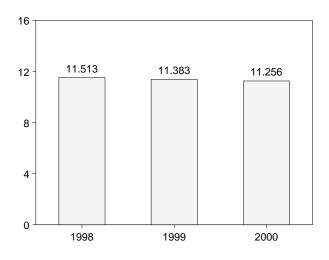
By Major Sources, 1973-1999



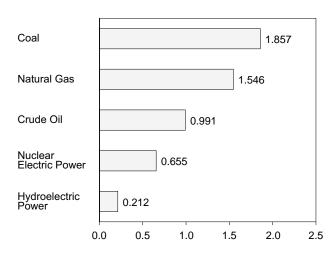
By Major Sources, Monthly



Total, January and February



By Major Sources, February 2000



Note: Because vertical scales differ, graphs should not be compared. Source: Table 1.3.

Table 1.3 Energy Production by Source

	Coal	Natural Gas (Dry)	Crude Oil ^a	Natural Gas Plant Liquids	Nuclear Electric Power	Hydro- electric Power ^b	Geothermal Energy	Other ^c	Total
4070 T I	40.000	00.407	40.400	0.500	0.040	0.004	2.242		22.252
1973 Total	13.992	22.187	19.493	2.569	0.910	2.861	0.043	0.003	62.059
1974 Total	14.074	21.210	18.575	2.471	1.272	3.177	.053	.003	60.835
1975 Total	14.989	19.640	17.729	2.374	1.900	3.155	.070	.002	59.860
1976 Total	15.654	19.480	17.262	2.327	2.111	2.976	.078	.003	59.891
1977 Total	15.755	19.565	17.454	2.327	2.702	2.333	.077	.005	60.218
1978 Total	14.910	19.485	18.434	2.245	3.024	2.937	.064	.003	61.103
1979 Total	17.540	20.076	18.104	2.286	2.776	2.931	.084	.005	63.801
1980 Total	18.598	19.908	18.249	2.254	2.739	2.900	.110	.005	64.761
1981 Total	18.377	19.699	18.146	2.307	3.008	2.758	.123	.004	64.422
1982 Total	18.639	18.319	18.309	2.191	3.131	3.266	.105	.003	63.963
1983 Total	17.247	16.593	18.392	2.184	3.203	3.527	.129	.004	61.279
1984 Total	19.719	18.008	18.848	2.274	3.553	3.386	.165	.009	65.962
1985 Total	19.325	16.980	18.992	2.241	4.149	2.970	.198	.015	64.871
1986 Total	19.509	16.541	18.376	2.149	4.471	3.071	.219	.012	64.349
1987 Total	20.141	17.136	17.675	2.215	4.906	2.635	.229	.016	64.952
1988 Total	20.738	17.599	17.279	2.260	5.661	2.334	.217	.017	66.105
1989 Total	21.346	17.847	16.117	2.158	d 5.677	2.798	.197	.021	d 66.161
1990 Total	22.456	18.362	15.571	2.175	6.162	2.945	.181	.022	67.873
1991 Total	21.594	18.229	15.701	2.306	6.580	2.908	.170	.021	67.509
1992 Total	21.629	18.375	15.223	2.363	6.608	2.510	.169	.022	66.899
1993 Total	20.249	18.584	14.494	2.408	6.520	2.765	.158	.021	65.199
1994 Total	22.111	19.348	14.103	2.391	6.838	2.547	.145	.021	67.502
	22.029	19.101	13.887	2.442	7.177	3.061	.099	.017	67.813
1995 Total				2.530				.020	
1996 Total	22.684	19.363	13.723		7.168	3.424	.110		69.021
1997 Total	23.211	19.394	13.658	2.495	6.678	3.525	.115	.021	69.097
1998 January	2.081	1.688	1.176	.211	.615	.287	.010	.002	6.070
February	1.850	1.493	1.052	.196	.542	.300	.008	.001	5.442
March	2.042	1.669	1.152	.217	.571	.316	.010	.002	5.978
April	1.955	1.610	1.128	.211	.505	.281	.007	.002	5.699
May	1.926	1.674	1.141	.214	.547	.324	.006	.002	5.835
June	1.962	1.604	1.091	.198	.592	.316	.007	.001	5.771
July	1.931	1.636	1.114	.185	.653	.279	.009	.002	5.809
August	1.944	1.647	1.115	.201	.641	.243	.010	.002	5.805
September	2.034	1.499	1.007	.194	.608	.205	.010	.002	5.559
October	2.063	1.620	1.104	.204	.610	.184	.011	.002	5.798
November	1.920	1.562	1.068	.200	.609	.195	.010	.002	5.565
December	2.011	1.586	1.087	.189	.664	.251	.009	.002	5.799
	23.719	19.288	13.235	2.420	7.157	3.182	.109	.021	69.130
Total	23.713	19.200	13.233	2.420	7.137	3.102	.109	.021	09.130
1999 January	1.946	RE 1.663	E 1.071	.192	.695	.284	.009	.002	R 5.861
February	1.969	RE 1.507	E.972	.181	.608	.277	.007	.002	R 5.522
March	2.102	RE 1.661	E 1.087	.207	.622	.310	.008	.002	^R 5.999
April	1.889	RE 1.577	E 1.040	.201	.513	.263	.009	.002	^R 5.494
May	1.802	RE 1.638	E 1.076	.205	.593	.278	(s)	.002	^R 5.594
June	1.913	^{RE} 1.589	E 1.023	.205	.659	.294	(s)	.002	^R 5.686
July	1.870	^{RE} 1.616	E 1.056	.218	R .710	.285	(s)	.002	^R 5.757
August	1.975	^{RE} 1.600	E 1.063	.213	.725	.245	(s)	.002	R 5.823
September	1.968	^{RE} 1.567	E 1.013	.215	.648	.201	(s)	.002	^R 5.613
October	1.901	RE 1.614	E 1.057	.225	.591	.191	(s)	.002	R 5.580
November	1.938	RE 1.579	E 1.026	.218	.645	.203	(s)	.002	^R 5.610
December	1.947	RE 1.626	E 1.061	.227	.726	.243	(s)	.002	R 5.832
Total	23.219	RE 19.237	E 12.544	2.506	R 7.735	3.074	.036	.021	R 68.372
2000 January	1.864	E 1.679	E 1.049	.225	.721	.239	(s)	.002	5.779
February	1.857	E 1.546	E .991	.215	.655	.212	(s)	.002	5.477
2-Month Total	3.720	E 3.226	E 2.039	.441	1.376	.451	.001	.003	11.256
1999 2-Month Total	3.915	^E 3.170	E 2.042	.373	1.303	.561	.016	.003	11.383
1998 2-Month Total	3.931	3.181	2.228	.407	1.157	.588	.019	.003	11.513

a Includes lease condensate.

R=Revised. (s)=Less than +0.5 trillion Btu and greater than -0.5 trillion Btu. E=Estimate.

Notes: See Note 1 at end of section.

Totals may not equal sum of Notes:

Geographic coverage is the 50 components due to independent rounding. States and the District of Columbia.

Sources: Coal: Tables 6.1 and A5. Natural Gas (Dry): Tables 4.1 Crude Oil and Natural Gas Plant Liquids: Tables 3.1a and A2. Nuclear Electric Power: Tables 7.2 and A6. Hydroelectric Power: Table 7.2; Section 2, "Energy Consumption Notes and Sources," Note 8; and Table A6. **Geothermal Energy and Other:** Section 2, "Energy Table A6. **Geothermal Energy and Other:** Section 2, "Energy Consumption Notes and Sources," Note 7, and Table A6.

Please Read: Due to a lack of consistent monthly historical data, some renewable energy sources are not included in total production. In 1998, for example, 3.5 quadrillion Btu of renewable energy produced for use by electric utilities to generate electricity for distribution and 0.1 quadrillion Btu for ethanol blended into motor gasoline are included, but an estimated 3.4 quadrillion Btu of renewable energy produced for use by residential, commercial, and industrial consumers is not. See Note 12 at the end of Section 2 for details.

^b Electric utility and industrial generation.

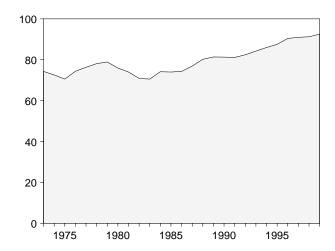
c "Other" production is electricity generated for distribution from wood, waste, wind, photovoltaic, and solar thermal energy.

d Beginning in 1989, includes electricity generated by nonutility nuclear

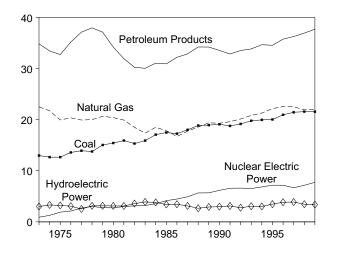
Figure 1.3 Energy Consumption

(Quadrillion Btu)

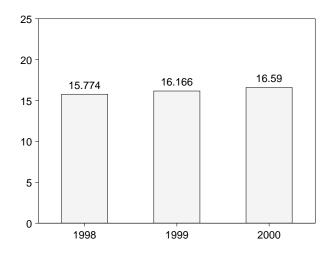
Total, 1973-1999



By Major Sources, 1973-1999

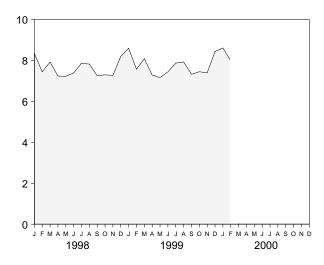


Total, January and February

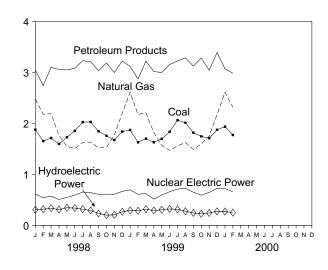


Note: Because vertical scales differ, graphs should not be compared. Source: Table 1.4.

Total, Monthly



By Major Sources, Monthly



By Major Sources, February 2000

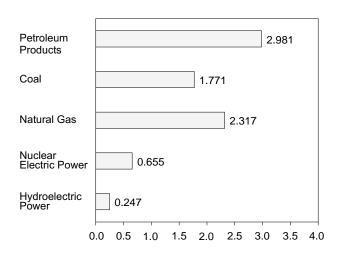


Table 1.4 Energy Consumption by Source

	Coal	Natural Gas ^a	Petroleum Products ^b	Nuclear Electric Power	Hydro- electric Power ^c	Geothermal Energy	Otherd	Total
973 Total	12.971	22.512	34.840	0.910	3.010	0.043	-0.004	74.282
974 Total	12.663	21.732	33.455	1.272	3.309	.053	.059	72.543
975 Total	12.663	19.948	32.731	1.900	3.219	.070	.016	70.546
976 Total	13.584	20.345	35.175	2.111	3.066	.078	.003	74.362
977 Total	13.922	19.931	37.122	2.702	2.515	.077	.020	76.289
978 Total	13.766	20.000	37.965	3.024	3.141	.064	.128	78.089
979 Total	15.040	20.666	37.123	2.776	3.141	.084	.068	78.898
980 Total	15.423	20.394	34.202	2.739	3.118	.110	031	75.955
981 Total	15.908	19.928	31.931	3.008	3.105	.123	012	73.990
982 Total	15.322	18.505	30.231	3.131	3.572	.105	018	70.848
983 Total	15.894	17.357	30.054	3.203	3.899	.129	012	70.524
984 Total	17.071	18.507	31.051	3.553	3.800	.165	002	74.144
985 Total	17.478	17.834	30.922	4.149	3.398	.198	.001	73.981
986 Total	17.260	16.708	32.196	4.471	3.446	.219	004	74.297
987 Total	18.008	17,744	32.865	4.906	3.117	.229	.024	76.894
988 Total	18.846	18.552	34.222	5.661	2.662	.217	.057	80.219
989 Total	18.926	19.384	34.211	e 5.677	2.913	.197	.051	e81.358
990 Total	19.101	19.296	33.553	6.162	2.969	.181	.026	81.289
991 Total	18.770	19.606	32.845	6.580	3.113	.170	.031	81.115
992 Total	†19.158	20.131	33.527	6.608	2.773	.169	.056	†82.422
993 Total	19.776	20.827	33.841	6.520	3.052	.158	.048	84.222
994 Total	19.960	21.288	34.670	6.838	3.009	.145	.079	85.988
995 Total	20.024	22,163	34.553	7,177	3,465	.099	.078	87.561
996 Total	20.940	22.559	35.757	7.168	3.840	.110	.043	90.417
997 Total	21.444	22.530	36.266	6.678	3.878	.115	.067	90.977
998 January	1.874	2.476	3.045	.615	.304	.010	.010	8.333
February	1.651	2.177	2.743	.542	.315	.008	.005	7.441
March	1.712	2.189	3.098	.571	.336	.010	.005	7.921
April	1.595	1.758	3.056	.505	.308	.007	.006	7.235
May	1.726	1.547	3.047	.547	.344	.006	.007	7.223
June	1.852	1.507	3.078	.592	.338	.007	.010	7.385
	2.023	1.621	3.228	.653	.316	.009	.009	7.859
July								
August	2.027	1.632	3.208	.641	.290	.010	.012	7.820
September	1.842	1.517	3.032	.608	.233	.010	.008	7.250
October	1.755	1.528	3.182	.610	.199	.011	.009	7.294
November	1.672	1.771	2.996	.609	.205	.010	.005	7.269
December	1.838	2.195	3.220	.664	.266	.009	.004	8.197
Total	21.569	21.921	36.934	7.157	3.454	.109	.088	91.231
	4 000	P. 0.4.4						P = ===
999 January	1.868	R 2.611	3.113	.695	.290	.009	.007	R 8.593
February	1.627	2.173	2.870	.608	.284	.007	.004	7.573
March	1.699	2.205	3.219	.622	.317	.008	.008	R 8.079
April	1.627	1.819	3.015	.513	.289	.009	.011	7.283
May	1.695	1.564	2.996	.593	.305	(s)	.005	7.158
June	1.833	R 1.470	3.155	.659	.320	(s)	.004	7.441
	2.061	1.557	3.221	R .710	.312	(s)	.005	R 7.866
July		R 1.624						
August	2.011		3.284	.725	.275	(s)	.008	R 7.927
September	1.815	R 1.488	3.123	.648	.243	(s)	.003	7.321
October	1.744	R 1.600	3.280	.591	.225	(s)	.005	^R 7.446
November	1.708	^R 1.747	3.041	.645	.240	(s)	.010	7.393
December	1.872	R 2.172	3.387	.726	.273	(s)	.007	R 8.437
Total	21.560	R 22.028	37.706	R 7.735	3.373	.036	.079	R 92.516
000 1	4.004	R o coo	0.074	704	R 070	(-)	000	R o 000
000 January	1.934	R 2.608	3.071	.721	R .270	(s)	.006	R 8.609
February	1.771	F 2.317	2.981	.655	.247	(s)	.009	7.981
2-Month Total	3.705	F 4.925	6.052	1.376	.517	.001	.015	16.590
999 2-Month Total	3.495	4.783	5.984	1.303	.574	.016	.011	16.166

^a Includes supplemental gaseous fuels.

R=Revised. (s)=Less than +0.5 trillion Btu and greater than -0.5 trillion Btu.

E=Estimate. F=Forecast.

See Note 2 at end of section. Totals may not equal sum of Notes: Geographic coverage is the 50

Notes: See Note 2 at end of section: components due to independent rounding. States and the District of Columbia.

Sources: Coal: Tables 6.1 and A5.

A4. Petroleum: Tables 3.1a and A3.

Tables 7.2 and A6. Hydroelectric Powe Natural Gas: Tables 4.1 and Tables 7.2 and A6. Hydroelectric Power: Table 7.2; Section 2, "Energy Consumption Notes and Sources," Note 8; and Table A6. Geothermal Energy and Other: Section 2, "Energy Consumption Notes and Sources," Note 7, and Table A6.

Please Read: Due to a lack of consistent monthly historical data, some renewable energy sources are not included in total consumption. In 1998, for example, 3.5 quadrillion Btu of renewable energy used by electric utilities to generate electricity for distribution and 0.1 quadrillion Btu for ethanol blended into motor gasoline are included, but an estimated 3.4 quadrillion Btu used by residential, commercial, and industrial consumers is not. See Note 12 at the end of Section 2 for details.

Includes supplemental gaseous luels.
 Products obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds.
 C Electric utility and industrial generation and net imports of electricity.
 Net imports of coal coke and electricity generated for distribution from

wood, waste, wind, photovoltaic, and solar thermal energy.

Beginning in 1989, includes electricity generated by nonutility nuclear

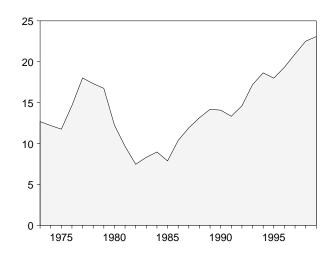
units.

f Beginning in 1992 includes coal consumed by "Other Power Producers."

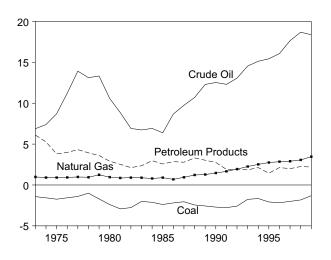
Figure 1.4 Energy Net Imports

(Quadrillion Btu, Except as Noted)

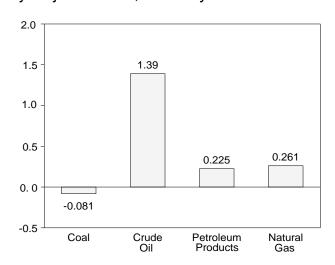
Total, 1973-1999



By Major Sources, 1973-1999

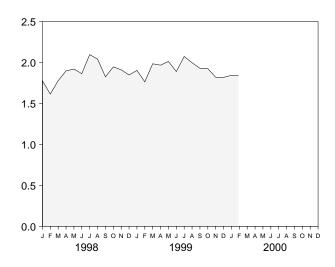


By Major Sources, February 2000

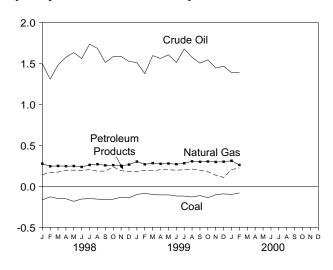


Note: Because vertical scales differ, graphs should not be compared. Sources: Tables 1.4 and 1.5.

Total, Monthly



By Major Sources, Monthly



As Share of Consumption, January and February

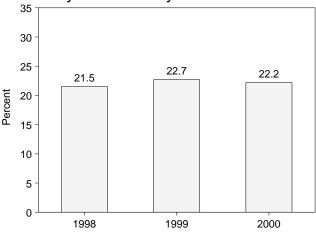


Table 1.5 Energy Net Imports by Source

	Coal	Natural Gas	Crude Oil ^a	Petroleum Products ^b	Electricityc	Coal Coke	Total
1		!	I .	ļ	1		
973 Total	-1.422	0.981	6.883	6.097	0.148	-0.007	12.680
974 Total	-1.568	.907	7.389	5.273	.133	.056	12.190
975 Total	-1.738	.904	8.708	3.800	.064	.014	11.752
976 Total	-1.567	.922	11.221	3.982	.089	(s)	14.648
77 Total	-1.401	.981	13.921	4.321	.182	.015	18.019
978 Total	-1.004	.941	13.125	3.932	.204	.125	17.323
979 Total	-1.702	1.243	13.328	3.603	.211	.063	16.746
980 Total	-2.391	.957	10.586	2.912	.217	035	12.247
981 Total	-2.918	.857	8.854	2.522	.347	016	9.646
	-2.768	.898	6.917	2.128	.306	022	7.460
982 Total							
83 Total	-2.013	.885	6.731	2.351	.372	016	8.310
984 Total	-2.119	.792	6.918	2.970	.414	011	8.963
985 Total	-2.389	.896	6.381	2.570	.428	013	7.872
986 Total	-2.193	.686	8.676	2.855	.375	017	10.382
987 Total	-2.049	.937	9.748	2.784	.483	.009	11.911
988 Total	-2.446	1.221	10.698	3.308	.328	.040	13.149
989 Total	-2.566	1.278	12.296	3.029	.115	.030	14.182
990 Total	-2.705	1.464	12.536	2.757	.024	.005	14.081
991 Total	-2.769	1.666	12.308	1.912	.205	.010	13.332
		1.941					14.611
992 Total	-2.587		13.065	1.895	.263	.035	
993 Total	-1.758	2.255	14.542	1.854	.287	.027	17.206
994 Total	-1.657	2.518	15.131	2.126	.462	.058	18.638
995 Total	-2.081	2.745	15.432	1.434	.405	.061	17.995
996 Total	-2.165	2.847	16.075	2.132	.416	.023	19.328
997 Total	-2.006	2.904	17.648	1.997	.353	.046	20.942
998 January	166	.276	1.497	.143	.016	.008	1.776
February	128	.245	1.309	.169	.015	.003	1.614
March	149	.249	1.481	.174	.020	.003	1.778
April	152	.246	1.576	.196	.027	.004	1.897
	183	.248	1.633	.198	.020	.005	1.920
May							
June	155	.236	1.560	.191	.023	.009	1.863
July	150	.261	1.736	.205	.037	.007	2.096
August	156	.270	1.684	.185	.047	.010	2.041
September	163	.256	1.512	.186	.028	.006	1.825
October	157	.259	1.584	.237	.016	.007	1.946
November	132	.251	1.586	.191	.010	.004	1.910
December	141	.265	1.525	.181	.015	.002	1.847
Total	-1.830	3.064	18.684	2.256	.272	.067	22.513
199 January	099	.302	1.511	.177	E .007	.005	1.903
	085	.268		.196	E .007	.003	1.764
February			1.376		= .007 F 007		
March	100	.283	1.596	.191	E .007	.007	1.984
April	105	.274	1.561	.203	E.026	.009	1.967
May	104	.278	1.606	.202	E.026	.003	2.012
June	118	.270	1.512	.197	E.026	.002	1.889
July	119	.282	1.677	.202	E.028	.003	2.073
August	130	E.305	1.575	.211	E.030	.006	1.997
September	113	E .299	1.505	.196	E .042	.002	1.929
October	139	E.303	1.544	.179	E .034	.004	1.925
November	103	E .297	1.444	.136	E .037	.009	1.820
		E.300			E .030		
December Total	092 -1.307	E 3.460	1.466 18.372	.108 2.198	E .299	.006 .058	1.818 23.080
000 January	099	RE .312	1.390	.204	RE .031	.004	R 1.843
February 2-Month Total	081 180	E .261 E .573	1.390 2.780	.225 .429	E .035 E .066	.007 .011	1.837 3.679
99 2-Month Total	184	.570	2.887	.373	^E .014	.008	3.667

^a Crude oil, lease condensate, and imports of crude oil for the Strategic

Petroleum Reserve.

b Petroleum products, unfinished oils, pentanes plus, and gasoline

^c Assumed to be hydroelectricity and estimated at the average input heat rate for fossil-fuel steam-electric power plant generation, which has ranged from 10.2 thousand Btu to 10.5 thousand Btu per kilowatthour since 1973. Actual heat rates applied in converting kilowatthours to Btu are listed by year

R=Revised. E=Estimate. (s)=Less than +0.5 trillion Btu and greater than

^{-0.5} trillion Btu.

Notes: See Notes 3 and 4 at end of section. Net imports equal imports minus exports. Minus sign indicates exports are greater than imports. Totals may not equal sum of components due to independent rounding. Geographic coverage is the 50 States and the District of Columbia.

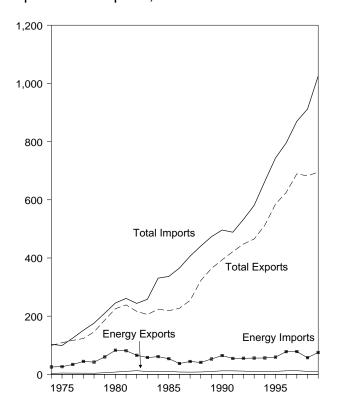
Sources: Coal: Tables 6.1 and A5. Natural Gas: Tables 4.1 and Oil and Petroleum Products: Tables 3.1b, A2, and A3.

A4. Crude Oil and Petroleum Products: Tables 3.1b, A2, and A3. Electricity: Tables 7.1 and A6. Coal Coke: Section 2, "Energy Consumption Notes and Sources," Note 9, and Table A5.

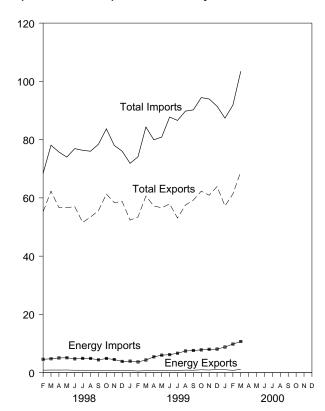
Figure 1.5 Merchandise Trade Value

(Billion Dollars)

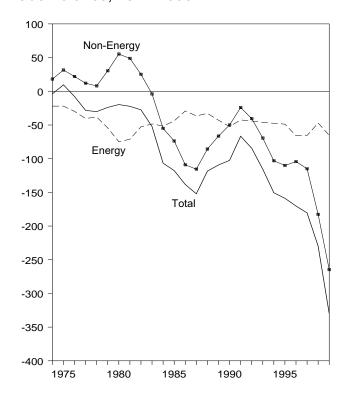
Imports and Exports, 1974-1999



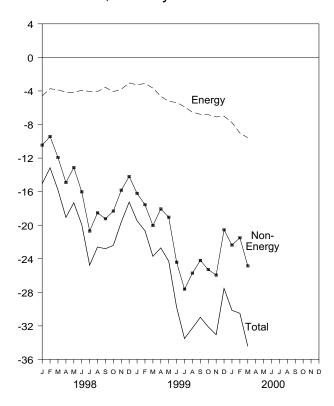
Imports and Exports, Monthly



Trade Balance, 1974-1999



Trade Balance, Monthly



Note: Because vertical scales differ, graphs should not be compared. Source: Table 1.6.

Table 1.6 Merchandise Trade Value

(Million Dollars)

		Petroleun	n ^a		Energyb		Non-	1	otal Merchandi	se
	Exports	Imports	Balance	Exports	Imports	Balance	Energy Balance	Exports	Imports	Balance
1974 Total	792	24,668	-23.876	3,444	25,454	-22,010	18,126	99.437	103,321	-3,884
1975 Total	907	25,197	-24,289	4,470	26,476	-22,006	31,557	108,856	99,305	9,551
1976 Total	998	32,226	-31,228	4,226	33,996	-29,770	21,950	116,794	124,614	-7,820
1977 Total	1,276	42,368	-41,093	4,184	44,537	-40,354	12,001	123,182	151,534	-28,353
978 Total	1,561	39,526	-37,965	3,881	42,096	-38,215	8,010	145,847	176,052	-30,205
979 Total	1,914	56,715	-54,801	5,621	59,998	-54,377	30,455	186,363	210,285	-23,922
980 Total	2,833	78,637	-75,803	7,982	82,924	-74,942	55,246	225,566	245,262	-19,696
981 Total	3,696	76,659	-73,803 -72.963	10,279	81,360	-71.081	48,814	238,715	260.982	-22,267
982 Total	,	-,	,	,	,	,	25,170	,	,	
	5,947	60,458	-54,511	12,729	65,409	-52,680	•	216,442	243,952	-27,510
983 Total	4,557	53,217	-48,659	9,500	57,952	-48,452	-3,957	205,639	258,048	-52,409
984 Total	4,470	56,924	-52,454	9,311	60,980	-51,669	-55,033	223,976	330,678	-106,703
985 Total	4,707	50,475	-45,768	9,971	53,917	-43,946	-73,765	218,815	336,526	-117,712
986 Total	3,640	35,142	-31,503	8,115	37,310	-29,195	-109,084	227,159	365,438	-138,279
987 Total	3,922	42,285	-38,363	7,713	44,220	-36,506	-115,613	254,122	406,241	-152,119
988 Total	3,693	38,787	-35,094	8,235	41,042	-32,806	-85,720	322,426	440,952	-118,526
989 Total	5,021	49,704	-44,683	9,869	52,779	-42,910	-66,490	363,812	473,211	-109,399
990 Total	6,901	61,583	-54,682	12,233	64,661	-52,428	-50,068	393,592	496,088	-102,496
991 Total	6,954	51,350	-44,396	12,081	54,629	-42,548	-24,175	421,730	488,453	-66,723
992 Total	6,412	51,217	-44,805	11,254	55,256	-44,002	-40,500	448,164	532,665	-84,501
993 Total	6,215	51,046	-44,831	9,756	55,900	-46,144	-69,425	465,091	580,659	-115,568
994 Total	5,659	50.835	-45,176	8,911	56,391	-47,480	-103,149	512,626	663,256	-150,629
995 Total	6,321	54,368	-48,047	10,358	59,109	-48,751	-110,050	584,742	743,543	-158,801
996 Total	7,984	72.022	-64,038	12,181	78,086	-65,905	-104,309	625,075	795,289	-170,214
997 Total	8,592	71,152	-62,560	12,682	78,277	-65,595	-114,927	689,182	869,704	-180,522
998 January	715	4,996	-4,281	1,056	5,645	-4,589	-10,463	55,172	70,224	-15,052
February	597	4,074	-3,477	855	4,587	-3,732	-9,428	55,234	68,394	-13,160
March	589	4,189	-3,600	905	4,770	-3,865	-11,934	62,297	78,096	-15,799
April	602	4,492	-3,890	896	5,056	-4,160	-14,909	56,675	75,744	-19,069
May	585	4,549	-3,964	915	5,112	-4,197	-13,129	56,672	73,998	-17.326
June	524	4,145	-3,621	836	4,741	-3,905	-16,019	56,994	76,918	-19,924
July	523	4,278	-3,755	840	4,901	-4,061	-20,699	51,577	76,337	-24,760
August	522	4,229	-3,707	802	4,867	-4,065	-18,529	53,420	76,014	-22,594
September	513	3,878	-3,365	833	4,409	-3,576	-19,231	55,627	78,434	-22,807
	476	4,280	-3,804	780	4,409	-4,084	-18,315	61,313	83,712	-22,399
October	415	3,892	-3,477	728		-3,792		58,395	78,020	-19,625
November		,	,		4,520	,	-15,833	,		,
December Total	514 6,574	3,260 50,264	-2,746 -43,690	806 10,251	3,853 57,323	-3,047 -47,072	-14,198 -182,686	58,762 682,138	76,007 911,896	-17,245 -229,758
999 January	460	3,258	-2,798	676	3,939	-3,263	-16,212	52,383	71,858	-19,475
February	375	3,160	-2,785	580	3,689	-3,109	-17,557	53,443	74,109	-20,666
March	441	3,709	-3,268	684	4,342	-3,658	-20,046	60,622	84,326	-23,704
April	575	4,775	-4,200	801	5,436	-4,635	-18,067	57,250	79,952	-22,702
	566	5,403	-4,837	772	6,005	-5,233	-19,051	56,589	80.873	-24,284
May	563	5,403	,	804	6,184	,	,	,	,	,
June		,	-5,040 5,396		,	-5,380 -5.882	-24,417	57,953	87,750 86 501	-29,797
July	559	5,945	-5,386	778	6,660	- ,	-27,630	53,080	86,591	-33,512
August	628	6,691	-6,063	876	7,420	-6,544	-25,711	57,522	89,776	-32,255
September	622	6,942	-6,320	836	7,620	-6,784	-24,191	59,244	90,219	-30,975
October	737	7,084	-6,347	990	7,819	-6,829	-25,288	62,306	94,423	-32,117
November	695	7,138	-6,443	910	8,005	-7,095	-25,952	60,913	93,960	-33,047
December	892	7,189	-6,297	1,086	8,083	-6,997	-20,548	63,909	91,454	-27,545
Total	7,110	66,899	-59,789	9,794	75,202	-65,408	-264,670	695,213	1,025,292	-330,078
000 January	796	7,836	-7,040	1,021	8,790	-7,769	-22,378	57,221	87,368	-30,147
February		9,016	-8,391	796	9,799	-9,003	R -21,494	^R 61,325	R 91,822	R -30,497
March	877	9,943	-9,066	1,117	10,696	-9,579	-24,855	69,019	103,454	-34,434
3-Month Total	2,296	26,795	-24,499	2,934	29,285	-26,351	-68,728	187,565	282,644	-95,079
999 3-Month Total	1,276	10,127	-8,851	1,940	11,970	-10,030	-53,815	166,448	230,293	-63,845
1998 3-Month Total	1,901	13,259	-11,358	2,816	15,002	-12,186	-31,825	172,703	216,714	-44,011

 ^a Crude oil, petroleum preparations, liquefied propane and butane, and other mineral fuels.
 ^b Petroleum, coal, natural gas, and electricity.

Notes: Monthly data are not adjusted for seasonal variations. See Note 5 at end of section. Totals may not equal sum of components due to independent rounding. Totals may not equal sum of components due to the U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. customs territory, which comprises the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands.

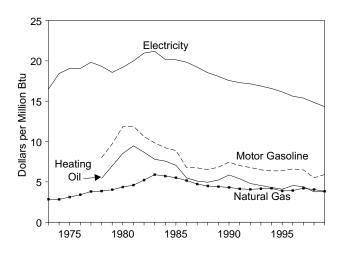
Sources: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division. For details, see "Sources for Table 1.6" at the end of this

section.

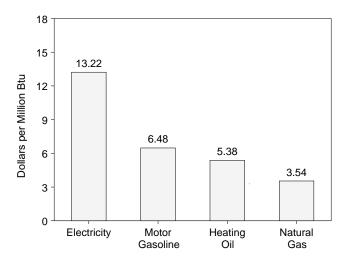
R=Revised.

Cost of Fuels to End Users in Constant (1982-1984) Dollars

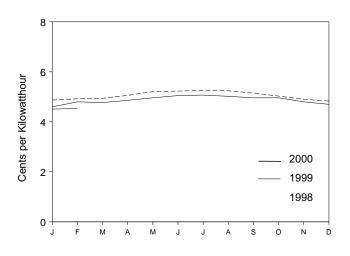
Costs, 1973-1999



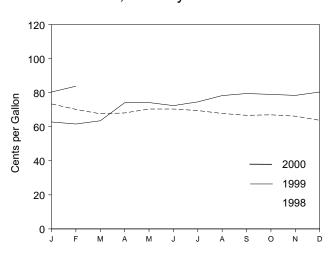
Costs, January 2000



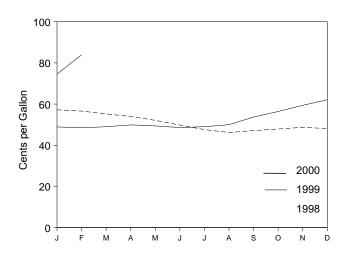
Electricity, Monthly



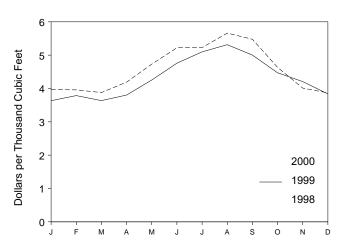
Motor Gasoline, Monthly



Heating Oil, Monthly



Natural Gas, Monthly



NA=Not available.

Note: Because vertical scales differ, graphs should not be compared.

Source: Table 1.7.

Table 1.7 Cost of Fuels to End Users in Constant (1982-84) Dollars

	Consumer Price Index (Urban) ^a		Gasoline Types)		dential ng Oil	Resid Natura		Resid Elect	
	Index 1982-1984=100	Cents per Gallon	Dollars per Million Btu	Cents per Gallon	Dollars per Million Btu	Cents per Thousand Cubic Feet	Dollars per Million Btu	Cents per Kilowatthour	Dollars per Million Btu
1973 Average	44.4	NA	NA	NA	NA	290.5	2.85	5.6	16.50
1974 Average	49.3	NA	NA	NA	NA	290.1	2.83	6.3	18.43
1975 Average	53.8	NA	NA	NA	NA	317.8	3.12	6.5	19.07
1976 Average	56.9	NA	NA	NA	NA	348.0	3.41	6.5	19.06
1977 Average	60.6	NA	NA	NA	NA	387.8	3.81	6.8	19.83
1978 Average	65.2	100.0	8.00	75.2	5.42	392.6	3.86	6.6	19.33
1979 Average	72.6	121.5	9.71	97.0	6.99	410.5	4.03	6.3	18.57
1980 Average	82.4	148.2	11.85	118.2	8.52	446.6	4.36	6.6	19.21
1981 Average	90.9	148.8	11.90	131.4	9.47	471.9	4.60	6.8	19.99
1982 Average	96.5	132.7	10.61	120.2	8.67	535.8	5.22	7.2	20.96
1983 Average	99.6	123.0	9.83	108.2	7.80	608.4	5.90	7.2	21.19
1984 Average	103.9	115.3	9.22	105.0	7.57	589.0	5.72	6.88	20.17
1985 Average	107.6	111.2	8.89	97.9	7.06	568.8	5.52	6.87	20.13
1986 Average	109.6	84.9	6.79	76.3	5.50	531.9	5.17	6.77	19.84
1987 Average	113.6	84.2	6.74	70.7	5.10	487.7	4.73	6.56	19.22
1988 Average	118.3	81.4	6.51	68.7	4.96	462.4	4.49	6.32	18.53
1989 Average	124.0	85.5	6.83	72.6	5.23	454.8	4.41	6.17	18.08
1990 Average	130.7	93.1	7.44	81.3	5.86	443.8	4.31	5.99	17.56
1991 Average	136.2	87.8	7.02	74.8	5.39	427.3	4.14	5.90	17.30
1992 Average	140.3	84.8	6.78	66.6	4.80	419.8	4.07	5.85	17.15
1993 Average	144.5	81.2	6.49	63.0	4.55	426.3	4.15	5.76	16.88
1994 Average	148.2	79.2	6.36	59.6	4.30	432.5	4.20	5.65	16.57
1995 Average	152.4	79.1	6.37	56.9	4.10	397.6	3.87	5.51	16.15
1996 Average	156.9	82.1	6.61	63.0	4.54	404.1	3.93	5.33	15.62
1997 Average	160.5	80.4	6.48	61.3	4.42	432.4	4.21	5.25	15.39
1998 January	161.6	73.4	5.91	57.2	4.13	396.7	3.84	4.87	14.27
February	161.9	70.2	5.66	56.6	4.08	395.9	3.83	4.92	14.43
March	162.2	67.6	5.45	55.2	3.98	387.8	3.75	4.94	14.47
April	162.5	68.1	5.48	54.0	3.89	419.1	4.06	5.06	14.84
May	162.8	70.4	5.67	52.1	3.76	473.0	4.58	5.21	15.28
June	163.0	70.4	5.68	49.8	3.59	522.1	5.05	5.23	15.34
July	163.2	69.5	5.60	47.6	3.43	522.7	5.06	5.26	15.41
August	163.4	67.8	5.46	46.2	3.33	566.1	5.48	5.24	15.37
September	163.6	66.7	5.37	47.1	3.39	547.7	5.30	5.15	15.10
October	164.0	67.0	5.40	47.9	3.46	463.4	4.49	5.03	14.74
November	164.0	66.2	5.34	48.7	3.51	401.2	3.88	4.90	14.37
December	163.9	63.8	5.14	48.1	3.47	386.8	3.74	4.83	14.16
Average	163.0	68.4	5.51	52.3	3.77	418.4	4.05	5.07	14.85
1999 January	164.3	62.8	5.06	48.9	3.53	363.4	3.52	4.60	13.47
February	164.5	61.6	4.97	48.5	3.50	378.7	3.67	4.80	14.08
March	165.0	63.5	5.12	49.0	3.54	363.6	3.52	4.77	13.98
April	166.2	74.1	5.97	49.9	3.60	380.3	3.68	4.86	14.23
May	166.2	74.2	5.98	49.4	3.56	425.4	4.12	4.96	14.53
June	166.2	72.4	5.84	48.6	3.51	475.9	4.61	5.05	14.81
July	166.7	74.6	6.01	49.0	3.53	509.9	4.94	5.07	14.87
August	167.1	78.3	6.31	50.0	3.60	531.4	5.14	5.02	14.72
September	167.9	79.5	6.40	53.7	3.87	500.3	4.84	4.96	14.54
October	168.2	79.0	6.37	56.4	4.06	447.1	4.33	4.96	14.53
November	168.3	78.4	6.32	59.4	4.28	420.7	4.07	4.80	14.05
December	168.3	80.4	6.48	62.1	4.48	383.8	3.72	4.70	13.77
Average	166.6	73.3	5.91	52.6	3.79	396.2	3.84	4.89	14.32
2000 January	168.7	80.4	6.48	^R 74.6	^R 5.38	365.7	3.54	4.51	13.22
February	169.7	83.8	6.75	83.9	6.05	365.7 NA	3.54 NA	4.51	13.22

a Consumer Price Index, All Urban Consumers, All Items, 1982-1984 =

100.0.

R=Revised. NA=Not available.

Notes: Fuel costs are calculated by using the Urban Consumer Price Index (CPI) developed by the Bureau of Labor Statistics. Annual averages may not equal average of months due to independent rounding.

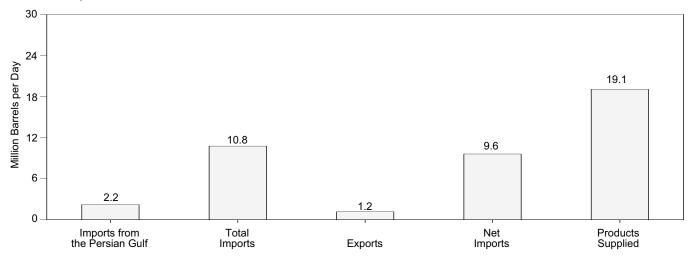
Geographic coverage is the 50 States and the District of Columbia.

Sources: Fuel Prices: Tables 9.4 (All Types), 9.8c, 9.11, and 9.9, adjusted by the CPI. CPI: 1973-1995—Economic Report of the President, February 1999, Table B-60. 1996 forward—Council of Economic Advisers, Economic Indicators, April 2000, "Consumer Prices - All Urban Consumers."

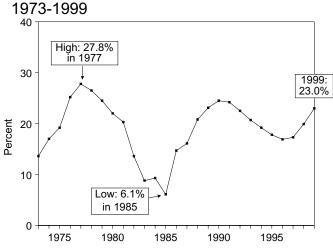
Conversion Factors: Tables A1, A3, A4, and A6.

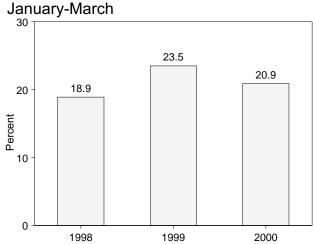
Figure 1.7 Overview of U.S. Petroleum Trade

Overview, March 2000

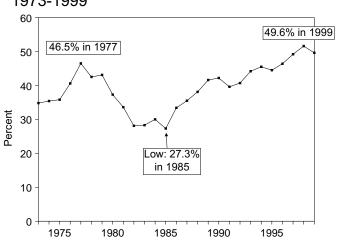


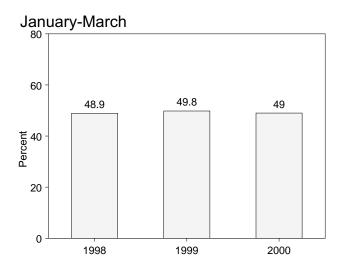
Imports from the Persian Gulf as a Share of Total Imports





Net Imports as Share of Products Supplied 1973-1999





Note: Because vertical scales differ, graphs should not be compared. Source: Table 1.8, 3.1a, and 3.1b.

Table 1.8 Overview of U.S. Petroleum Trade

	Imports from the					As Share of P	oducts Sup	plied	Imports from the Persian Gulf
	Persian Gulf ^a	Total Imports	Exports	Net Imports	Products Supplied	Imports from the Persian Gulf ^a	Total Imports	Net Imports	as a Share of Total Imports
		Thous	and Barrels p	er Day			Per	cent	
973 Average	848	6,256	231	6,025	17,308	4.9	36.1	34.8	13.6
974 Average	1,039	6,112	221	5,892	16,653	6.2	36.7	35.4	17.0
975 Average	1,165	6,056	209	5,846	16,322	7.1	37.1	35.8	19.2
976 Average	1,840	7,313	223	7,090	17,461	10.5	41.9	40.6	25.2
977 Average	2,448	8,807	243	8,565	18,431	13.3	47.8	46.5	27.8
978 Average	2,219	8,363	362	8,002	18,847	11.8	44.4	42.5	26.5
979 Average	2,069	8,456	471	7,985	18,513	11.2	45.7	43.1	24.5
980 Average	1,519	6,909	544	6,365	17,056	8.9	40.5	37.3	22.0
981 Average	1,219	5,996	595	5,401	16,058	7.6	37.3	33.6	20.3
982 Average	696	5,113	815	4,298	15,296	4.5	33.4	28.1	13.6
983 Average	442	5,051	739	4,312	15,231	2.9	33.2	28.3	8.8
984 Average	506	5,437	722	4,715	15,726	3.2	34.6	30.0	9.3
985 Average	311	5,067	781	4,286	15,726	2.0	32.2	27.3	6.1
986 Average	912	6,224	785	5,439	16,281	5.6	38.2	33.4	14.7
987 Average	1,077	6,678	764	5,914	16,665	6.5	40.1	35.5	16.1
988 Average	1,541	7,402	815	6,587	17,283	8.9	42.8	38.1	20.8
989 Average	1,861	8,061	859	7,202	17,325	10.7	46.5	41.6	23.1
1990 Average	1,966	8,018	857	7,161	16,988	11.6	47.2	42.2	24.5
991 Average	1,845	7,627	1,001	6,626	16,714	11.0	45.6	39.6	24.2
992 Average	1,778	7,888	950	6,938	17,033	10.4	46.3	40.7	22.5
1993 Average	1,782	8,620	1,003	7,618	17,237	10.3	50.0	44.2	20.7
994 Average	1,728	8,996	942	8,054	17,718	9.8	50.8	45.5	19.2
995 Average	1,573	8,835	949	7,886	17,725	8.9	49.8	44.5	17.8
996 Average	1,604	9,478	981	8,498	18,309	8.8	51.8	46.4	16.9
997 Average	1,755	10,162	1,003	9,158	18,620	9.4	54.6	49.2	17.3
998 January	1,804	10,127	1,133	8,994	18,362	9.8	55.2	49.0	17.8
February	1,826	9,991	1,003	8,988	18,316	10.0	54.5	49.1	18.3
March	2,066	10,034	948	9,087	18,685	11.1	53.7	48.6	20.6
April	2,111	11,105	1,048	10,057	19,044	11.1	58.3	52.8	19.0
May	1,915	11,104	1,053	10,051	18,375	10.4	60.4	54.7	17.3
June	2,207	10,926	987	9,939	19,182	11.5	57.0	51.8	20.2
July	2,351	11,649	998	10,651	19,466	12.1	59.8	54.7	20.2
August	2,486	11,032	780	10,252	19,347	12.8	57.0	53.0	22.5
September	2,383	10,499	863	9,636	18,895	12.6	55.6	51.0	22.7
October	2,194	10,861	851	10,011	19,188	11.4	56.6	52.2	20.2
November	2,153	10,860	782	10,078	18,673	11.5	58.2	54.0	19.8
December	2,116	10,258	893	9,365	19,419	10.9	52.8	48.2	20.6
Average	2,136	10,708	945	9,764	18,917	11.3	56.6	51.6	19.9
999 January	2,114	10,181	896	9,285	18,850	11.2	54.0	49.3	20.8
February	2,396	10,336	756	9,580	19,240	12.5	53.7	49.8	23.2
March	2,794	10,589	764	9,825	19,489	14.3	54.3	50.4	26.4
April	2,591	11,227	1,196	10,031	18,861	13.7	59.5	53.2	23.1
May	2,449	10,865	915	9,950	18,142	13.5	59.9	54.8	22.5
June	2,484	10,624	907	9,717	19,738	12.6	53.8	49.2	23.4
July	2,393	11,250	918	10,332	19,503	12.3	57.7	53.0	21.3
August	2,422	10,734	902	9,832	19,883	12.2	54.0	49.4	22.6
September	2,474	10,566	889	9,677	19,537	12.7	54.1	49.5	23.4
October	2,356	10,428	944	9,484	19,860	11.9	52.5	47.8	22.6
November	2,294	9,924	950	8,974	19,027	12.1	52.2	47.2	23.1
December	2,314	9,876	1,230	8,646	20,507	11.3	48.2	42.2	23.4
Average	2,423	10,551	940	9,612	19,389	12.5	54.4	49.6	23.0
000 January	2,036	9,795	1,006	8,789	18,592	11.0	52.7	47.3	20.8
February	2,256	10,396	870	9,526	19,296	11.7	53.9	49.4	21.7
March	2,189	10,768	1,159	9,609	19,064	11.5	56.5	50.4	20.3
3-Month Average	2,158	10,318	1,015	9,303	18,977	11.4	54.4	49.0	20.9
999 3-Month Average	2,436	10,370	807	9,563	19,192	12.7	54.0	49.8	23.5
1998 3-Month Average	1,901	10,053	1,029	9,024	18,459	10.3	54.5	48.9	18.9

^a Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates.

Notes: Readers of Table 1.8 may be interested in a feature article, "Measuring Dependence on Imported Oil," that was published in the August 1995 Monthly Energy Review. Petroleum is crude oil, lease condensate, unfinished oils, petroleum products, natural gas plant liquids, and nonhydrocarbon compounds blended into finished petroleum products. Beginning in October 1977, petroleum imported for the Strategic Petroleum

Reserves is included. Annual averages may not equal average of months due to independent rounding.

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

U.S. exports include shipments to U.S. exports from U.S. territorics.

territories, and imports include receipts from U.S. territories.
Sources: Column 1: Table 3.3b. Columns 2 - 4: Table 3.1b.
Column 5: Table 3.1a. Column 6: Column 1 divided by column 5 times
100. Column 7: Column 2 divided by column 5 times 100. Column 8:
Column 4 divided by column 5 times 100. Column 9: Column 1 divided by column 2 times 100.

NA=Not available. E=Estimate.

Figure 1.8 **Energy Consumption per Dollar of Gross Domestic Product**

(Thousand Btu per Chained (1996) Dollar)

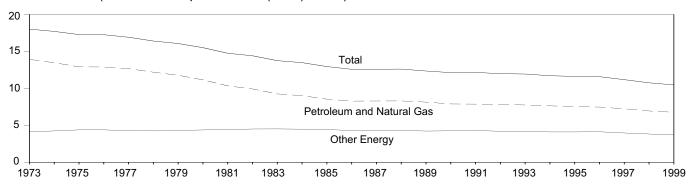


Table 1.9 **Energy Consumption per Dollar of Gross Domestic Product**

(Seasonally Adjusted at Annual Rates)

	Ene	ergy Consumption	n		Energy Cons	sumption per Doll	ar of GDP	
	Petroleum and Natural Gas	Other Energy ^a	Total ^a	Gross Domestic Product (GDP)	Petroleum and Natural Gas	Other Energy ^a	Total ^a	
		Quadrillion Btu		Billion Chained (1996) Dollars	Thousand Btu per Chained (1996) Dollar			
973 Year	57.352	16.930	74,282	4,123.4	13.91	4.11	18.01	
974 Year	55.187	17.356	72.543	4,099.0	13.46	4.23	17.70	
975 Year	52.678	17.867	72.543 70.546	4,084.4	12.90	4.23	17.70	
976 Year	55.520	18.842	74.362	,	12.88	4.37	17.27	
				4,311.7				
977 Year	57.053	19.236	76.289	4,511.8	12.65	4.26	16.91	
978 Year	57.966	20.123	78.089	4,760.6	12.18	4.23	16.40	
979 Year	57.789	21.108	78.898	4,912.1	11.76	4.30	16.06	
980 Year	54.596	21.359	75.955	4,900.9	11.14	4.36	15.50	
981 Year	51.859	22.131	73.990	5,021.0	10.33	4.41	14.74	
982 Year	48.736	22.111	70.848	4,919.3	9.91	4.49	14.40	
983 Year	47.411	23.114	70.524	5,132.3	9.24	4.50	13.74	
984 Year	49.558	24.586	74.144	5,505.2	9.00	4.47	13.47	
985 Year	48.756	25.225	73.981	5,717.1	8.53	4.41	12.94	
986 Year	48.904	25.393	74.297	5,912.4	8.27	4.29	12.57	
987 Year	50.609	26.285	76.894	6,113.3	8.28	4.30	12.58	
988 Year	52.774	27.444	80.219	6,368.4	8.29	4.31	12.60	
989 Year	53.595	b 27.763	b 81.358	6,591.8	8.13	4.21	12.34	
990 Year	52.849	28,440	81,289	6.707.9	7.88	4.24	12.12	
991 Year	52,452	28,663	81,115	6,676,4	7.86	4.29	12.15	
992 Year	53.657	^c 28.765	^c 82.422	6,880.0	7.80	4.18	11.98	
993 Year	54.668	29.554	84.222	7,062.6	7.74	4.19	11.93	
994 Year	55.958	30.031	85.988	7,347.7	7.62	4.09	11.70	
995 Year	56.717	30.844	87.561	7,543.8	7.52	4.09	11.61	
996 Year	58.316	32.101	90.417	7,813.2	7.46	4.11	11.57	
997 Year	58.795	32.182	90.977	8,144.8	7.22	3.95	11.17	
337 Tear	30.733	32.102	30.377	0,144.0	1.22	0.55		
998 1st Quarter	57.846	32.865	90.711	8,391.1	6.89	3.92	10.81	
2 nd Quarter	59.616	32.706	92.321	8,436.3	7.07	3.88	10.94	
3 rd Quarter	60.043	32.356	92.400	8.515.7	7.05	3.80	10.85	
4 th Quarter	57.898	31.575	89.473	8,639.5	6.70	3.65	10.36	
Year	58.855	32.376	91.231	8,495.7	6.93	3.81	10.74	
ı Gai	30.033	32.370	31.231	0,433.7	0.33	3.01	10.74	
999 1st Quarter	^R 60.146	R 32.336	R 92.482	8.717.6	6.90	^R 3.71	^R 10.61	
2 nd Quarter	R 59.596	R 33.253	R 92.849	8,758.3	6.80	R 3.80	R 10.60	
3 rd Quarter	R 60.079	R 32.563	R 92.642	8.879.8	6.77	R 3.67	R 10.43	
4 th Quarter	R 59.123	R 33.003	R 92.126	9.037.2	6.54	R 3.65	R 10.19	
Year	R 59.734	R 32.782	R 92.12 6	9,037.2 8,848.2	6.75	3.70	10.19 10.46	
ı eai	39.734	32.702	92.510	0,040.2	0.75	3.70	10.46	

^a Due to a lack of consistent monthly historical data, some renewable energy sources are not included in other energy or total consumption. For example, in 1998, 3.5 quadrillion Btu of renewable energy used by electric utilities to generate electricity for distribution and 0.1 quadrillion Btu of ethanol blended into motor gasoline are included, but an estimated 3.4 quadrillion Btu used by residential, commercial, and industrial consumers is not. See Note 12 at the end of Section 2 for details.

b Beginning in 1989, includes electricity generated by nonutility nuclear

R=Revised.

Quarterly data are seasonally adjusted and shown at annual Yearly data may not equal average of quarters due to seasonality adjustments and independent rounding. Totals may not equal sum of components due to independent rounding. Geographic coverage is the 50 States and the District of Columbia.

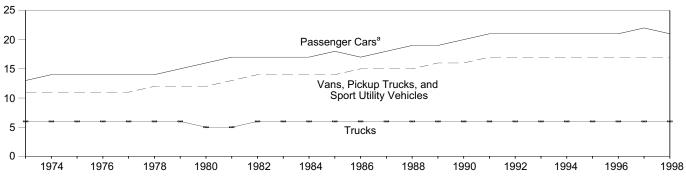
Energy Consumption: Table 1.4. Sources: **Gross Domestic** Product: 1973-1997—U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business, November 1999, Table 3B. 1998 forward—U.S. Department of Commerce, Bureau of Economic Analysis, *BEA*News Release, May 25, 2000, Table 3, which is available at website www.bea.doc.gov/bea/newsrel/gdp100p.htm.

units.

C Beginning in 1992, includes coal consumed by "Other Power Producers."

Figure 1.9 **Motor Vehicle Fuel Rates**

(Miles per Gallon)



^a Includes motorcycles through 1989.

Table 1.10 Motor Vehicle Mileage, Fuel Consumption, and Fuel Rates

		Passenger Cars	3	Vans, Pickup Trucks, and Sport Utility Vehicles ^a			Trucks ^b			All Motor Vehicles ^c		
	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Rate (miles per gallon)	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Rate (miles per gallon)	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Rate (miles per gallon)	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Rate (miles pe gallon)
1973	d 9,884	d 737	d 13.4	9,779	931	10.5	15,370	2,775	5.5	10,099	850	11.9
1974	d 9,221	d 677	d13.6	9,452	862	11.0	14,995	2,708	5.5	9,493	788	12.0
1975	d 9 ,309	d 665	d 14.0	9,829	934	10.5	15,167	2,722	5.6	9,627	790	12.2
1976	d 9 ,418	d 681	d 13.8	10,127	934	10.8	15,438	2,764	5.6	9,774	806	12.1
1977	d 9 ,517	d 676	^d 14.1	10,607	947	11.2	16,700	3,002	5.6	9,978	814	12.3
1978	d 9 ,500	d 665	^d 14.3	10,968	948	11.6	18,045	3,263	5.5	10,077	816	12.4
1979	d 9.062	d 620	d 14.6	10.802	905	11.9	18.502	3,380	5.5	9.722	776	12.5
1980	d 8,813	d 551	d 16.0	10,437	854	12.2	18,736	3,447	5.4	9,458	712	13.3
1981	d 8,873	d 538	d 16.5	10,244	819	12.5	19,016	3,565	5.3	9,477	697	13.6
1982	d 9 ,050	d 535	d 16.9	10,276	762	13.5	19,931	3,647	5.5	9,644	686	14.1
1983	d 9 ,118	^d 534	^d 17.1	10,497	767	13.7	21,083	3,769	5.6	9,760	686	14.2
1984	d 9,248	d 530	^d 17.4	11,151	797	14.0	22,550	3,967	5.7	10,017	691	14.5
1985	d 9,419	d 538	d 17.5	10,506	735	14.3	20,597	3,570	5.8	10,020	685	14.6
1986	d 9,464	^d 543	^d 17.4	10,764	738	14.6	22,143	3,821	5.8	10,143	692	14.7
1987	^d 9,720	^d 539	d 18.0	11,114	744	14.9	23,349	3,937	5.9	10,453	694	15.1
1988	d 9,972	^d 531	d 18.8	11,465	745	15.4	22,485	3,736	6.0	10,721	688	15.6
1989	d10,157	d 533	d 19.0	11,676	724	16.1	22,926	3,776	6.1	10,932	688	15.9
1990	10,504	520	20.2	11,902	738	16.1	23,603	3,953	6.0	11,107	677	16.4
1991	10,571	501	21.1	12,245	721	17.0	24,229	4,047	6.0	11,294	669	16.9
1992	10,857	517	21.0	12,381	717	17.3	25,373	4,210	6.0	11,558	683	16.9
1993	10,804	527	20.5	12,430	714	17.4	26,262	4,309	6.1	11,595	693	16.7
1994	10,992	531	20.7	12,156	701	17.3	25,838	4,202	6.1	11,683	698	16.7
1995	11,203	530	21.1	12,018	694	17.3	26,514	4,315	6.1	11,793	700	16.8
1996	11,330	534	21.2	11,811	685	17.2	26,092	4,221	6.2	11,813	700	16.9
1997	11,581	539	21.5	12,115	703	17.2	27,032	4,218	6.4	12,107	711	17.0
1998 ^e	11,725	548	21.4	12,061	704	17.1	27,064	4,257	6.4	12,183	719	17.0

^a Includes a small number of trucks with 2 axles and 4 tires, such as step vans.

R=Revised.

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

Web Page: http://www.fhwa.dot.gov/ohim.
Sources: Passenger Cars: 1990-1994: U.S. Department of Transportation, Bureau of Transportation Statistics, National Transportation Statistics 1998, Table All Other Data: 1973-1994: Federal Highway Administration (FHWA), Highway Statistics Summary to 1995, Table VM-201A. 1995 forward: FHWA, Highway Statistics, annual, Table VM-1.

b Single-unit trucks with 2 axles and 6 or more tires, and combination trucks. ^c Includes buses and motorcycles, which are not shown separately.

d Includes motorcycles.

e Preliminary.

Table 1.11 Heating Degree-Days by Census Division

		April '	1 through A	pril 30			July 1	Cumulative I through A		
				Percent	Change				Percent	Change
Census Divisions	Normala	1999	2000	Normal to 2000	1999 to 2000	Normala	1999	2000	Normal to 2000	1999 to 2000
New England Connecticut, Maine, Massachusetts, New Hampshire,	500	550	505		7.0	0.000	5.070	5,000	7.0	
Rhode Island, Vermont	580	552	595	2.6	7.8	6,322	5,876	5,882	-7.0	0.1
Middle Atlantic New Jersey, New York, Pennsylvania	484	469	500	3.3	6.6	5,640	5,125	5,106	-9.5	4
East North Central Illinois, Indiana, Michigan, Ohio, Wisconsin	483	427	503	4.1	17.8	6,195	5,522	5,506	-11.1	3
West North Central lowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	438	419	453	3.4	8.1	6,438	5,625	5,487	-14.8	-2.5
South Atlantic Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia,										
West Virginia	169	167	210	24.3	25.7	2,856	2,543	2,622	-8.2	3.1
East South Central Alabama, Kentucky, Mississippi, Tennessee	187	145	246	31.6	69.7	3,542	2,979	3,097	-12.6	4.0
West South Central Arkansas, Louisiana, Oklahoma, Texas	75	70	100	(°)	(°)	2,309	1,812	1,759	-23.8	-2.9
Mountain Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	433	521	334	-22.9	-35.9	5,035	4,657	4,350	-13.6	-6.6
Pacific ^b California, Oregon, Washington	312	372	249	-20.2	-33.1	2,997	3,211	2,662	-11.2	-17.1
U.S. Average ^b	339	335	345	1.8	3.0	4,414	4,007	3,907	-11.5	-2.5

^a "Normal" is based on calculations of data from 1961 through 1990.

Notes: Degree-days are relative measurements of outdoor air temperature used as an index for heating and cooling energy requirements. Heating degree-days are the number of degrees that the daily average temperature falls below 65° F. Cooling degree-days are the number of degrees that the

daily average temperature rises above 65° F. The daily average temperature is the mean of the maximum and minimum temperatures in a 24-hour period. For example, a weather station recording an average daily temperature of 40° F would report 25 heating degree-days for that day (and 0 cooling degree-days). If a weather station recorded an average daily temperature of 78° F, cooling degree-days for that station would be 13 (and 0 heating degree days).

Sources: See end of section.

b Excludes Alaska and Hawaii.

 $^{^{\}rm C}$ Percent change is not meaningful: normal is less than 100 or ratio is incalculable.

Table 1.12 Cooling Degree-Days by Census Division

		April '	1 through A	pril 30			January	Cumulative / 1 through		
				Percent	Change				Percent	Change
Census Divisions	Normala	1999	2000	Normal to 2000	1999 to 2000	Normal ^a	1999	2000	Normal to 2000	1999 to 2000
New England Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	0	0	0	(°)	(°)	0	0	0	(°)	(°)
Middle Atlantic New Jersey, New York, Pennsylvania	0	0	0	(°)	(°)	0	0	0	(°)	(c)
East North Central Illinois, Indiana, Michigan, Ohio, Wisconsin	1	0	0	(°)	(°)	2	0	0	(°)	(°)
West North Central lowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	8	3	1	(°)	(°)	11	3	1	(°)	(°)
South Atlantic Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia,	72	113	67	(°)	(°)	177	203	172	-2.8	-15.3
West Virginia East South Central Alabama, Kentucky, Mississippi, Tennessee	34	73	23	(°)	(°)	64	203	52	-2.8 (°)	(°)
West South Central Arkansas, Louisiana, Oklahoma, Texas	109	156	118	8.3	-24.4	180	239	256	42.2	7.1
Mountain Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	31	19	50	(°)	(°)	41	28	58	(°)	(c)
Pacific ^b California, Oregon, Washington	12	10	14	(°)	(°)	18	10	15	(°)	(°)
U.S. Average ^b	31	44	31	(°)	(°)	61	71	67	(°)	(°)

^a "Normal" is based on calculations of data from 1961 through 1990.

Notes: Degree-days are relative measurements of outdoor air temperature used as an index for heating and cooling energy requirements. Cooling degree-days are the number of degrees that the daily average temperature rises above 65° F. Heating degree-days are the number of degrees that the

daily average temperature falls below 65° F. The daily average temperature is the mean of the maximum and minimum temperatures in a 24-hour period. For example, if a weather station recorded an average daily temperature of 78° F, cooling degree-days for that station would be 13 (and 0 heating degree-days). A weather station recording an average daily temperature of 40° F would report 25 heating degree-days for that day (and 0 cooling degree-days).

Sources: See end of section.

b Excludes Alaska and Hawaii.

 $^{^{\}rm C}$ Percent change is not meaningful: normal is less than 100 or ratio is incalculable.

Energy Summary 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, and electricity generated from nuclear power. Production also includes electricity generated for distribution from wood, waste, geothermal, wind, photovoltaic, and solar thermal energy but excludes other energy obtained from those sources because consistent historical data are not available. Approximate heat contents (Btu values) are derived by using the conversion factors provided in Appendix A.
- 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 (assumed to be hydroelectricity), net imports of coal coke, and electricity generated from nuclear power. Consumption also includes electricity generated for distribution from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy but excludes other energy obtained from those sources because consistent historical data are not available. Approximate heat contents (Btu values) are derived by using the conversion factors provided in Appendix A.
- **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 (assumed to be hydroelectricity), and coal coke. Approximate heat contents (Btu values) are derived by using the conversion factors provided in Appendix A. For further information on electricity, see "Note for imports and exports of electricity" under Note 8 of Section 2, Energy Consumption Section Notes and Sources.
- **4. Energy Exports:** Energy exports include coal, crude oil, petroleum products, natural gas, electricity produced from hydroelectric power, and coal coke. Approximate heat contents (Btu values) are derived by using the conversion factors provided in Appendix A. For more information on electricity, see "Note for imports and exports of electricity" under Note 8 of Section 2, Energy Consumption Section Notes and Sources.
- 5. Merchandise Trade Value: Import data presented are based on the customs value. That value does not include insurance and freight and is consequently lower than the cost, insurance, and freight (CIF) value, which is also reported by the Bureau of the Census. All export data, and import data prior to 1981, are on a free along-side ship (f.a.s.) basis.
- "Balance" is exports minus imports; a positive balance indicates a surplus trade value and a negative balance indicates a deficit trade value. "Energy" includes mineral fuels, lubricants, and related material. "Non-Energy Balance" and "Total Merchandise" in-

clude foreign exports (i.e., re-exports) and nonmonetary gold and Department of Defense Grant-Aid shipments. The "Non-Energy Balance" is calculated by subtracting the "Energy" from the "Total Merchandise Balance."

"Imports" consist of government and nongovernment shipments of merchandise into the 50 States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and the U.S. Foreign Trade Zones. They reflect the total arrival from foreign countries of merchandise that immediately entered consumption channels, warehouses, the Foreign Trade Zones, or the Strategic Petroleum Reserve. They exclude shipments between the United States, Puerto Rico, and U.S. possessions, shipments to U.S. Armed Forces and diplomatic missions abroad for their own use, U.S. goods returned to the United States by its Armed Forces, and in-transit shipments.

Sources for Table 1.6

U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division:

Petroleum Exports

1974-1987: "U.S. Exports," FT410, December issues. **1988:** "Report on U.S. Merchandise Trade, 1988 Final Revisions."

1989: "Report on U.S. Merchandise Trade, 1989 Revisions."

1990: "U.S. Merchandise Trade, 1990 Final Report."

1991: "U.S. Merchandise Trade, 1991 Final Report," May 13, 1992.

1992: "U.S. Merchandise Trade, 1992 Final Report," May 12, 1993.

1993: "U.S. International Trade in Goods and Services, Annual Revision for 1993."

1994: "U.S. International Trade in Goods and Services, Annual Revision for 1994."

1995: "U.S. International Trade in Goods and Services, Annual Revision for 1995."

1996: "U.S. International Trade in Goods and Services, Annual Revision for 1996."

1997: "U.S. International Trade in Goods and Services, Annual Revision for 1997."

1998: "U.S. International Trade in Goods and Services, Annual Revision for 1998."

1999 and 2000: "U.S. International Trade in Goods and Services," FT-900, monthly.

Petroleum Imports

1974-1987: "U.S. Merchandise Trade," FT900, December issues, 1975-1988.

1988: "Report on U.S. Merchandise Trade, 1988 Final Revisions."

1989: "Report on U.S. Merchandise Trade, 1989 Revisions."

1990: "U.S. Merchandise Trade, 1990 Final Report." **1991:** "U.S. Merchandise Trade, 1991 Final Report," May 13, 1992, and "U.S. Merchandise Trade, October 1992," December 17, 1992, page 3.

1992: "U.S. Merchandise Trade, 1992 Final Report," May 12, 1993.

1993: "U.S. Merchandise Trade, 1992 Final Report," May 12, 1994.

1994: "U.S. International Trade in Goods and Services, Annual Revision for 1994."

1995: "U.S. International Trade in Goods and Services, Annual Revision for 1995."

1996: "U.S. International Trade in Goods and Services, Annual Revision for 1996."

1997: "U.S. International Trade in Goods and Services, Annual Revision for 1997."

1998: "U.S. International Trade in Goods and Services, Annual Revision for 1998."

1999 and 2000: "U.S. International Trade in Goods and Services," FT-900, monthly.

Energy Exports and Imports

1974-1987: U.S. merchandise trade press releases and database printouts for adjustments.

1988: January-July, monthly FT-900 supplement, 1989 issues. August-December, monthly FT-900, 1989 issues.

1989: Monthly FT-900, 1990 issues.

1990: "U.S. Merchandise Trade, 1990 Final Report."

1991: "U.S. Merchandise Trade, 1991 Final Report," May 13, 1992, and "U.S. Merchandise Trade, October 1992," December 17, 1992, page 3.

1992: "U.S. Merchandise Trade, 1992 Final Report," May 12, 1993.

1993: "U.S. International Trade in Goods and Services, Annual Revision for 1993."

1994: "U.S. International Trade in Goods and Services, Annual Revision for 1994."

1995: "U.S. International Trade in Goods and Services, Annual Revision for 1995."

1996: "U.S. International Trade in Goods and Services, Annual Revision for 1996."

1997: "U.S. International Trade in Goods and Services, Annual Revision for 1997."

1998: "U.S. International Trade in Goods and Services, Annual Revision for 1998."

1999 and 2000: "U.S. International Trade in Goods and Services," FT-900, monthly.

Energy and Non-Energy Balances

Calculated by the Energy Information Administration.

Total Merchandise

1974-1987: U.S. merchandise trade press releases and database printouts for adjustments.

1988: "Report on U.S. Merchandise Trade, 1988 Final Revisions," August 18, 1989.

1989: "Report on U.S. Merchandise Trade, 1989 Revisions," July 10, 1990.

1990: "U.S. Merchandise Trade, 1990 Final Report," May 10, 1991, and "U.S. Merchandise Trade, December 1992," February 18, 1993, page 3.

1991: "U.S. Merchandise Trade, 1992 Final Report," May 12, 1993.

1992: "U.S. International Trade in Goods and Services, Annual Revision for 1994."

1993 and 1994: "U.S. International Trade in Goods and Services, Annual Revision for 1995."

1995 and 1996: "U.S. International Trade in Goods and Services. Annual Revision for 1996."

1997 and 1998: "U.S. International Trade in Goods and Services, Annual Revision for 1998."

1999 and 2000: "U.S. International Trade in Goods and Services," FT-900, monthly.

Sources for Tables 1.11 and 1.12

There are several degree-day databases maintained by the National Oceanic and Atmospheric Administration. The information published here is developed by the National Weather Service Climate Analysis Center, Camp Springs, MD. 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 those 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 1990 by the U.S. Department of Commerce, Bureau of the Census. The data provided here are available sooner than the Historical Climatology Series 5-1 (heating degree-days) and 5-2 (cooling degree-days) developed by the National Climatic Data Center, Asheville, NC, which compiles data from some 8,000 weather stations.

Section 2. Energy Consumption

U.S. total energy consumption in February 2000 was 8.0 quadrillion Btu. Petroleum products accounted for 37 percent of the energy consumed in February 2000, while natural gas accounted for 29 percent, and coal accounted for 22 percent.

Residential and commercial sector consumption was 3.2 quadrillion Btu in February 2000, 7 percent higher than the February 1999 level. The sector accounted for 41 percent of total consumption, up 1 percentage point from its 40-percent share in February 1999.

Industrial sector consumption was 2.7 quadrillion Btu in February 2000, 4 percent higher than the February 1999 level. The industrial sector accounted for 34 percent of total consumption, down 1 percentage point from its 35-percent share in February 1999.

Transportation sector consumption of energy was 2.0 quadrillion Btu in February 2000, up 5 percent from the February 1999 level. The sector accounted for 25 percent of total consumption, about the same share as in February 1999.

Electric utility consumption of energy totaled 2.7 quadrillion Btu in February 2000, up 4 percent from the February 1999 level. Coal contributed 59 percent of the energy consumed by electric utilities, while nuclear electric power contributed 24 percent; hydroelectric 9 percent; natural gas 6 percent; petroleum 1 percent; and all other, less than 1 percent.

Table 2.1 Energy Consumption Summary for February 2000 (Quadrillion Btu)

		End-Us	e Sectors				
Energy Source	Residential and Commercial	Industrial	Industrial Transportation		Electric Utilities	Total	
coal	0.012	0.187	(b)	0.200	^c 1.571	c _{1.771}	
latural Gasd	F 1.190	F.893	F .065	F 2.146	.170	F 2.317	
etroleum Productse	.204	.789	1.953	2.946	.036	2.981	
luclear Electric Power	_	_	_	_	g.655	g.655	
lydroelectric Powerf	_	.003	_	.003	.244	.247	
Seothermal	_	_	_	_	(s)	(s)	
let Imports of Coal Coke	-	.007	_	.007		.007	
Other ^{h'}	-	_	_	_	.002	.002	
Primary Consumption	1.405	1.880	2.018	5.302	2.678	7.981	
lectricity ⁱ	.628	.289	.001	.919	_	_	
Net Consumption	2.033	2.169	2.020	6.221	_	_	
lectrical System Energy Losses	1.203	.554	.003	1.760	_	-	
Total Consumption	3.236	2.723	2.023	7.981	_	-	

a Totals for coal and natural gas may not equal sum of sectors due to the use of sector-specific conversion factors.

Note Regarding Table 2.1

Due to a lack of consistent monthly historical data, some renewable energy sources are not included in total consumption. For 1998, for example, 3.5 quadrillion Btu of renewable energy used by electric utilities to generate electricity for distribution and 0.1 quadrillion Btu for ethanol blended into motor gasoline are included, but an estimated 3.4 quadrillion Btu used by residential, commercial, and industrial consumers is not. See Note 12 at the end of section for details.

^b Small amounts of coal consumed for transportation are reported as industrial sector consumption.

c Includes coal consumed by "Other Power Producers." See Table 6.2.

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

e Products obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds.

Includes net imports of electricity.

⁹ Includes electricity generated by nonutility nuclear units.

h "Other" is electricity generated for distribution from wood, waste, wind, photovoltaic, and solar thermal energy.

Electric utility retail sales of electricity, including nonutility sales of electricity to utilities for distribution to end users; does not include nonutility facility use of onsite electricity generation or electricity sold by nonutilities directly to end users.

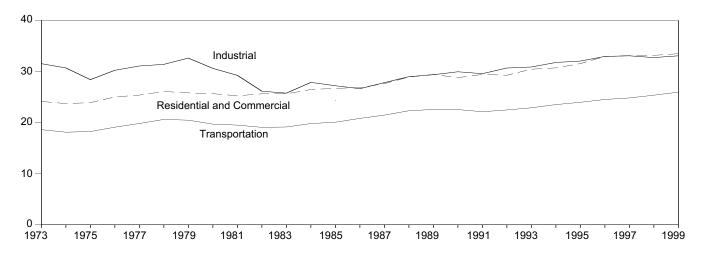
^{- =} Not applicable. (s)=Less than 0.5 trillion Btu. F=Forecast.

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

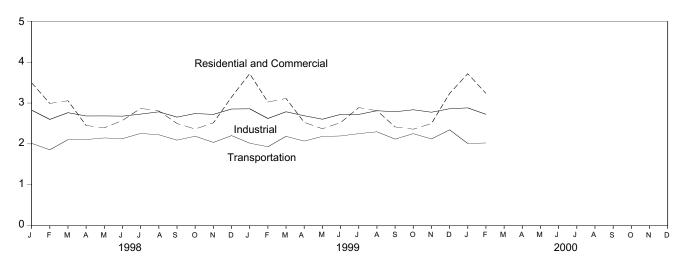
Additional Notes and Sources: See Tables 2.2-2.6 and end of section.

Figure 2.1 Energy Consumption by End-Use Sector

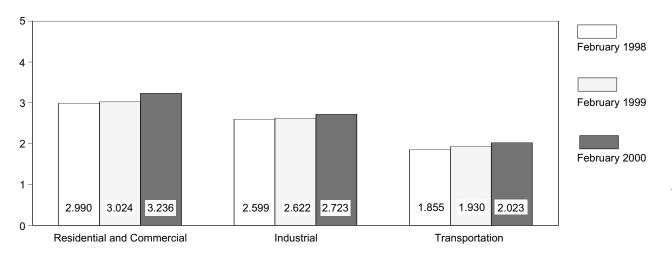
Overview, 1973-1999



Overview, Monthly



Overview, February



Note: Because vertical scales differ, graphs should not be compared.

Source: Table 2.2.

Table 2.2 Energy Consumption by End-Use Sector

	Residential a	nd Commercial	Indu	ustrial	Transp	ortation		
	Neta	Total	Neta	Total	Net ^a	Total	Neta	Total
1973 Total	15.763	24.136	25.917	31.528	18.587	18.612	60,274	74.282
1974 Total	15.245	23.723	24.994	30.694	18.096	18.119	58.342	72.543
1975 Total	15.200	23.899	22.737	28.402	18.219	18.244	56.157	70.546
1976 Total	15.997	25.019	24.038	30.236	19.075	19.099	59.118	74.362
1977 Total	15.828	25.384	24.593	31.077	19.795	19.820	60,223	76.289
1978 Total	16.022	26.081	24.637	31.392	20.590	20.615	61.251	78.089
1979 Total	15.709	25.809	25.679	32.616	20.447	20.471	61.836	78.898
1980 Total	15.075	25.654	23.854	30.606	19.669	19.696	58.597	75.955
1981 Total	14.541	25.242	22.533	29.240	19.480	19.506	56.557	73.990
1982 Total	14.629	25.629	20.020	26.145	19.043	19.069	53.697	70.848
1983 Total	14.393	25.621	19.401	25.759	19.111	19.141	52.907	70.524
1984 Total	14.962	26.466	21.184	27.867	19.775	19.808	55.924	74.144
	14.837		20.520			20.071		73.981
1985 Total		26.700		27.214	20.038		55.391	
1986 Total	14.789	26.846	20.101	26.630	20.783	20.818	55.676	74.297
1987 Total	15.144	27.614	21.117	27.826	21.421	21.456	57.678	76.894
1988 Total	16.002	28.917	22.085	28.985	22.277	22.313	60.366	80.219
1989 Total	16.258	29.416	22.272	29.365	22.533	22.569	61.071	^b 81.358
1990 Total	15.567	28.795	22.842	29.946	22.504	22.540	60.921	81.289
1991 Total	15.983	29.416	22.550	29.571	22.093	22.128	60.626	81.115
1992 Total	16.087	29.266	23.506	30.680	22.435	22.469	62.034	^c 82.422
1993 Total	16.733	30.451	23.749	30.879	22.860	22.895	63.339	84.222
1994 Total	16.756	30.702	24.449	31.764	23.484	23.520	64.691	85.988
1995 Total	17.114	31.542	24.722	32.038	23.938	23.974	65.780	87.561
1996 Total	18.000	32.940	25.481	32.948	24.486	24.521	67.975	90.417
1997 Total	17.875	33.087	25.596	33.066	24.788	24.823	68.260	90.977
1998 January	2.165	3.496	2.241	2.826	2.011	2.014	6.415	8.333
February	1.877	2.990	2.045	2.599	1.853	1.855	5.771	7.441
March	1.821	3.056	2.145	2.764	2.101	2.104	6.064	7.921
April	1.371	2.451	2.093	2.683	2.103	2.106	5.562	7.235
May	1.124	2.393	1.992	2.685	2.143	2.146	5.258	7.223
June	1.108	2.574	1.999	2.679	2.126	2.129	5.236	7.385
July	1.189	2.869	2.064	2.729	2.253	2.256	5.511	7.859
August	1.183	2.807	2.112	2.785	2.219	2.223	5.520	7.820
September	1.106	2.499	2.053	2.655	2.089	2.092	5.251	7.250
October	1.159	2.364	2.146	2.743	2.185	2.188	5.490	7.294
November	1.403	2.514	2.124	2.722	2.033	2.036	5.557	7.269
December	1.833	3.144	2.216	2.853	2.200	2.203	6.246	8.197
Total	17.340	33.158	25.230	32.722	25.321	25.357	67.886	91.231
1999 January	2.328	3.718	R 2.273	R 2.859	^R 2.015	^R 2.018	6.614	R 8.593
February	1.877	3.024	R 2.061	R 2.622	R 1.927	R 1.930	5.861	7.573
March	1.877	3.112	R 2.169	R 2.786	R 2.182	R 2.185	6.225	R 8.079
April	1.402	2.527	R 2.078	R 2.689	R 2.067	R 2.069	R 5.543	7.283
May	1.156	2.371	R 1.933	R 2.604	R 2.180	R 2.183	5.268	7.158
June	1.119	2.521	R 2.054	R 2.722	R 2.191	R 2.194	^R 5.368	7.130
July	1.213	R 2.888	R 2.039	R 2.721	R 2.247	R 2.251	R 5.505	R 7.866
	1.213	2.813	R 2.152	R 2.812	R 2.293	R 2.296	R 5.653	R 7.927
August September	1.203	2.415	R 2.203	R 2.786	R 2.115	R 2.117	R 5.447	7.321
October	1.127	2.360	R 2.230	R 2.835	R 2.247	R 2.250	R 5.675	R 7.446
	1.365	2.360	R 2.153	R 2.775	R 2.119	R 2.121		7.393
November December	1.365	2.498 3.234	R 2.153	R 2.775	R 2.341	R 2.121	5.635 ^R 6.474	7.393 R 8.437
Total	17.771	R 33.484	R 25.572	R 33.071	R 25.923	R 25.958	R 69.269	R 92.516
2000 January	^R 2.331	^R 3.718	^R 2.276	^R 2.881	R 2.006	R 2.010	^R 6.615	R 8.609
February	2.033	3.236	2.169	2.723	2.020	2.023	6.221	7.981
2-Month Total	4.365	6.954	4.445	5.604	4.026	4.032	12.836	16.590
1999 2-Month Total	4.205	6.742	4.334	5.482	3.942	3.947	12.476	16.166
1998 2-Month Total	4.042	6.487	4.286	5.425	3.863	3.869	12.185	15.774

^a Total minus electrical system energy losses.

R=Revised.

Totals may not equal sum of components due to independent rounding and the use of sector-specific conversion factors for natural gas and Geographic coverage is the 50 States and the District of Columbia. Additional Notes and Sources: See end of section.

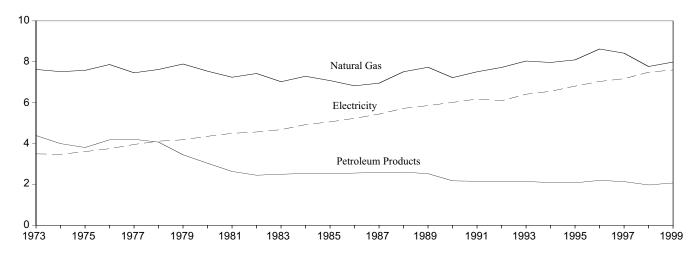
Please Read: Due to a lack of consistent monthly historical data, some renewable energy sources are not included in total consumption. In 1998, for example, 3.5 quadrillion Btu of renewable energy used by electric utilities to generate electricity for distribution and 0.1 quadrillion Btu for ethanol blended into motor gasoline are included, but an estimated 3.4 quadrillion Btu used by residential, commercial, and industrial consumers is not. See Note 12 at the end of section for details.

b Beginning in 1989, includes electricity generated by nonutility nuclear

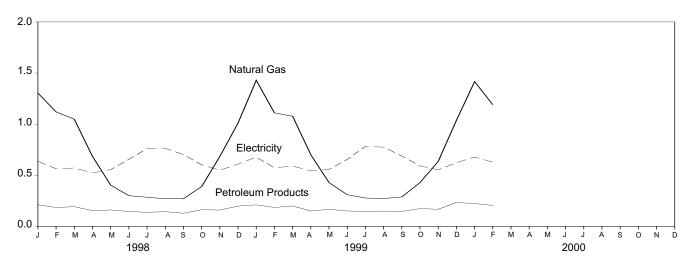
units. C Beginning in 1992, includes coal consumed by "Other Power Producers." See Table 6.2.

Figure 2.2 Residential and Commercial Energy Consumption

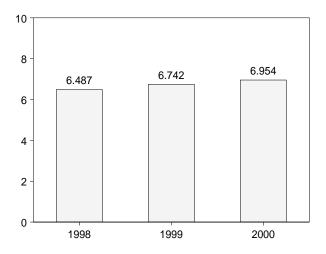
By Major Sources, 1973-1999



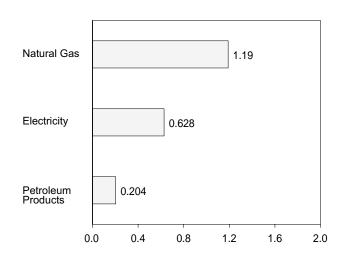
By Major Sources, Monthly



Total, January and February



By Major Sources, February 2000



Note: Because vertical scales differ, graphs should not be compared. Source: Table 2.3.

Table 2.3 Residential and Commercial Energy Consumption

	Coal	Natural Gas ^a	Petroleum Products ^b	Primary Consumption	Electricity ^c	Net Consumption	Electrical System Energy Losses	Total Consumption
1973 Total	0.254	7.626	4.391	12.270	3.493	15.763	8.372	24.136
1974 Total	.257	7.518	3.996	11.771	3.474	15.245	8.478	23.723
1975 Total	.209	7.581	3.805	11.595	3.605	15.200	8.700	23.899
1976 Total	.203	7.866	4.181	12.250	3.747	15.997	9.022	25.019
1977 Total	.205	7.461	4.206	11.873	3.955	15.828	9.556	25.384
1978 Total	.214	7.624	4.070	11.908	4.115	16.022	10.059	26.081
1979 Total	.187	7.891 7.540	3.448 3.035	11.525	4.184 4.354	15.709 15.075	10.100 10.579	25.809 25.654
1980 Total	.145 .167	7.540 7.243	2.634	10.721 10.043	4.354 4.498	14.541	10.579	25.054 25.242
1982 Total	.187	7.427	2.449	10.043	4.566	14.629	10.999	25.629
1983 Total	.192	7.024	2.498	9.715	4.679	14.393	11.228	25.621
1984 Total	.209	7.292	2.535	10.036	4.926	14.962	11.504	26.466
1985 Total	.176	7.079	2.522	9.777	5.060	14.837	11.862	26.700
1986 Total	.176	6.825	2.555	9.556	5.233	14.789	12.057	26.846
1987 Total	.162	6.954	2.587	9.703	5.440	15.144	12.471	27.614
1988 Total	.168	7.513	2.600	10.280	5.722	16.002	12.915	28.917
1989 Total	.146	7.731	2.525	10.402	5.856	16.258	13.158	29.416
1990 Total	.156	7.224	2.174	9.554	6.013	15.567	13.228	28.795
1991 Total	.141	7.510	2.154	9.805	6.178	15.983	13.433	29.416
1992 Total	.142	7.725	2.126	9.993	6.094	16.087	13.179	29.266
1993 Total	.143	8.037	2.140	10.320	6.413	16.733	13.718	30.451
1994 Total	.139	7.967	2.094	10.200	6.556	16.756	13.945	30.702
1995 Total 1996 Total	.134 .138	8.094 8.626	2.076 2.198	10.305 10.962	6.809 7.037	17.114 18.000	14.429 14.940	31.542 32.940
1997 Total	.145	8.420	2.137	10.702	7.173	17.875	15.212	33.087
1009 January	.013	1.304	.211	1.528	.637	2.165	1.331	3.496
1998 January	.013	1.120	.184	1.314	.563	1.877	1.113	2.990
February March	.010	1.048	.192	1.251	.571	1.821	1.234	3.056
April	.009	.685	.153	.847	.523	1.371	1.081	2.451
May	.006	.403	.160	.570	.554	1.124	1.269	2.393
June	.007	.300	.145	.452	.656	1.108	1.466	2.574
July	.008	.284	.137	.429	.760	1.189	1.680	2.869
August	.008	.270	.143	.421	.763	1.183	1.624	2.807
September	.006	.270	.128	.404	.702	1.106	1.393	2.499
October	.006	.389	.162	.557	.602	1.159	1.205	2.364
November	.011	.684	.159	.854	.549	1.403	1.111	2.514
December	.016	1.010	.198	1.224	.609	1.833	1.312	3.144
Total	.111	7.768	1.973	9.851	7.489	17.340	15.818	33.158
1999 January	.013	1.429	.210	1.651	.677	2.328	1.390	3.718
February	.010	1.110	.184	1.304	.572	1.877	1.148	3.024
March	.010	1.077	.199	1.287	.590	1.877	1.235	3.112
April	.010	.700	.150	.860	.542	1.402	1.125	2.527
May	.006	.428	.166	.600	.556	1.156	1.216	2.371
June	.006	.309	.150	.465	.655	1.119	1.401	2.521
July	.009	.277 .271	.146	.432	.781	1.213	R 1.675	R 2.888
August	.007 .005	.271 .288	.149 .146	.428 .439	.775 .688	1.203 1.127	1.610 1.288	2.813 2.415
September October	.005	.200 .427	.146	.439 .607	.591	1.127	1.266	2.415
November	.006	.635	.173	.812	.553	1.365	1.134	2.498
December	.016	1.036	.232	1.284	.622	1.906	1.328	3.234
Total	.111	7.988	2.071	10.170	7.601	17.771	R 15.713	R 33.484
2000 January	.014	R 1.416	.223	R 1.654	.678	R 2.331	R 1.387	R 3.718
February	.012	F 1.190	.204	1.405	.628	2.033	1.203	3.236
2-Month Total	.026	F 2.606	.427	3.059	1.306	4.365	2.589	6.954
1999 2-Month Total 1998 2-Month Total	.023 .023	2.539 2.425	.394 .395	2.956 2.843	1.249 1.200	4.205 4.042	2.537 2.444	6.742 6.487

directly to end users.

R=Revised. F=Forecast.

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

Additional Notes and Sources: See end of section.

Please Read: Due to a lack of consistent monthly historical data, some renewable energy sources are not included in this table. In 1998, for example, an estimated 0.5 quadrillion Btu of renewable energy used by the residential and commercial sectors (primarily the residential sector) is not included. See Note 12 at the end of section for details.

^a Includes supplemental gaseous fuels.

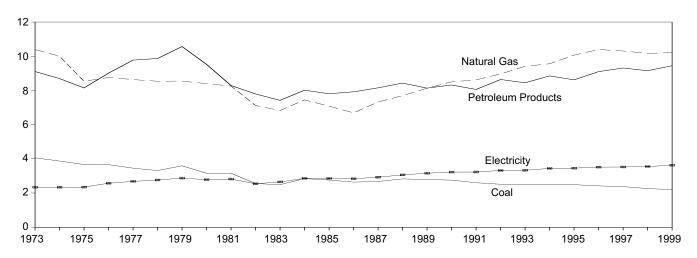
^b Products obtained from the processing of crude oil (including lease

condensate), natural gas, and other hydrocarbon compounds.

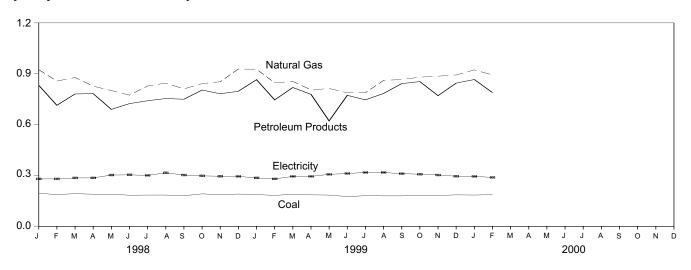
^c Electric utility retail sales of electricity, including nonutility sales of electricity to utilities for distribution to end users; does not include nonutility facility use of onsite electricity generation or electricity sold by nonutilities

Figure 2.3 Industrial Energy Consumption

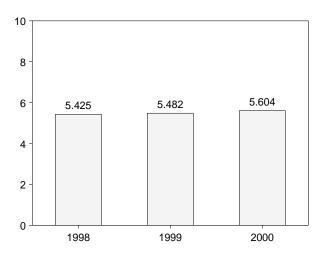
By Major Sources, 1973-1999



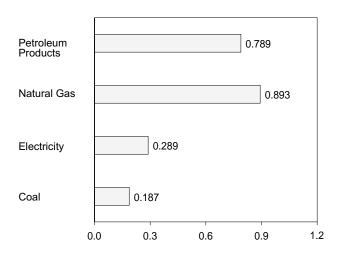
By Major Sources, Monthly



Total, January and February



By Major Sources, February 2000



Note: Because vertical scales differ, graphs should not be compared. Source: Table 2.4.

Table 2.4 Industrial Energy Consumption

	Coal	Natural Gas ^a	Petroleum Products ^b	Hydro- electric Power	Net Imports of Coal Coke	Primary Consumption	Electricity ^C	Net Consumption	Electrical System Energy Losses	Total Consumption
1973 Total	4.057	10.388	9.104	0.035	-0.007	23.576	2.341	25.917	5.611	31.528
1974 Total	3.870	10.004	8.694	.033	.056	22.657	2.337	24.994	5.700	30.694
1975 Total	3.667	8.532	8.146	.032	.014	20.391	2.346	22.737	5.665	28.402
1976 Total	3.661	8.762	9.010	.033	(s)	21.465	2.573	24.038	6.197	30.236
1977 Total	3.454	8.635	9.774	.033	.015	21.911	2.682	24.593	6.484	31.077
1978 Total	3.314	8.539	9.867	.032	.125	21.876	2.761	24.637	6.756	31.392
1979 Total	3.593	8.549	10.568	.034	.063	22.807	2.873	25.679	6.936	32.616
1980 Total	3.155	8.395	9.525	.033	035	21.073	2.781	23.854	6.752	30.606
1981 Total	3.157	8.257	8.285	.033	016	19.715	2.817	22.533	6.707	29.240
1982 Total	2.552	7.121	7.794	.033	022	17.479	2.542	20.020	6.125	26.145
1983 Total	2.490	6.826	7.420	.033	016	16.753	2.648	19.401	6.359	25.759
1984 Total	2.842	7.448	8.014	.033	011	18.325	2.859	21.184	6.683	27.867
1985 Total	2.760	7.080	7.805	.033	013	17.665	2.855	20.520	6.694	27.214
1986 Total	2.641	6.690	7.920	.033	017	17.267	2.834	20.101	6.529	26.630
1987 Total	2.673	7.323	8.151	.033	.009	18.188	2.928	21.117	6.710	27.826
1988 Total	2.828	7.696	8.430	.033	.040	19.026	3.059	22.085	6.901	28.985
1989 Total	2.787	8.131	8.133	.033	.030	19.114	3.158	22.272	7.093	29.365
1990 Total	2.756	8.502	8.320	.033	.005	19.616	3.226	22.842	7.103	29.946
1991 Total	2.601	8.619	8.057	.033	.010	19.320	3.230	22.550	7.021	29.571
1992 Total	2.515	8.967	8.638	.033	.035	20.187	3.319	23.506	7.174	30.680
1993 Total	2.496	9.410	8.449	.033	.027	20.415	3.334	23.749	7.130	30.879
1994 Total	2.510	9.560	8.849	.033	.058	21.010	3.439	24.449	7.316	31.764
1995 Total	2.488	10.064	8.621	.033	.061	21.267	3.455	24.722	7.316	32.038
1996 Total	2.418	10.393	9.099	.033	.023	21.966	3.516	25.481	7.467	32.948
1997 Total	2.375	10.307	9.312	.033	.046	22.073	3.523	25.596	7.469	33.066
1998 January	.195	.924	.832	.003	.008	1.962	.280	2.241	.585	2.826
February	.188	.857	.714	.003	.003	1.764	.280	2.045	.554	2.599
March	.193	.878	.781	.003	.003	1.859	.286	2.145	.619	2.764
April	.190	.827	.783	.003	.004	1.807	.286	2.093	.590	2.683
May	.190	.801	.690	.003	.005	1.689	.303	1.992	.693	2.685
June	.184	.774	.724	.003	.009	1.694	.304	1.999	.680	2.679
July	.185	.828	.741	.003	.007	1.763	.301	2.064	.665	2.729
August	.185	.845	.754	.002	.010	1.796	.316	2.112	.673	2.785
September	.181	.811	.750	.002	.006	1.750	.303	2.053	.602	2.655
October	.192	.842	.804	.002	.007	1.848	.298	2.146	.597	2.743
November	.187	.853	.782	.002	.004	1.828	.296	2.124	.598	2.722
December	.191	.928	.797	.002	.002	1.921	.295	2.216	.637	2.853
Total	2.261	10.168	9.152	.033	.067	21.681	3.549	25.230	7.492	32.722
1999 January	.188	R .927	R .865	.003	.005	R 1.988	.286	R 2.273	.586	R 2.859
February	.183	.847	R .746	.003	.002	R 1.781	.280	R 2.061	.562	R 2.622
March	.190	.855	R .819	.003	.007	R 1.874	.295	R 2.169	.617	R 2.786
April	.186	R .805	R .779	.003	.009	R 1.783	.295	R 2.078	.611	R 2.689
May	.185	.813	R .622	.003	.003	R 1.626	.307	R 1.933	.671	R 2.604
June	.176	.788	R .773	.003	.002	R 1.742	.312	R 2.054	.668	R 2.722
July	.181	.788	R .746	.003	.003	R 1.720	.318	R 2.039	.682	R 2.721
August	.180	.861	R .784	.002	.006	R 1.834	.318	R 2.152	.661	R 2.812
September	.180	R .866	R .842	.002	.002	R 1.892	.311	R 2.203	.583	R 2.786
October	.182	R .880	R .854	.002	.004	R 1.922	.308	R 2.230	.605	R 2.835
November	.183	.886	R .771	.002	.009	R 1.850	.303	R 2.153	.622	R 2.775
December Total	.186 2.201	R .893	^R .845 ^R 9.446	.002 .033	.006 .058	R 1.932 R 21.944	.296 3.628	R 2.228 R 25.572	.632 7.499	R 2.860 R 33.071
2000 January February	.185 .187	R .923 F .893	^R .866 .789	.003 .003	.004 .007	^R 1.981 1.880	.295 .289	^R 2.276 2.169	^R .605 .554	^R 2.881 2.723
2-Month Total	.372	F 1.817	1.655	.003	.007 . 011	3.861	.585	4.445	.554 1.159	5.604
1999 2-Month Total	.371	1,774	1.611	.006	.008	3.768	.566	4.334	1.148	5.482
1998 2-Month Total	.383	1.781	1.546	.006	.011	3.726	.560	4.286	1.139	5.425

^a Includes supplemental gaseous fuels.

Additional Notes and Sources: See end of section.

Please Read: Due to a lack of consistent monthly historical data, some renewable energy sources are not included in this table. In 1998, for example, an estimated 2.9 quadrillion Btu of renewable energy used by the industrial sector (primarily the pulp and paper industry) is not included. See Note 12 at the end of section for details.

b Products obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds.

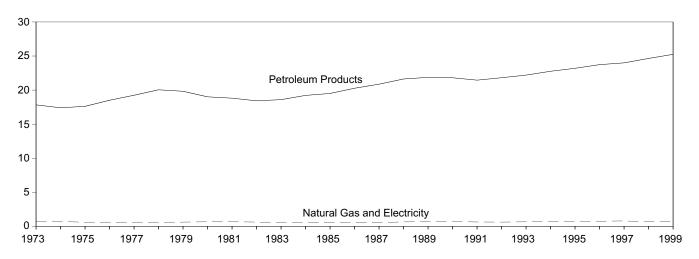
^c Electric utility retail sales of electricity, including nonutility sales of electricity to utilities for distribution to end users; does not include nonutility facility use of onsite electricity generation or electricity sold by nonutilities directly to end users.

R=Revised. F=Forecast. (s)=Less than +0.5 trillion Btu and greater than -0.5 trillion Btu.

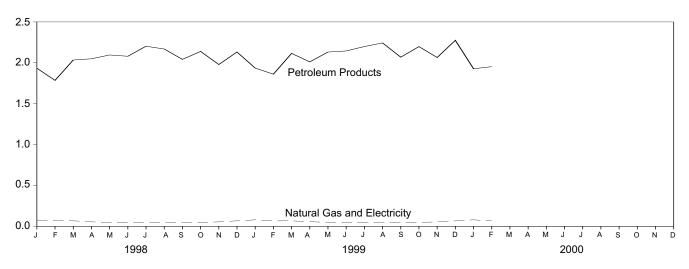
Totals may not equal sum of components due to independent Geographic coverage is the 50 States and the District of Notes: rounding. Columbia.

Figure 2.4 Transportation Energy Consumption

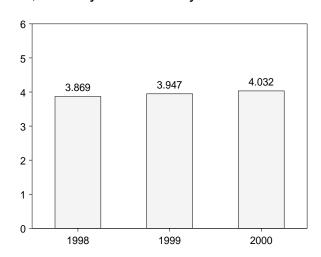
By Major Sources, 1973-1999



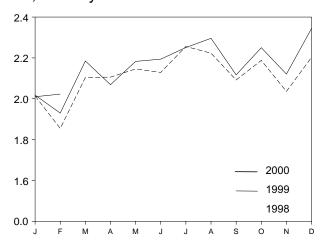
By Major Sources, Monthly



Total, January and February



Total, Monthly



Note: Because vertical scales differ, graphs should not be compared. Source: Table 2.5.

Table 2.5 Transportation Energy Consumption

	Coal	Natural Gas ^a	Petroleum Products ^{b,c}	Primary Consumption	Electricity ^d	Net Consumption	Electrical System Energy Losses	Total Consumption
1973 Total	0.003	0.743	17.831	18.576	0.011	18.587	0.025	18.612
1974 Total	.002	.685	17.399	18.086	.010	18.096	.024	18.119
1975 Total	.001	.595	17.614	18.209	.010	18.219	.024	18.244
1976 Total	(s)	.559	18.506	19.065	.010	19.075	.024	19.099
1977 Total	(s)	.543	19.241	19.784	.010	19.795	.025	19.820
1978 Total	(^{`e} ´)	.539	20.041	20.580	.010	20.590	.025	20.615
1979 Total	(e)	.612	19.825	20.436	.010	20.447	.024	20.471
1980 Total	(e)	.650	19.008	19.658	.011	19.669	.027	19.696
1981 Total	(e)	.658	18.811	19.469	.011	19.480	.026	19.506
1982 Total	(e)	.612	18.420	19.032	.011	19.043	.026	19.069
1983 Total	(e)	.505	18.593	19.098	.013	19.111	.030	19.141
1984 Total	(e)	.545	19.216	19.761	.014	19.775	.033	19.808
1985 Total	(°)	.519	19.504	20.023	.014	20.038	.033	20.071
1986 Total	(°)	.499 535	20.269	20.768	.015	20.783	.035	20.818
1987 Total	(e)	.535 .632	20.870 21.629	21.405 22.261	.016 .016	21.421 22.277	.036 .036	21.456 22.313
1988 Total 1989 Total	(°)	.649	21.829	22.517	.016	22.533	.036	22.569
1990 Total	(e)	.680	21.808	22.488	.016	22.504	.036	22.540
1991 Total	\e\	.620	21.456	22.077	.016	22.093	.035	22.128
1992 Total	} e {	.606	21.812	22.419	.016	22.435	.035	22.469
1993 Total	}e	.643	22,201	22.844	.016	22.860	.035	22.895
1994 Total	} e {	.707	22.760	23.467	.017	23.484	.036	23.520
1995 Total	}e	.722	23,199	23.921	.017	23.938	.036	23.974
1996 Total	(e)	.734	23.735	24.469	.017	24.486	.036	24.521
1997 Total	(e)	.776	23.995	24.771	.017	24.788	.035	24.823
1998 January	(e)	.075	1.934	2.009	.001	2.011	.003	2.014
February	(e)	.066	1.785	1.851	.001	1.853	.003	1.855
March	(e)	.066	2.034	2.100	.001	2.101	.003	2.104
April	(e)	.053	2.049	2.102	.001	2.103	.003	2.106
May	(e)	.046	2.096	2.142	.001	2.143	.003	2.146
June	(e) (e)	.045	2.080	2.125	.001	2.126	.003	2.129
July	(e)	.048	2.203	2.251	.001	2.253	.003	2.256
August	(e)	.048	2.169	2.218	.002	2.219	.003	2.223
September	(e)	.045	2.042	2.087	.002	2.089	.003	2.092
October	(e)	.045	2.139	2.184	.001	2.185	.003	2.188
November	(e)	.053 .066	1.979 2.132	2.032 2.198	.001 .001	2.033 2.200	.003	2.036 2.203
December Total	(e)	.662	24.643	25.304	.001 .017	25.321	.003	25.357
	` ,				.017		.036	
1999 January	(e)	.078	R 1.935	R 2.014	.001	R 2.015	.003	R 2.018
February	(e)	.065	R 1.861	R 1.926	.001	R 1.927	.003	R 1.930
March	(e)	.066	R 2.115	R 2.181	.001	R 2.182	.003	R 2.185
April	(e) (e)	.055	R 2.011	R 2.065	.001	R 2.067	.003	R 2.069
May	(e)	.047	R 2.132	R 2.179	.001	R 2.180	.003	R 2.183
June	(e)	.044	R 2.145	R 2.189	.001	R 2.191	.003	R 2.194
July	(e)	.047 .049	R 2.199 R 2.243	^R 2.246 ^R 2.291	.002	R 2.247 R 2.293	.003 .003	^R 2.251 ^R 2.296
August	(e)	.049 .045	R 2.243	R 2.291	.002 .002	R 2.293	.003	R 2.296
September	(e)	.045	R 2.198	R 2.246	.002	R 2.115	.003	R 2.250
October November	(e)	.048	R 2.198	^N 2.246 ^R 2.117	.001	R 2.247	.003	R 2.121
December	(e)	.065	R 2.275	R 2.340	.001	R 2.341	.003	R 2.344
Total	(e)	.660	R 25.246	R 25.906	.017	R 25.923	.035	R 25.958
2000 January	(^e)	R .078	R 1.927	R 2.005	.001	R 2.006	.003	R 2.010
February	(e j	F.065	1.953	2.018	.001	2.020	.003	2.023
2-Month Total	(e)	F.143	3.880	4.022	.003	4.026	.006	4.032
1999 2-Month Total	(e)	.143	3.796	3.939	.003	3.942	.005	3.947
1998 2-Month Total	(e)	.141	3.720	3.861	.003	3.863	.005	3.869

^a Natural gas consumed in the operation of pipelines (primarily in compressors) and small amounts consumed as vehicle fuel. See Table 4.4.
^b Products obtained from the processing of crude oil (including lease

facility use of onsite electricity generation or electricity sold by nonutilities

Additional Notes and Sources: See end of section.

or Products obtained from the processing of citate of (including lease condensate), natural gas, and other hydrocarbon compounds.

^c Includes small quantities (about 0.1 quadrillion Btu per year since 1989) of renewable energy in the form of ethanol blended into motor gasoline. See Note 12 at end of section.

^d Electric utility retail sales of electricity, including nonutility sales of

electricity to utilities for distribution to end users; does not include nonutility

directly to end users.

^e Since 1978, the small amounts of coal consumed for transportation are reported as industrial sector consumption.

R=Revised. F=Forecast. (s)=Less than 0.5 trillion Btu.

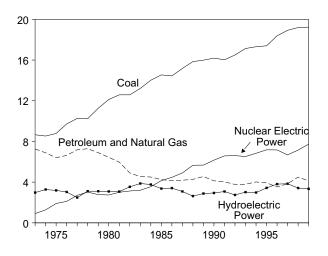
Totals may not equal sum of components due to independent Geographic coverage is the 50 States and the District of Notes: rounding. Columbia.

Figure 2.5 Energy Input at Electric Utilities (Quadrillion Btu)

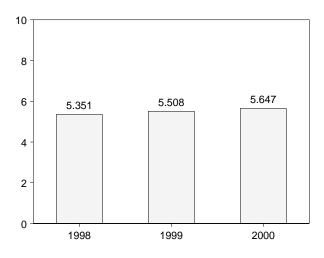
Total, 1973-1999

40 30 20 10 1975 1980 1985 1990 1995

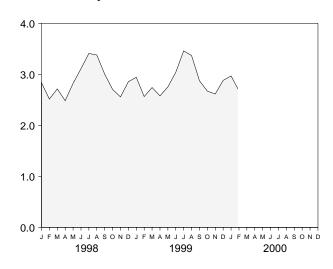
By Major Sources, 1973-1999



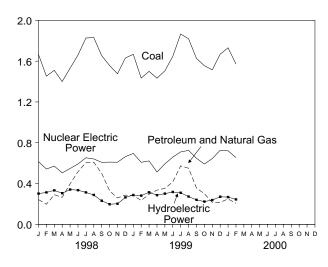
Total, January and February



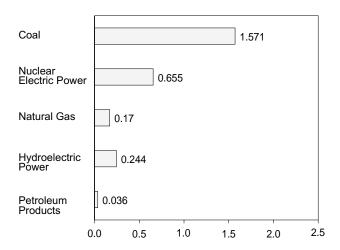
Total, Monthly



By Major Sources, Monthly



By Major Sources, February 2000



Note: Because vertical scales differ, graphs should not be compared. Source: Table 2.6.

Table 2.6 Energy Input at Electric Utilities

		Natural	Petroleum	Nuclear Electric	Hydro- electric	Geothermal		
	Coal	Gasa	Productsb	Power	Powerc	Energy	Otherd	Total
973 Total	8.658	3.748	3.515	0.910	2.975	0.043	0.003	19.852
74 Total	8.534	3.519	3.365	1,272	3.276	.053	.003	20.022
75 Total	8.786	3.240	3.166	1.900	3.187	.070	.002	20.350
76 Total	9.720	3.152	3.477	2.111	3.032	.078	.003	21.573
77 Total	10.262	3.284	3.901	2.702	2.482	.077	.005	22.713
78 Total	10.238	3.297	3.987	3.024	3.110	.064	.003	23.72
79 Total	11.260	3.613	3.283	2.776	3.107	.084	.005	24.128
80 Total	12.123	3.810	2.634	2.739	3.085	.110	.005	24.50
100 Total	12.583	3.768	2.202	3.008	3.072	.123	.003	24.76
981 Total						.123	.004	
082 Total	12.582	3.342	1.568	3.131	3.539			24.270
983 Total	13.213	2.998	1.544	3.203	3.866	.129	.004	24.95
184 Total	14.019	3.220	1.286	3.553	3.767	.165	.009	26.020
85 Total	14.542	3.160	1.090	4.149	3.365	.198	.015	26.519
186 Total	14.444	2.691	1.452	4.471	3.413	.219	.012	26.702
87 Total	15.173	2.935	1.257	4.906	3.084	.229	.016	27.60
988 Total	15.850	2.709	1.563	5.661	2.630	.217	.017	28.648
989 Total	15.988	2.871	1.685	e 5.677	2.880	.197	.021	^e 29.319
990 Total	16.190	2.882	1.250	6.162	2.936	.181	.022	29.623
991 Total	16.028	2.856	1.178	6.580	3.080	.170	.021	29.913
92 Total	^f 16.499	2.826	.951	6.608	2.740	.169	.022	^f 29.81
993 Total	17.135	2.741	1.052	6.520	3.019	.158	.021	30.64
994 Total	17.309	3.053	.968	6.838	2.976	.145	.021	31.310
995 Total	17.401	3.276	.658	7.177	3.433	.099	.017	32.062
996 Total	18.384	2.798	.725	7.168	3.807	.110	.020	33.012
997 Total	18.924	3.025	.822	6.678	3.845	.115	.021	33.430
998 January	1.666	.175	.068	.615	.301	.010	.002	2.836
February	1.453	.137	.060	.542	.313	.008	.001	2.514
March	1.510	.199	.091	.571	.333	.010	.002	2.71
April	1.400	.194	.071	.505	.305	.007	.002	2.48
May	1.531	.297	.100	.547	.341	.006	.002	2.823
,	1.660	.387	.129	.592	.335	.007	.002	3.112
June								
July	1.827	.459	.146	.653	.313	.009	.002	3.410
August	1.831	.467	.141	.641	.288	.010	.002	3.380
September	1.654	.389	.112	.608	.231	.010	.002	3.005
October	1.557	.252	.077	.610	.197	.011	.002	2.706
November	1.476	.182	.077	.609	.202	.010	.002	2.558
December	1.631	.193	.093	.664	.264	.009	.002	2.856
Total	19.196	3.330	1.166	7.157	3.421	.109	.021	34.400
99 January	1.667	.180	.103	.695	.287	.009	.002	2.942
February	1.434	.153	.081	.608	.281	.007	.002	2.56
March	1.500	.209	.086	.622	.314	.008	.002	2.74
April	1.433	.260	.075	.513	.286	.009	.002	2.578
May	1.505	.276	.077	.593	.301	(s)	.002	2.75
June	1.647	.329	.087	.659	.317	(s)	.002	3.04
July	1.866	.443	.130	R .710	.309	(s)	.002	R 3.46
August	1.819	.442	.108	.725	.272	(s)	.002	3.369
September	1.627	.289	.067	.648	.240	(s)	.002	2.87
October	1.555	.245	.055	.591	.223	(s)	.002	2.67
November	1.515	.176	.039	.645	.238	(s)	.002	2.61
December	1.668	.180	.039	.726	.270	(s) (s)	.002	2.88
Total	19.236	3.182	.943	R 7.735	3.340	.036	.002 . 021	R 34.49
00 January	1.731	.194	.055	.721	R .267	(s)	.002	R 2.96
February	1.571	.170	.036	.655	.244	.000	.002	2.678
2-Month Total	3.302	.364	.036 . 091	1.376	.511	.001	.002	5.64
999 2-Month Total	3.100	.333	.184	1.303	.569	.016	.003	5.508

R=Revised. (s)=Less than 0.5 trillion Btu.

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

Additional Notes and Sources: See end of section.

This table reports energy input at electric utilities. Also, beginning in 1989, nuclear energy consumed by nonutility power producers and, beginning in 1992, coal consumed by "Other Power Producers" are included.

 $^{^{\}rm a}$ Includes supplemental gaseous fuels. $^{\rm b}$ Includes residual and distillate fuel oils, petroleum coke, and small amounts of kerosene and jet fuel.

c Includes net imports of electricity.

d "Other" is electricity generated for distribution from wood, waste, wind, photovoltaic, and solar thermal energy.

^e Beginning in 1989, includes electricity generated by nonutility nuclear

^f Beginning in 1992, includes coal consumed by "Other Power Producers." See Table 6.2.

Energy Consumption Notes and Sources

The data in this section of the Monthly Energy Review (MER) are obtained initially from a group of energyrelated surveys, typically called "supply surveys," conducted by the Energy Information Administration (EIA). Supply surveys are those surveys directed to suppliers and marketers of specific energy sources. They measure the quantities of specific energy sources produced, or the quantities supplied to the market, or both. The data obtained from the EIA's supply surveys are integrated to yield the summary consumption statistics published in this section (and in Section 1) of the MER. Users of the EIA's energy consumption statistics should be aware of a second group of energy-related surveys, typically called "consumption surveys." Consumption surveys gather information on the types of energy consumed by end users of energy, along with the characteristics of those end users that can be associated with energy use. For example, the Manufacturing Energy Consumption Survey belongs to the consumption survey group because it collects information directly from end users (the manufacturing establishments). There are important differences between the supply and consumption surveys that need to be taken into account in any analysis that uses both data sources. For information on those differences, see Energy Consumption by End-Use Sector, A Comparison of Measures by Consumption and Supply Surveys, DOE/EIA-0533, Energy Information Administration, Washington, DC, April 6, 1990. The numbered notes that follow elaborate on essential information in Section 2.

- 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, and electricity generated from nuclear power. Total energy consumed also includes electricity generated from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy but excludes other energy obtained from those sources because consistent historical data are not available.
- **2. Economic Sectors:** Energy use is assigned to the major economic sectors according to the following guidelines as closely as possible:

Residential—All private residences, whether occupied or vacant, owned or rented, including single-family homes, multifamily housing units, and mobile homes. Secondary homes, such as summer homes, are also included. Institutional housing, such as school dormitories, hospitals, and military barracks, generally are not included in the residential sector; they are included in the commercial sector.

Commercial—Business establishments that are not engaged in transportation or in manufacturing or other types of industrial activity (agriculture, mining, or construction). Commercial establishments include hotels, motels, restaurants, wholesale businesses, retail stores, laundries, and other service enterprises; religious and nonprofit organizations; health, social, and educational institutions; and Federal, State, and local governments. Street lights, pumps, bridges, and public services are also included if the establishment operating them is considered commercial.

Industrial—Manufacturing industries, which make up the largest part of the sector, along with mining, construction, agriculture, fisheries, and forestry. Establishments in this sector range from steel mills to small farms to companies assembling electronic components.

Transportation—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—Privately and publicly owned establishments that generate, transmit, distribute, and sell electricity primarily for use by the public and meet the definition of an electric utility. Nonutility power producers are not included in the electric utility sector.

Although the end-use allocations are made according to these aggregations as closely as possible, some data are collected by using different classifications. For example, electric utilities may classify commercial and industrial users by the quantity of electricity purchased rather than by the business activity of the purchaser. Natural gas used in agriculture, forestry, and fisheries was collected and reported in the commercial sector through 1995. Beginning with 1996 data, deliveries of natural gas for agriculture, forestry, and fisheries are reported in the industrial sector instead. Another example is master-metered condominiums and apartments, and buildings with a combination of residential and commercial units. In many cases, the metering and billing practices cause residential energy usage of electricity, natural gas, or fuel oil to be included in the commercial sector. No adjustments for these discrepancies were made.

- **3. Conversion Factors:** See the conversion factors listed in Appendix A.
- **4.** Coal Sources: See "Sources for Table 6.2" at the end of Section 6.
- **5. Natural Gas:** Natural gas consumption by end use is based on data presented in Table 4.4 of this report. For Section 2 calculations, lease and plant fuel consumption are added to industrial deliveries, and pipeline fuel represents transportation use of natural gas. Values in Btu are derived by using the conversion factors provided in Appendix A.

Sources:

1973-1975: DOI, BOM, *Minerals Yearbook*, "Natural Gas" chapter.

1976-1978: EIA, Energy Data Reports, "Natural Gas, Annual."

1979: EIA, Natural Gas Production and Consumption 1979

1980-1992: EIA, *Natural Gas Annual*.

1993 forward: EIA, Natural Gas Monthly.

Electric Utilities

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

1977-1981: Federal Energy Regulatory Commission (FERC), Form FPC-4, "Monthly Power Plant Report." **1982 forward:** EIA, Form EIA-759, "Monthly Power Plant Report."

American Gas Association, "Monthly Gas Utility Statistical Report," residential and commercial monthly sales data for 1973-1979, which are used to estimate monthly consumption values from EIA annual consumption values.

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 (MER)* is the series called "petroleum products supplied" in Section 3.

Sources for petroleum products supplied by individual products are:

1973-1975: DOI, BOM, *Mineral Industry Surveys*, "Petroleum Statement, Annual."

1976-1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual."

1981-1997: EIA, Petroleum Supply Annual.

1998 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—Product supplied is assigned to electric utilities and non-electric utilities as follows:

Electric Utilities, All Periods.

For 1973-1979, consumption of distillate fuel is assumed to be the amount of petroleum (minus small amounts of kerosene and kerosene-type jet fuel deliveries) consumed in gas turbine and internal combustion plants. For 1980 forward, consump-

tion of distillate fuel is assumed to be the amount of light oil (minus small amounts of kerosene deliveries through 1982) consumed at electric utilities. (See Table 7.3)

Sources:

1973-September 1977: FPC, Form FPC-4, "Monthly Power Plant Report";

October 1977-1981: FERC, Form FPC-4, "Monthly Power Plant Report."

1982 forward: EIA, Form EIA-759, "Monthly Power Plant Report."

Sectors Other Than Electric Utilities, Annual Estimates Through 1997.

The aggregate non-electric utility use of distillate fuel is total distillate fuel supplied minus the electric utility consumption. The non-electric utility annual consumption totals are allocated to the individual non-electric utility sectors (residential, commercial, industrial, and transportation) in proportion to the share of "adjusted sales" of each end-use sector, as reported in EIA's *Fuel Oil and Kerosene Sales* report series (DOE/EIA-0535), which is based primarily on data collected by Form EIA-821, previously Form EIA-172. "Adjusted sales" are sales that have been adjusted at the PAD district level to equal EIA volume estimates of petroleum products supplied in the U.S. market. Following are notes on the individual sector groupings:

- Since 1979, the residential sector adjusted sales total is directly from the *Sales* reports. Prior to 1979, each year's sales subtotal of the heating plus industrial category is split into residential, commercial, and industrial (including farm) in proportion to the 1979 shares.
- Since 1979, the commercial sector adjusted sales total is directly from the *Sales* reports. Prior to 1979, each year's sales subtotal of the heating plus industrial category is split into residential, commercial, and industrial (including farm) in proportion to the 1979 shares.
- Since 1979, the industrial sector adjusted sales total is the sum of the adjusted sales for industrial, farm, oil company, off-highway, diesel, and all other uses. Prior to 1979, each year's sales 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.
- The transportation sector adjusted sales total is the sum of the adjusted sales for railroad, vessel bunkering, on-highway diesel, and military uses for all years.

Sectors Other Than Electric Utilities, Monthly Estimates Through 1997.

- Residential and commercial monthly consumption is estimated by allocating the annual estimates, which are described above, into the months in proportion to each month's share of the year's sales of No. 2 heating oil. The years' sales totals are from the following sources: for 1973-1980, the Ethyl Corporation, *Monthly Report of Heating Oil Sales;* for 1981 and 1982, the American Petroleum Institute, *Monthly Report of Heating Oil Sales;* and for 1983-1997, EIA, Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report," No. 2 Fuel Oil Sales to End Users and for Resale.
- The transportation 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." After 1993, the sales-for-highway-use data are no longer available as a monthly series; the 1993 data are used for allocating succeeding year's totals into 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 monthly estimates are made by subtracting the residential and commercial, transportation, and electric utility sector estimates from each month's total distillate fuel supplied.

Sectors Other Than Electric Utilities, 1998 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 1997.

Jet Fuel—Through 1982, small amounts of kerosene-type jet fuel were consumed by electric utilities. Kerosene-type jet fuel deliveries to electric utilities as reported on the Form FERC-423 (formerly Form 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 sales grouped into end-use sectors from EIA's *Fuel Oil and Kerosene Sales* reports (based primarily on data collected by Form EIA-821, previously Form EIA-172), as follows:

- Residential deliveries are taken directly from the Sales reports for 1979-1997. Sales for 1997 are

used as estimates for succeeding periods. Prior to 1979, each year's sales category called "heating" is split into residential, commercial, and industrial in proportion to the 1979 shares.

- Commercial sales are directly from the *Sales* reports for 1979-1997. Sales for 1997 are used as estimates for succeeding periods. Prior to 1979, each year's sales category called "heating" is split into residential, commercial, and industrial in proportion to the 1979 shares.
- Industrial sales are directly from the *Sales* reports for 1979-1997. Sales for 1997 are used as estimates for succeeding periods. Prior to 1979, each year's sales 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:

- 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 for consumption in internal combustion engines is allocated between the transportation and industrial sectors on the basis of data for special fuels used on highways published by the U.S. Department of Transportation, Federal Highway Administration, in *Highway Statistics*. The allocations of LPG sold for internal combustion engine use to the transportation sector range from a low of 36 percent (in 1996) to a high of 73 percent (in 1994).
- LPG consumed annually by the industrial sector is estimated as the difference between LPG total supplied and the estimated consumption of LPG 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 used 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.

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

1973-1982: 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 because the collection of data under Form EIA-174 was discontinued after data year 1982.

1984-1996: American Petroleum Institute (API), "Sales of Natural Gas Liquids and Liquefied Refinery Gases," which is based on an LPG sales survey jointly sponsored by API, the Gas Processors Association, and the National Liquefied Petroleum Gas Association.

1997 forward: The 1996 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 the 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.

Motor Gasoline—Total product supplied monthly is allocated to the major end-use sectors in proportion to aggregations of annual sales categories created on the basis of 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 and miscellaneous and unclassified uses.
- Industrial sales are the sum of sales for agriculture, construction, and industrial and commercial use as classified in the *Highway Statistics*.
- 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 electric utilities is from Form EIA-759, "Monthly Power Plant Report" (formerly Form FPC-4). The remaining petroleum coke is assigned to the industrial sector.

Residual Fuel—Product supplied is assigned to electric utilities and non-electric utilities as follows:

Electric Utilities, All Periods.

For 1973-1979, consumption of residual fuel is assumed to be the amount of petroleum consumed in steam-electric power plants. For 1980 forward, consumption of residual fuel is assumed to be the amount of heavy oil consumed at electric utilities. (See Table 7.3)

Sources:

1973-September 1977: Form FPC-4, "Monthly Power Plant Report."

October 1977-1981: FERC, Form FPC-4, "Monthly Power Plant Report."

1982 forward: EIA, Form EIA-759, "Monthly Power Plant Report."

Sectors Other Than Electric Utilities, Annual Estimates Through 1997.

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 sold to end users, grouped into sectors from EIA's *Fuel Oil and Kerosene Sales* reports (based primarily on data collected by Form EIA-821, previously Form EIA-172), as follows:

- Since 1979, commercial sales data are directly from the *Sales* reports. Prior to 1979, each year's sales subtotal of the heating plus industrial category is split into commercial and industrial in proportion to the 1979 shares.
- Since 1979, industrial sales data are the sum of sales for industrial, oil company, and all other uses. Prior to 1979, each year's sales 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.
- Transportation sales are the sum of sales for railroad, vessel bunkering, and military uses for all years.

Sectors Other Than Electric Utilities, Monthly Estimates Through 1997.

- Commercial monthly consumption is estimated by allocating the annual estimates, which are described above, into the months in proportion to each month's share of the year's sales of No. 2 heating oil. The years' sales totals are from the following sources: for 1973-1980, the Ethyl Corporation, *Monthly Report of Heating Oil Sales*; for 1981 and 1982, the American Petroleum Institute, *Monthly Report of Heating Oil Sales*; and for 1983-1996, EIA, Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report," No. 2 Fuel Oil Sales to End Users and for Resale.
- Transportation monthly estimates are made by evenly distributing the annual sector estimate over the months, adjusting for the number of days per month.

- Industrial monthly estimates are made by subtracting the commercial, transportation, and electric utility sector estimates from each month's total residual fuel supplied.

Sectors Other Than Electric Utilities, 1998 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 1997.

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

Sources:

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

1977-1981: FERC, Form FPC-4, "Monthly Power Plant Report."

1982 forward: EIA, Form EIA-759, "Monthly Power Plant Report."

8. 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 electric utilities sector.

Sources for Electric Utilities Sector

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

1977-1981: FERC, Form FPC-4, "Monthly Power Plant Report."

1982 forward: EIA, Form EIA-759, "Monthly Power Plant Report."

Sources for Industrial Sector

1973-1978: FPC, Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts, and FPC, Form FPC-12C, "Industrial Electric Generating Capacity," for all other plants.

1979: FPC, Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts and EIA estimates for all other plants.

1980 forward: Annual generation estimated by EIA as

the average generation over the 6-year period of 1974-1979; monthly generation estimated to be in proportion to each month's hydroelectricity generation in the electric utility industry in 1980.

Sources for Imports and Exports of Electricity: See "Sources for Table 7.1" at the end of Section 7.

9. Net Imports of Coal Coke: Net imports means imports minus exports, and a minus sign indicates that exports are greater than imports.

Sources:

1973-1975: DOI, BOM, *Minerals Yearbook*, "Coke and Coal Chemicals" chapter.

1976-1980: EIA, *Energy Data Report*, "Coke and Coal Chemicals" annual.

1981: EIA, *Energy Data Report*, "Coke Plant Report," quarterly.

1982-forward: Quarterly Coal Report.

- **10. Electricity:** End-use consumption of electricity is based on Table 7.2 sales data. "Other," which is primarily for use in government buildings, is added to the commercial sector, except for approximately 5 percent used by railroads and railways and attributed to the transportation sector. Kilowatthours are converted to Btu at the rate of 3,412 Btu per kilowatthour. See Table 7.2 for sources of the electricity sales data.
- 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 those losses occur at steam-electric power plants (conventional and nuclear) in the conversion of heat energy into mechanical energy to turn electric generators. The loss is a thermodynamically necessary feature of the steam-electric cycle. Part of the energy input-to-output losses is a result of imputing fossil energy equivalent inputs for hydroelectric and other energy sources, since there is no generally accepted practice for measuring those thermal conversion rates. In addition to conversion losses, other losses include power plant use of electricity, transmission and distribution of electricity from power plants to end-use consumers (also called "line losses"), and unaccounted for electricity. Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity sales. Overall, approximately 67 percent of total energy input is lost in conversion; of electricity generated, approximately 5 percent is lost in plant use and 9 percent is lost 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 nonelectric utilities and from Canada and Mexico, although they are included in electricity sales.

12. Renewable Energy: Monthly Energy Review (MER) consumption and production totals currently capture about half of estimated total renewable energy resources. Coverage is complete for the electric utilities as reported under "Hydroelectric Power," "Geothermal Energy," and "Other" on Table 2.6. Small amounts of hydroelectric power (about -0.05 quadrillion Btu in 1998) included on Table 2.6 are used at pumped storage facilities and are not considered renewable. Small quantities of ethanol (about 0.11 quadrillion Btu in 1998) are blended into motor gaso-

line, which are accounted for under "Petroleum Products" on Table 2.5 for the transportation sector.

Hydroelectric power is partially accounted for in Table 2.4 (e.g., in 1998, about 22 percent of all industrial sector use of conventional hydroelectric power is currently included in the monthly series). All other renewable energy used by residential, commercial, and industrial consumers is *not* currently included in the *MER* data series because consistent monthly data are not available. On an annual basis, the estimated quantities in quadrillion Btu are:

	R	esidential and	Commercia	ļ	Industrial ¹							
Year	Wood	Geothermal Energy ²	Solar Energy	Total	Wood and Waste ³	Geothermal Energy ⁴	Conventional Hydroelectric Power ⁵	Solar Energy	Wind Energy	Total		
1989	0.918	0.008	0.053	0.978	2.010	0.116	0.074	0.005	0.019	2.224		
1990	0.581	0.008	0.056	0.645	1.948	0.155	0.085	0.007	0.023	2.217		
1991	0.613	0.009	0.058	0.680	1.943	0.170	0.085	0.008	0.027	2.234		
1992	0.645	0.010	0.060	0.714	2.042	0.182	0.098	0.008	0.030	2.360		
1993	0.592	0.010	0.062	0.664	2.084	0.206	0.119	0.009	0.031	2.449		
1994	0.582	0.010	0.064	0.656	2.217	0.214	0.136	0.009	0.036	2.613		
1995	0.641	0.011	0.065	0.717	2.286	0.210	0.152	0.008	0.033	2.690		
1996	0.644	0.012	0.066	0.722	2.370	0.217	0.171	0.009	0.035	2.802		
1997	0.475	0.013	0.065	0.553	2.390	0.194	0.185	0.009	0.035	2.813		
1998 ^E	0.468	0.015	0.065	0.547	2.460	0.191	0.206	0.010	0.036	2.902		

¹Includes electricity generated from nonutility power plant facilities of 1 megawatt or greater capacity.

E=Estimate.

Source: Energy Information Administration, Annual Energy Review 1998 (July 1999), Table 10.2.

Note: See the inside front cover of the *Monthly Energy Review* for information about ordering EIA reports, or, for direct access to several reports on the subject of renewable energy, go to our Web site at http://www.eia.doe.gov and tap "Renewables."

²Geothermal heat pump and direct use energy.

³Wood, wood waste, black liquor, red liquor, spent sulfite liquor, pitch, wood sludge, peat, railroad ties, utility poles, municipal solid waste, landfill gas, methane, digester gas, liquid acetonitrile waste, tall oil, waste alcohol, medical waste, paper pellets, sludge waste, solid byproducts, tires, agricultural byproducts, closed loop biomass, fish oil, and straw.

⁴Geothermal electricity generation, heat pump, and direct use energy.

⁵ Hydroelectricity generated by pumped storage is not included in renewable energy.

Section 3. Petroleum

Total petroleum imports¹ averaged 11.1 million barrels per day in April 2000, 3 percent higher than the previous month's rate but 1 percent lower than the April 1999 rate.

In April 2000, 19.0 million barrels per day of petroleum products were supplied for domestic use, 1 percent higher than the April 1999 rate. Motor gasoline accounted for 45 percent of the total; distillate fuel oil, 19 percent; and kerosene-type jet fuel, 9 percent.

Motor gasoline supplied during April 2000 averaged 8.5 million barrels per day, 4 percent higher than the previous month's rate and 2 percent higher than the April 1999 rate. Total motor gasoline stocks were 202 million barrels at the end of April 2000, 2 million bar-

rels below the stock level in the previous month and 14 million barrels below the level 1 year earlier.

Distillate fuel oil supplied during April 2000 averaged 3.7 million barrels per day, slightly lower than the previous month's rate but 7 percent higher than the April 1999 rate. Distillate fuel oil ending stocks for April 2000 were 96 million barrels, the same as the stock level in the previous month and 29 million barrels below the level 1 year earlier.

Kerosene-type jet fuel supplied in April 2000 averaged 1.7 million barrels per day, 1 percent lower than the previous month's rate but 2 percent above the April 1999 rate. Kerosene-type jet fuel stocks measured 42 million barrels at the end of April 2000, 2 million barrels above the stock level in the previous month but 2 million barrels below the level 1 year earlier.

Estimates (except of crude production) for the most current month are based on Energy Information Administration (EIA) weekly data 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 2000.

¹Total import data include imports into the Strategic Petroleum Reserve.

Table 3.1a Petroleum Overview: Field Production, Stock Change, Petroleum Products Supplied, and Stocks

		Field Production	n	Stock	Change ^a		Stocksb
	Total Domestic ^c	Crude Oil	Natural Gas Plant Liquids	Crude Oil ^d	Petroleum Products	Petroleum Products Supplied	Crude Oil ^d and Petroleum Products
			Thousand Ba	rrels per Day			Million Barrels
1073 Average	10,975	9,208	1,738	-11	146	17,308	1,008
1973 Average1974 Average	10,498	8,774	1,688	62	117	16,653	e1,074
1975 Average	10,045	8,375	1,633	e17	e15	16,322	1,133
1976 Average	9,774	8,132	f 1,604	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	e1,392
1981 Average	10,230	8,572	1,609	e 290	e-130	16,058	1,484
1982 Average	10,252	8,649	1,550	136	-283	15,296	e1,430
1983 Average	10,299	8,688	1,559	e 214	e-234	15,231	1,454
1984 Average	10,554	8,879	1,630	199	81	15,726	1,556
1985 Average	10,636	8,971	1,609	50	-153	15,726	1,519
1986 Average	10,289	8,680	1,551	78	124	16,281	1,593
1987 Average	10,008	8,349	1,595	128	-87	16,665	1,607
1988 Average	9,818	8,140	1,625	1	-29	17,283	1,597
1989 Average	9,219	7,613	1,546	86	-129	17,325	1,581
1990 Average	8,994	7,355	1,559	-35	142	16,988	1,621
1991 Average	9,168	7,417	1,659	-42	32	16,714	1,617
1992 Average	8,996	7,171	1,697	-1	-68	17,033	e1,592
1993 Average	9 8,836	6,847	1,736	81	e 70	17,237	e1,647
1994 Average	8,645	6,662	1,727	18	-2	17,718	1,653
1995 Average	8,626	6,560	1,762	-93	-153	17,725	1,563
1996 Average	8,607	6,465	1,830	-124	-28	18,309	1,507
1997 Average	8,611	6,452	1,817	51	93	18,620	1,560
1998 January	8,781	6,541	1,805	389	-66	18,362	1,570
February	8,731	6,476	1,857	37	-79	18,316	1,569
March	8,590	6,408	1,853	538	54	18,685	1,587
April	8,685	6,483	1,869	556	349	19,044	1,614
May	8,529	6,347	1,835	-9	1,232	18,375	1,652
June	8,460	6,267	1,748	-620	577	19,182	1,651
July	8,155	6,194	1,586	187	162	19,466	1,661
August	8,301	6,203	1,722	-293	530	19,347	1,669
September	7,878	5,789	1,716	-641	95	18,895	1,652
October	8,257	6.143	1,744	677	-776	19,188	1,649
November	8,294	6,140	1,768	321	425	18,673	1,672
December	8,066	6.043	1,620	-285	-515	19,419	1,647
Average	8,392	6,252	1,759	74	165	18,917	1,647
,	0,00=	0,202	.,			.0,0	.,
1999 January	E 7,974	E 5,954	1,656	67	-321	18,850	1,639
February	E 8,109	E 5,984	1,722	31	-521	19,240	1,625
March	E 8,204	E 6,048	1,779	342	-903	19,489	1,608
April	E 8,087	E 5,977	1,786	-192	434	18,861	1,615
May	E 8,185	E 5,985	1,768	406	1,064	18,142	1,661
June	E 8,097	E 5,880	1,827	-402	-425	19,738	1,636
July	E 8,055	E 5,873	1,880	104	1	19,503	1,639
August	E 8,202	^E 5,912	1,838	-545	-131	19,883	1,618
September	E 8,128	E 5,820	1,911	-370	29	19,537	1,608
October	E 8,222	E 5,878	1,938	-74	-856	19,860	1,579
November	E 8,198	E 5,895	1,939	-315	-230	19,027	1,563
December	E 8,269	E 5,899	1,955	-470	-2,009	20,507	1,486
Average	E 8,144	^E 5,925	1,834	-117	-324	19,389	1,486
2000 January	E 8,153	E 5,833	1,942	91	-321	18,592	1,479
February	E 8,301	E 5.889	1,981	120	-424	19,296	1,470
March	RE 8.219	RE 5,873	R 1.983	R 270	R -29	R 19,064	R 1,478
April	E 8,160	PE 5,830	E 1,945	E 390	E 427	E 19,007	E 1,494
4-Month Average	E 8,207	PE 5,856	E 1,963	E 218	E -86	E 18,985	E 1,494
1999 4-Month Average	^E 8,093	^E 5,991	1,736	65	-329	19,109	1,615
1998 4-Month Average	8,696	6,477	1,846	387	65	18,605	1,614

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

gasoline and oxygenate production from merchant MTBE (methyl tertiary butyl ether) plants.

PE=Preliminary estimate. R=Revised. E=Estimate.

Notes: Crude oil includes lease condensate. Geographic coverage is the 50 States and the District of Columbia.

Stocks are at end of period.

^c Includes crude oil, natural gas plant liquids, and other liquids.

d Includes stocks located in the Strategic Petroleum Reserve.

e See Note 4 at end of section.

See Note 6 at end of section.

g Beginning in 1993, includes fuel ethanol blended into finished motor

Table 3.1b Petroleum Overview: Imports, Exports, and Net Imports

		Imports	T		Exports			
	Total	Crude Oil ^a	Petroleum Products	Total	Crude Oil	Petroleum Products	Net Imports	
		•	The	ousand Barrels p	er Day			
973 Average	6,256	3,244	3,012	231	2	229	6,025	
974 Average	6,112	3,477	2,635	221	3	218	5,892	
975 Average	6,056	4,105	1,951	209	6	204	5,846	
976 Average	7,313	5,287	2,026	223	8	215	7,090	
977 Average	8,807	6,615	2,193	243	50	193	8,565	
978 Average	8,363	6,356	2,008	362	158	204	8,002	
979 Average	8,456	6,519	1,937	° 471	235	c 236	° 7,985	
980 Average	6,909	5,263	1,646	544	287	258	6,365	
981 Average	5,996	4,396	1,599	595	228	367	5,401	
982 Average	5,113	3,488	1,625	815	236	579	4,298	
983 Average	5,051	3,329	1,722	739	164	575	4,312	
984 Average	5,437	3,426	2,011	722	181	541	4,715	
985 Average	5,067	3,201	1,866	781	204	577	4,286	
986 Average	6,224	4,178	2,045	785	154	631	5,439	
987 Average	6,678	4,674	2,004	764	151	613	5,914	
988 Average	7,402	5,107	2,004	815	155	661	6,587	
989 Average	8,061	5,843	2,293	859	142	717	7,202	
	8,018	5,894	2,123	857	109	748	7,161	
990 Average	7,627	•	,	1.001	116	885	•	
991 Average	7,888	5,782 6,092	1,844 1,805	950	89	861	6,626	
992 Average	•	6,083	,		98		6,938	
993 Average	8,620	6,787	1,833	1,003		904	7,618	
994 Average	8,996	7,063	1,933	942	99	843	8,054	
995 Average	8,835	7,230	1,605	949	95	855	7,886	
996 Average	9,478	7,508	1,971	981	110	871	8,498	
997 Average	10,162	8,225	1,936	1,003	108	896	9,158	
998 January	10,127	8,339	1,788	1,133	231 197	902 806	8,994	
February	9,991	8,045	1,946	1,003			8,988	
March	10,034	8,124	1,911	948	99	848	9,087	
April	11,105	8,985	2,120	1,048	163	885	10,057	
May	11,104	8,987	2,117	1,053	144	909	10,051	
June	10,926	8,795	2,132	987	63	924	9,939	
July	11,649	9,507	2,142	998	104	894	10,651	
August	11,032	9,177	1,855	780	51	729	10,252	
September	10,499	8,500	1,998	863	34	828	9,636	
October	10,861	8,667	2,194	851	87	763	10,011	
November	10,860	8,940	1,920	782	60	721	10,078	
December	10,258	8,352	1,906	893	90	803	9,365	
Average	10,708	8,706	2,002	945	110	835	9,764	
999 January	10,181	8,308	1,873	896	107	788	9,285	
February	10,336	8,387	1,949	756	119	636	9,580	
March	10,589	8,757	1,832	764	95	669	9,825	
April	11,227	9,080	2,146	1,196	332	864	10,031	
May	10,865	8,806	2,059	915	88	826	9,950	
June	10,624	8,601	2,024	907	123	784	9,717	
July	11,250	9,222	2,028	918	120	798	10,332	
August	10,734	8,684	2,050	902	132	769	9,832	
September	10,566	8,470	2,097	889	27	862	9,677	
October	10,428	8,439	1,989	944	56	888	9,484	
November	9,924	8,185	1,738	950	83	866	8,974	
December	9,876	8,091	1,785	1,230	133	1,096	8,646	
Average	10,551	8,588	1,964	940	118	822	9,612	
000 January	9,795	7,719	2,076	1,006	176	830	8,789	
February	10,396	8,096	2,300	870	30	840	9,526	
March	R 10,768	^R 8,661	^R 2,107	^R 1,159	^R 144	^R 1,015	R 9,609	
April	E 11,142	^E 9,201	E 1,941	^E 981	E 109	E 872	E 10,161	
4-Month Average	E 10,522	^E 8,418	E 2,104	E 1,006	^E 116	^E 890	^E 9,516	
999 4-Month Average	10,584	8,636	1,948	904	163	741	9,680	
998 4-Month Average	10,316	8,376	1,939	1,033	172	862	9,282	

 $^{^{\}rm a}$ Includes crude oil for storage in the Strategic Petroleum Reserve. $^{\rm b}$ Net imports equals imports minus exports.

R=Revised. E=Estimate.

Notes: Crude oil includes lease condensate. Totals may not equal sum

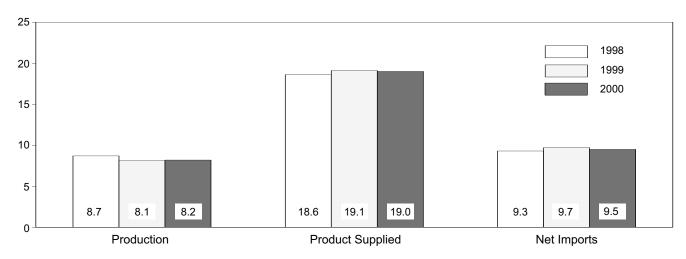
^c See Note 6 at end of section.

of components due to independent rounding. Geographic coverage is the 50 States and the District of Columbia.

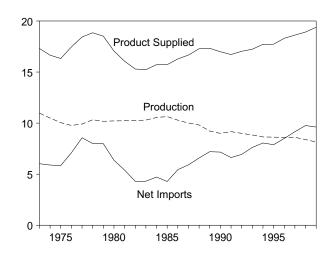
Figure 3.1a Petroleum Overview

(Million Barrels per Day)

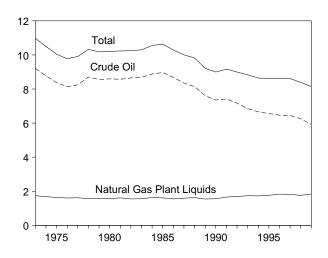
Overview, January-April



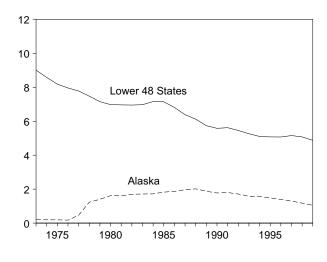
Overview, 1973-1999



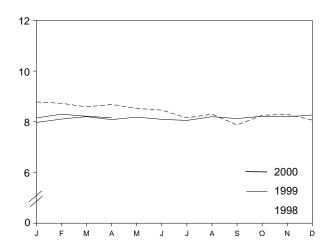
Production, 1973-1999



Crude Oil Production, 1973-1999



Total Production, Monthly

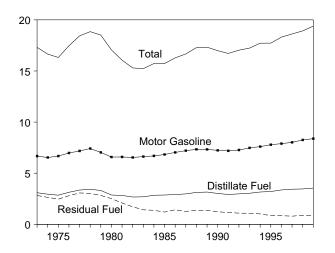


Note: Because vertical scales differ, graphs should not be compared. Sources: Tables 3.1a, 3.1b, and 3.2a.

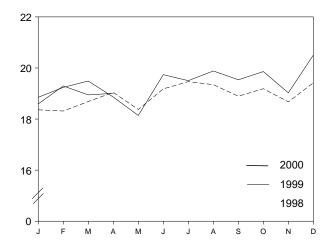
Figure 3.1b Petroleum Overview

(Million Barrels per Day, Except as Noted)

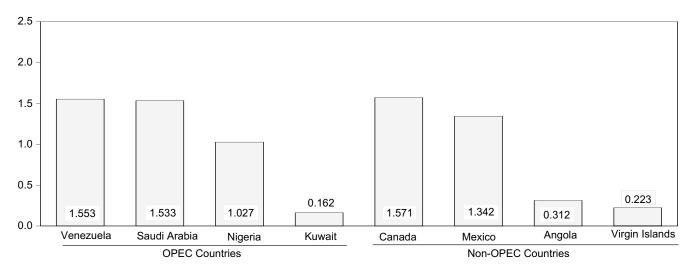
Product Supplied, 1973-1999



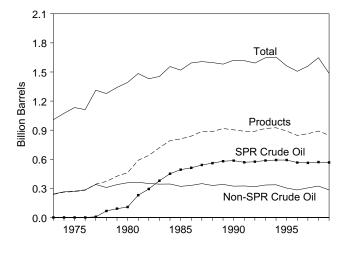
Product Supplied, Monthly



Imports from Selected Countries, March 2000

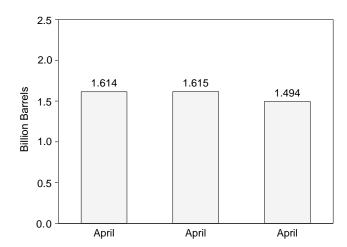


Stocks, End of Year, 1973-1999



Notes: • OPEC = Organization of Petroleum Exporting Countries. • SPR = Strategic Petroleum Reserve. • Because vertical scales differ, graphs should not be compared.

Total Stocks, End of Month



Sources: Tables 3.1a, 3.2b, 3.3a, 3.3b, 3.3d, 3.3e, 3.3f, 3.3h, 3.4, 3.5, and 3.6.

Table 3.2a Crude Oil Supply and Disposition: Supply

				Supply			
	Field Pr	oduction		Imports			
	Total Domestic	Alaskan	Total	SPR ^a	Other	Unaccounted- for Crude Oil ^b	Crude Oi Used Directly ^c
		1	Tho	ousand Barrels per	Day		
973 Average	9,208	198	3,244	_	3,244	3	-19
974 Average	8,774	193	3,477	_	3,477	-25	-15
975 Average	8,375	191	4,105	_	4,105	17	-17
976 Average	8,132	173	5,287	_	5,287	77	d -19
977 Average	8,245	464	6,615	21	6,594	-6	-14
978 Average	8,707	1,229	6,356	d 161	6,195	-57	^d -15
979 Average	8,552	1,401	6,519	67	6,452	-11	^d -14
980 Average	8,597	1,617	5,263	44	5,219	34	^d -14
981 Average	8,572	1,609	4,396	256	4,141	83	-58
982 Average	8,649	1,696	3,488	165	3,323	71	-59
983 Average	8,688	1,714	3,329	234	3,096	114	_
984 Average	8,879	1,722	3,426	197	3,229	185	_
985 Average	8,971	1,825	3,201	118	3,083	145	-
986 Average	8,680	1,867	4,178	48	4,130	139	_
987 Average	8,349	1,962	4,674	73	4,601	145	_
988 Average	8,140	2,017	5,107	51	5,055	196	-
989 Average	7,613	1,874	5,843	56	5,787	200	-
990 Average	7,355	1,773	5,894	27	5,867	258	-
991 Average	7,417	1,798	5,782	0	5,782	195	-
992 Average	7,171	1,714	6,083	10	6,073	258	-
993 Average	6,847	1,582	6,787	15	6,772	168	_
994 Average	6,662	1,559	7,063	12	7,051	266	_
995 Average	6,560	1,484	7,230	0	7,230	193	_
996 Average	6,465	1,393	7,508	0	7,508	215	_
997 Average	6,452	1,296	8,225	0	8,225	145	_
998 January	6,541	1,229	8,339	0	8,339	60	_
February	6,476	1,238	8,045	0	8,045	-264	_
March	6,408	1,221	8,124	0	8,124	745	_
April	6,483	1,200	8,985	0	8,985	336	_
May	6,347	1,173	8,987	0	8,987	122	_
June	6,267	1,135	8,795	0	8,795	-135	_
July	6,194	1,155	9,507	0	9,507	144	_
August	6,203	1,133	9,177	0 0	9,177	96	_
September	5,789	1,093	8,500	0	8,500	-44	_
October	6,143	1,197	8,667	0	8,667	-52 74	_
November	6,140 6,043	1,168 1,160	8,940 8,352	0	8,940 8,352	250	_
December	6,252	1,175	8,706	0	8,706	11 5	
Average	•	·	0,700	U	0,700	113	_
99 January	^E 5,954	E 1,164	8,308	0	8,308	396	-
February	E 5,984	E 1,104	8,387	0	8,387	209	_
March	E 6,048	E 1,134	8,757	0	8,757	128	_
April	E 5,977	E 1,056	9,080	0	9,080	122	_
May	E 5,985	E 1,088	8,806	0	8,806	650	_
June	E 5,880	E 967	8,601	0	8,601	183	_
July	E 5,873	E 990	9,222	0	9,222	361	_
August	E 5,912	E 1,011	8,684	0	8,684	272 475	_
September	E 5,820	E 933	8,470	17 17	8,452	475 254	_
October	E 5,878	E 1,068	8,439	17 17	8,422	254	_
November	E 5,895 E 5,899	E 1,023 E 1,058	8,185 8,001	17 16	8,169 8,075	392	_
December Average	E 5,925	E 1,050	8,091 8,588	16 6	8,075 8,582	92 295	_
00 January	5,833	1,024	7,719	3	7,716	503	_
February	E 5,889	E 1,031	8,096	17	8,079	211	_
March	RE 5,873	RE 1,011	R 8,661	0	R 8,661	R 508	_
April 4-Month Average	PE 5,830 PE 5,856	PE 997 PE 1,016	E 9,201 E 8,418	^E 0 ^E 5	E 9,201 E 8,413	^E 585 ^E 455	- -
_		_		-			_
99 4-Month Average	^E 5,991	E 1,115	8,636 8,376	0 0	8,636 8 376	215	-
998 4-Month Average	6,477	1,222	8,376	U	8,376	230	-

^a Strategic Petroleum Reserve.

Crude oil includes lease condensate. Totals may not equal sum of components due to independent rounding. Geographic coverage is

b A balancing item.

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

d See Note 6 at end of section.

PE=Preliminary estimate. R=Revised. – =Not applicable. E=Estimate.

Table 3.2b Crude Oil Supply and Disposition: Disposition and Stocks

	Crude Losses 13 13 13 13 16 16 16 16 5 3 2 2 1 (s) (s) (s) (s) (s) (s) (s) 0 0 0	Stock C SPR° 20 163 67 45 336 174 234 195 117 50 80 52 56 16 -47 17 34 13 (s) -71 -7 (s)	Changeb Other Thousand E -11 62 17 39 150 -84 81 52 f -46 -38 9 -20 4 -67 28 49 -51 30 -51 5 -18 47 5 -93 -53 57	Refinery Inputs 12,431 12,133 12,442 13,416 14,602 14,739 14,648 13,481 12,470 11,774 11,685 12,044 12,002 12,716 12,854 13,246 13,401 13,409 13,301 13,411 13,613 13,866 13,973 14,195 14,662	2 3 6 8 50 158 235 287 228 236 164 181 204 151 155 142 109 116 89 98 99 95 110	Product Suppliedd	Total 242 265 271 285 348 376 430 f 466 594 9 644 723 796 814 843 890 890 921 908 893 893 893 922 929 895	SPR ^c Million Barrels	242 265 271 285 340 309 339 f 358 363 g 350 344 345 321 331 349 330 341 323 325 318 325 335
1973 Average	13 13 13 e 14 16 16 16 e 14 5 3 2 2 1 (s) (s) (s) (s) (s) (s)	- - 20 163 67 45 336 174 234 195 117 50 80 52 56 16 -47 17 34 13 (s) -71	Thousand B -11 62 17 39 150 -84 81 52 f -46 -38 9 -20 4 -67 28 49 -51 30 -51 5 -18 47 5 -93 -53	12,431 12,133 12,442 13,416 14,602 14,739 14,648 13,481 12,470 11,774 11,685 12,044 12,002 12,716 12,854 13,401 13,409 13,301 13,411 13,613 13,613 13,866 13,973 14,195	2 3 6 8 50 158 235 287 228 236 164 181 204 154 151 155 142 109 116 89 98 99		242 265 271 285 348 376 430 f 466 594 9 644 723 796 814 843 890 890 891 908 893 893 893 893 922 929	Million Barrels 7 67 91 108 230 294 379 451 493 512 541 560 586 569 575 587 592	242 265 271 285 340 309 339 358 363 9 350 344 345 321 331 349 330 341 323 325 318 335 337
1974 Average 1975 Average 1976 Average 1977 Average 1978 Average 1978 Average 1980 Average 1981 Average 1982 Average 1983 Average 1984 Average 1985 Average 1986 Average 1987 Average 1997 Average 1998 Average 1999 Average 1999 Average 1991 Average 1991 Average 1992 Average 1993 Average 1994 Average 1995 Average 1995 Average 1996 Average 1997 Average 1998 January February March April May June July August September October November December Average	13 13 e 14 16 16 16 e 14 5 3 2 2 1 (s) (s) (s) (s) (s) (s) (s) (s)	- - 20 163 67 45 336 174 234 195 117 50 80 52 56 16 -47 17 34 13 (s) -71	-11 62 17 39 150 -84 81 52 f -46 -38 9 -20 4 -67 28 49 -51 30 -51 5 -18 47 5 -93 -93	12,431 12,133 12,442 13,416 14,602 14,739 14,648 13,481 12,470 11,774 11,685 12,044 12,002 12,716 12,854 13,246 13,401 13,409 13,301 13,411 13,613 13,613 13,973 14,195	3 6 8 50 158 235 287 228 236 164 181 204 154 151 155 142 109 116 89 98	- - - - - - 66 64 60 49 34 40 28 24 18 13	242 265 271 285 348 376 430 f 466 594 9 644 723 796 814 843 890 921 908 893 893 893 922 929	- - - 7 67 91 108 230 294 379 451 493 512 541 560 580 586 569 575 587	242 265 271 285 340 309 339 f 358 363 g 350 344 345 321 331 349 330 341 323 325 318 325 335
1974 Average 1975 Average 1976 Average 1977 Average 1978 Average 1978 Average 1980 Average 1981 Average 1982 Average 1983 Average 1984 Average 1985 Average 1986 Average 1987 Average 1997 Average 1998 Average 1999 Average 1999 Average 1991 Average 1991 Average 1992 Average 1993 Average 1994 Average 1995 Average 1995 Average 1996 Average 1997 Average 1998 January February March April May June July August September October November December Average	13 13 e 14 16 16 16 e 14 5 3 2 2 1 (s) (s) (s) (s) (s) (s) (s) (s)	- - 20 163 67 45 336 174 234 195 117 50 80 52 56 16 -47 17 34 13 (s) -71	62 17 39 150 -84 81 52 f -46 -38 9 -20 4 -67 28 49 -51 30 -51 5 -18 47 5 -93 -93	12,133 12,442 13,416 14,602 14,739 14,648 13,481 12,470 11,774 11,685 12,044 12,002 12,716 12,854 13,246 13,401 13,301 13,411 13,613 13,613 13,973 14,195	3 6 8 50 158 235 287 228 236 164 181 204 154 151 155 142 109 116 89 98	- - - - - - 66 64 60 49 34 40 28 24 18 13	265 271 285 348 376 430 f 466 594 9 644 723 796 814 843 890 921 908 893 893 893 893 922	- - 7 67 91 108 230 294 379 451 493 512 541 560 580 586 569 575 587	265 271 285 340 309 339 5358 363 9 350 344 345 321 331 349 330 341 323 325 318 335 335
1975 Average 1976 Average 1977 Average 1978 Average 1979 Average 1980 Average 1981 Average 1982 Average 1983 Average 1985 Average 1986 Average 1987 Average 1998 Average 1997 Average 1998 Average 1999 Average 1990 Average 1991 Average 1992 Average 1993 Average 1994 Average 1995 Average 1995 Average 1996 Average 1997 Average 1998 January February March April May June July August September October November December Average	13 e 14 16 16 16 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	- 20 163 67 45 336 174 234 195 117 50 80 52 56 16 -47 17 34 13 (s)	17 39 150 -84 81 52 f -46 -38 9 -20 4 -67 28 49 -51 30 -51 5 -18 47 5 -93 -53	12,442 13,416 14,602 14,739 14,648 13,481 12,470 11,774 11,685 12,044 12,002 12,716 12,854 13,401 13,409 13,301 13,411 13,613 13,613 13,866 13,973 14,195	6 8 50 158 235 287 228 236 164 181 204 154 151 155 142 109 116 89 98		271 285 348 376 430 f 466 594 9 644 723 796 814 843 890 890 921 908 893 893 893 922 929	- 7 67 91 108 230 294 379 451 493 512 541 560 580 586 569 575 587	271 285 340 309 339 f 358 363 g 350 344 345 321 331 349 330 341 323 325 318 335 337
1976 Average 1977 Average 1978 Average 1979 Average 1980 Average 1981 Average 1982 Average 1983 Average 1984 Average 1985 Average 1986 Average 1997 Average 1998 Average 1999 Average 1990 Average 1991 Average 1992 Average 1993 Average 1994 Average 1995 Average 1996 Average 1997 Average 1998 January February March April May June July August September October November December Average	e 14 16 16 16 16 16 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	- 20 163 67 45 336 174 234 195 117 50 80 52 56 16 -47 17 34 13 (s) -71	39 150 -84 81 52 f -46 -38 9 -20 4 -67 28 49 -51 30 -51 5 -18 47 5 -93	13,416 14,602 14,739 14,648 13,481 12,470 11,774 11,685 12,044 12,002 12,716 12,854 13,246 13,401 13,409 13,301 13,411 13,613 13,866 13,973 14,195	8 50 158 235 287 228 236 164 181 204 154 155 142 109 116 89 98	- - - - - 66 64 60 49 34 40 28 24 18 13 10 9	285 348 376 430 f 466 594 9 644 723 796 814 843 890 890 921 908 893 893 893 922 929	7 67 91 108 230 294 379 451 493 512 541 560 586 569 575 587	285 340 309 339 5358 363 9 350 344 345 321 331 349 330 341 323 325 318 335 337
1977 Average 1978 Average 1978 Average 1980 Average 1981 Average 1982 Average 1983 Average 1984 Average 1985 Average 1986 Average 1987 Average 1987 Average 1998 Average 1999 Average 1991 Average 1992 Average 1993 Average 1994 Average 1995 Average 1995 Average 1996 Average 1997 Average 1997 Average 1998 January February March April May June July August September October November December Average	16 16 16 16 11 15 3 2 2 1 (s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	20 163 67 45 336 174 234 195 117 50 80 52 56 16 -47 17 34 13 (s)	150 -84 81 52 f -46 -38 9 -20 4 -67 28 49 -51 30 -51 5 -18 47 5 -93 -53	14,602 14,739 14,648 13,481 12,470 11,774 11,685 12,002 12,716 12,854 13,246 13,401 13,409 13,301 13,411 13,613 13,613 13,973 14,195	50 158 235 287 228 236 164 181 204 154 151 155 142 109 116 89 98	- - - - 66 64 60 49 34 40 28 24 18 13	348 376 430 f 466 594 g 644 723 796 814 843 890 890 921 908 893 893 893 922 929	7 67 91 108 230 294 379 451 493 512 541 560 580 586 569 575 587	340 309 339 f 358 363 9 350 344 321 331 349 330 341 323 325 318 335 337
1978 Average 1979 Average 1980 Average 1981 Average 1982 Average 1983 Average 1984 Average 1985 Average 1986 Average 1987 Average 1989 Average 1990 Average 1991 Average 1991 Average 1993 Average 1994 Average 1995 Average 1995 Average 1996 Average 1997 Average 1997 Average 1998 January February March April May June July August September October November December Average	16 16 16 14 5 3 2 2 1 (s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	163 67 45 336 174 234 195 117 50 80 52 56 16 -47 17 34 13 (s) -71	-84 81 52 f -46 -38 g -20 4 -67 28 49 -51 30 -51 5 -18 47 5 -93	14,739 14,648 13,481 12,470 11,774 11,685 12,044 12,002 12,716 12,854 13,246 13,401 13,409 13,301 13,411 13,613 13,613 13,973 14,195	158 235 287 228 236 164 181 204 154 151 155 142 109 116 89 98	- - - 66 64 60 49 34 40 28 24 18 13 10 9	376 430 f 466 594 9 644 723 796 814 843 890 921 908 893 893 893 922 929	67 91 108 230 294 379 451 493 512 541 560 580 586 569 575 587	309 339 5358 363 9 350 344 345 321 331 349 330 341 323 325 318 335 337
1979 Average 1980 Average 1981 Average 1982 Average 1983 Average 1985 Average 1986 Average 1987 Average 1989 Average 1990 Average 1991 Average 1992 Average 1993 Average 1994 Average 1995 Average 1996 Average 1997 Average 1998 January February March April May June July August September October November December Average	16 e 14 5 3 2 2 1 (s)	67 45 336 174 234 195 117 50 80 52 56 16 -47 17 34 13 (s) -71	81 52 f -46 -38 g -20 4 -67 28 49 -51 30 -51 5 -18 47 5 -93 -53	14,648 13,481 12,470 11,774 11,685 12,044 12,002 12,716 12,854 13,246 13,401 13,409 13,301 13,411 13,613 13,866 13,973 14,195	235 287 228 236 164 181 204 154 151 155 142 109 116 89 98	- - 66 64 60 49 34 40 28 24 18 13 10 9	430 f 466 594 g 644 723 796 814 843 890 921 908 893 893 893 922 929	91 108 230 294 379 451 493 512 541 560 580 586 569 575 587	339 f 358 363 g 350 344 345 321 331 349 330 341 323 325 318 335 337
1980 Average 1981 Average 1982 Average 1983 Average 1984 Average 1985 Average 1986 Average 1987 Average 1998 Average 1999 Average 1991 Average 1992 Average 1993 Average 1994 Average 1995 Average 1996 Average 1997 Average 1998 January February March April May June July August September October November December Average	e 14 5 3 2 2 1 (s)	45 336 174 234 195 117 50 80 52 56 16 -47 17 34 13 (s) -71	52 f -46 -38 g -20 4 -67 28 49 -51 30 -51 5 -18 47 5 -93 -53	13,481 12,470 11,774 11,685 12,044 12,002 12,716 12,854 13,246 13,401 13,409 13,301 13,411 13,613 13,866 13,973 14,195	287 228 236 164 181 204 154 155 142 109 116 89 98 99	- 66 64 60 49 34 40 28 24 18 13 10 9	f 466 594 9 644 723 796 814 843 890 890 921 908 893 893 893 922 929	108 230 294 379 451 493 512 541 560 580 586 569 575 587 592	f 358 363 9 350 344 345 321 331 349 330 341 323 325 318 335 337
1981 Average 1982 Average 1983 Average 1984 Average 1985 Average 1986 Average 1987 Average 1989 Average 1999 Average 1991 Average 1992 Average 1993 Average 1994 Average 1995 Average 1995 Average 1996 Average 1997 Average 1998 January February March April May June July August September October November December Average	5 3 2 1 (s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	336 174 234 195 117 50 80 52 56 16 -47 17 34 13 (s) -71	f -46 -38 9 -20 4 -67 28 49 -51 30 -51 5 -18 47 5 -93	12,470 11,774 11,685 12,044 12,002 12,716 12,854 13,246 13,401 13,409 13,301 13,411 13,613 13,613 13,973 14,195	228 236 164 181 204 154 155 142 109 116 89 98 99	-66 64 60 49 34 40 28 24 18 13 10 9	594 9 644 723 796 814 843 890 890 921 908 893 893 893 922 929	230 294 379 451 493 512 541 560 580 586 569 575 587 592	363 9 350 344 345 321 331 349 330 341 323 325 318 335 337
1982 Average 1983 Average 1984 Average 1985 Average 1986 Average 1987 Average 1988 Average 1989 Average 1990 Average 1991 Average 1992 Average 1993 Average 1994 Average 1995 Average 1996 Average 1997 Average 1997 Average 1998 January February March April May June July August September October November December Average	2 2 1 (s) (s) (s) (s) (s) (s) (s) (s) (s)	234 195 117 50 80 52 56 16 -47 17 34 13 (s) -71	9 -20 4 -67 28 49 -51 30 -51 5 -18 47 5 -93	11,774 11,685 12,044 12,002 12,716 12,854 13,246 13,401 13,409 13,301 13,411 13,613 13,613 13,973 14,195	164 181 204 154 151 155 142 109 116 89 98	64 60 49 34 40 28 24 18 13 10 9	723 796 814 843 890 890 921 908 893 893 922 929	379 451 493 512 541 560 580 586 569 575 587 592	344 345 321 331 349 330 341 323 325 318 335 337
1983 Average 1984 Average 1985 Average 1986 Average 1987 Average 1988 Average 1988 Average 1999 Average 1991 Average 1992 Average 1993 Average 1994 Average 1995 Average 1996 Average 1997 Average 1998 January February March April May June July August September October November December Average	2 1 (s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	195 117 50 80 52 56 16 -47 17 34 13 (s) -71	4 -67 28 49 -51 30 -51 5 -18 47 5 -93	12,044 12,002 12,716 12,854 13,246 13,401 13,409 13,301 13,411 13,613 13,866 13,973 14,195	181 204 154 151 155 142 109 116 89 98 99	64 60 49 34 40 28 24 18 13 10 9	796 814 843 890 890 921 908 893 893 922 929	451 493 512 541 560 580 586 569 575 587 592	345 321 331 349 330 341 323 325 318 335 337
1985 Average 1986 Average 1987 Average 1988 Average 1999 Average 1991 Average 1992 Average 1993 Average 1995 Average 1996 Average 1997 Average 1998 January February March April May June July August September October November December Average	1 (s)	117 50 80 52 56 16 -47 17 34 13 (s) -71	-67 28 49 -51 30 -51 5 -18 47 5 -93	12,002 12,716 12,854 13,246 13,401 13,409 13,301 13,411 13,613 13,866 13,973 14,195	204 154 151 155 142 109 116 89 98 99	60 49 34 40 28 24 18 13 10 9	814 843 890 890 921 908 893 893 922	493 512 541 560 580 586 569 575 587 592	321 331 349 330 341 323 325 318 335 337
1986 Average 1987 Average 1988 Average 1988 Average 1990 Average 1991 Average 1992 Average 1993 Average 1994 Average 1995 Average 1996 Average 1997 Average 1997 Average 1998 January February March April May June July August September October November December Average	(s) (s) (s) (s) (s) (s) (s) (s) (s) (o)	50 80 52 56 16 -47 17 34 13 (s) -71	28 49 -51 30 -51 5 -18 47 5 -93	12,716 12,854 13,246 13,401 13,409 13,301 13,411 13,613 13,866 13,973 14,195	154 151 155 142 109 116 89 98 99	49 34 40 28 24 18 13 10 9	843 890 890 921 908 893 893 922 929	512 541 560 580 586 569 575 587 592	331 349 330 341 323 325 318 335 337
1987 Average 1988 Average 1989 Average 1990 Average 1991 Average 1993 Average 1994 Average 1995 Average 1996 Average 1997 Average 1998 January February March April May June July August September October November December Average	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	80 52 56 16 -47 17 34 13 (s) -71	49 -51 30 -51 5 -18 47 5 -93 -53	12,854 13,246 13,401 13,409 13,301 13,411 13,613 13,866 13,973 14,195	151 155 142 109 116 89 98 99	34 40 28 24 18 13 10 9 7	890 890 921 908 893 893 922 929	541 560 580 586 569 575 587 592	349 330 341 323 325 318 335 337
1988 Average 1989 Average 1990 Average 1991 Average 1992 Average 1993 Average 1995 Average 1996 Average 1997 Average 1998 January February March April May June July August September October November December Average	(s) (s) (s) (s) (s) (s) (s) (s) 0	52 56 16 -47 17 34 13 (s) -71	-51 30 -51 5 -18 47 5 -93 -53	13,246 13,401 13,409 13,301 13,411 13,613 13,866 13,973 14,195	155 142 109 116 89 98 99	40 28 24 18 13 10 9	890 921 908 893 893 922 929	560 580 586 569 575 587 592	330 341 323 325 318 335 337
1989 Average 1990 Average 1991 Average 1992 Average 1993 Average 1994 Average 1995 Average 1996 Average 1997 Average 1997 Average 1998 January February March April May June July August September October November December Average	(s) (s) (s) (s) (s) (s) (s) (s)	56 16 -47 17 34 13 (s) -71	30 -51 5 -18 47 5 -93 -53	13,401 13,409 13,301 13,411 13,613 13,866 13,973 14,195	142 109 116 89 98 99	28 24 18 13 10 9 7	921 908 893 893 922 929	580 586 569 575 587 592	341 323 325 318 335 337
1990 Average 1991 Average 1992 Average 1993 Average 1994 Average 1995 Average 1996 Average 1997 Average 1997 Average 1998 January February March April May June July August September October November December Average	(s) (s) (s) (s) (s) (s) (s) 0	16 -47 17 34 13 (s) -71	-51 5 -18 47 5 -93 -53	13,409 13,301 13,411 13,613 13,866 13,973 14,195	109 116 89 98 99	24 18 13 10 9 7	908 893 893 922 929	586 569 575 587 592	323 325 318 335 337
1991 Average 1992 Average 1993 Average 1994 Average 1995 Average 1996 Average 1997 Average 1998 January February March April May June July August September October November December Average	(s) (s) (s) (s) (s) (s) 0	-47 17 34 13 (s) -71 -7	5 -18 47 5 -93 -53	13,301 13,411 13,613 13,866 13,973 14,195	116 89 98 99 95	18 13 10 9 7	893 893 922 929	569 575 587 592	325 318 335 337
1992 Average 1993 Average 1994 Average 1995 Average 1996 Average 1997 Average 1998 January February March April May June July August September October November December Average	(s) (s) (s) (s) (s) 0	17 34 13 (s) -71	-18 47 5 -93 -53	13,411 13,613 13,866 13,973 14,195	89 98 99 95	13 10 9 7	893 922 929	575 587 592	318 335 337
1993 Average 1994 Average 1995 Average 1996 Average 1997 Average 1998 January February March April May June July August September October November December Average	(s) (s) (s) (s) 0	34 13 (s) -71 -7	47 5 -93 -53	13,613 13,866 13,973 14,195	98 99 95	10 9 7	922 929	587 592	335 337
1994 Average 1995 Average 1996 Average 1997 Average 1998 January February March April May June July August September October November December Average	(s) (s) (s) 0	13 (s) -71 -7	5 -93 -53	13,866 13,973 14,195	99 95	9 7	929	592	337
1995 Average 1996 Average 1997 Average 1998 January February March April May June July August September October November December Average	(s) (s) 0	(s) -71 -7	-93 -53	13,973 14,195	95	7			
1996 Average 1997 Average 1998 January February March April May June July August September October November December Average	(s) 0	-71 -7	-53	14,195			895	502	
1997 Average 1998 January	0	-7		,	110	b	050		303
February March April May June July August September October November December Average		(e)			108	2	850 868	566 563	284 305
February March April May June July August September October November December Average		161	000	44.040	004		000	500	047
March	0		389	14,319	231	0	880	563	317
April May June July August September October November December Average	_	(s)	38	14,023	197	0	881	563	318
May	0	0	538	14,639	99	0	898	563	334
June July August September October November December Average	0 0	0	556 -9	15,085	163 144	0	915 914	563 563	351 351
July	0	(s) (s)	-620	15,321 15,485	63	0	896	563	332
August		(s)	187	15,554	104	0	901	563	338
September October November December Average	(s) 0	0	-293	15,717	51	0	892	563	329
October November December Average	(s)	0	-293 -641	14,851	34	0	873	563	310
November December Average	(s)	19	658	13,994	87	0	894	564	330
December Average	0	150	170	14,772	60	0	904	569	335
Average	0	93	-378	14,840	90	0	895	571	324
-	(s)	22	52	14,889	110	ŏ	895	571	324
1000 January	(3)		32	14,000		·	033	371	324
1999 January	0	18	49	14,483	107	0	897	572	325
February	(s)	(s)	31	14,430	119	0	897	572	325
March	(s)	0	342	14,495	95	0	908	572	336
April	0	17	-209	15,039	332	0	902	572	330
May	0	37	369	14,946	88	0	915	574	341
June	0	40	-442	14,943	123	0	903	575	328
July	0	29	75	15,232	120	0	906	576	330
August	0	-27	-519	15,280	132	0	889	575	314
September	0	20	-389	15,107	27	0	878	575	303
October	0	-103	29	14,590	56	0	876	572	303
November	0	-105	-210	14,704	83	0	866	569	297
December	0	-60	-410	14,420	133	0	852	567	284
Average	(s)	-11	-106	14,807	118	0	852	567	284
2000 January	0	41	50	13,789	176	0	854	568	286
February	E 0	E 30	90	14,046	30	0	858	569	289
March	0	^R 1	R 269	R 14,629	^R 144	0	R 866	569	R 297
April	E 0	E (s)	E 390	E 15,117	E 109	E 0	E 875	E 569	E 306
4-Month Average	E 0	E 18	E 200	E 14,395	E 116	E 0	E 875	E 569	^E 306
1999 4-Month Average 1998 4-Month Average		9 (s)	56 387	14,613 14,524	163 172	0 0	902 915	572 563	330 351

 $^{^{\}rm a}$ Stocks are at end of period. $^{\rm b}$ A negative number indicates a decrease in stocks and a positive number indicates an increase.

^c Strategic Petroleum Reserve. Crude oil stocks in the SPR include non-U.S. stocks held under foreign or commercial storage agreements.

d Beginning in January 1983, crude oil used directly as fuel is shown as

product supplied.

See Note 6 at end of section.
 Stocks of Alaskan crude oil in transit are included from January 1981 forward. See Note 5 at end of section.

^g See Note 4 at end of section.

R=Revised. — =Not applicable. E=Estimate. (s)=Less than +500 barrels per day and greater than -500 barrels per day.

Notes: Crude oil includes lease condensate. Totals may not equal sum of components due to independent rounding. Geographic coverage is the 50 States and the District of Columbia.

Sources: 1973-1980: Energy Information Administration (EIA), Petroleum Supply Monthly, February 1993, Table S2. 1981 forward: EIA, Petroleum Supply Monthly, May 2000, Table S2.

Table 3.3a Petroleum Imports From Bahrain, Iran, Iraq, and Kuwait

				Persiar	n Gulf ^a			
	Bal	nrain	ı	ran	lı	raq	Ku	waitb
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1973 Average	11	0	223	216	4	4	47	42
1974 Average	12	0	469	463	0	0	5	5
1975 Average	16	0	280	278	2	2	16	4
1976 Average	3	0	298	298	26	26	5	1
1977 Average	10	0	535	530	74	74	48	42
1978 Average	3	0	555	554	62	62	6	5
1979 Average	1	0	304	297	88	88	8	5
1980 Average	(s)	0	9	8	28	28	27	27
1981 Average	ìí	0	0	0	(s)	0	0	0
1982 Average	1	0	35	35	Ìá	3	5	2
1983 Average	2	Ô	48	48	10	10	14	7
1984 Average	1	Ö	10	10	12	12	36	24
1985 Average	4	Ŏ	27	27	46	46	21	4
1986 Average	ż	Ŏ	19	19	81	81	68	28
1987 Average	ō	ŏ	98	98	83	82	84	70
1988 Average	2	ŏ	° (s)	° (s)	345	343	92	80
1989 Average	0	0	0	0	449	441	157	155
1990 Average	1	ŏ	ŏ	Ŏ	518	514	86	79
1991 Average	2	ŏ	32	32	0	0	6	6
1992 Average	0	0	0	0	Ö	Ŏ	51	39
	1	0	0	0	Ö	0	353	344
1993 Average	1	0	0	0	Ö	0	312	344 307
1994 Average	1	0	0	0	Ö	0	218	213
1995 Average	i	0	0	0	1	1	236	235
1996 Average	0	-		-		-		
1997 Average	U	0	0	0	89	89	253	253
1998 January	0	0	0	0	36	36	252	252
February	0	0	0	0	0	0	338	338
March	0	0	0	0	127	127	374	374
April	0	0	0	0	254	254	311	311
May	17	0	0	0	137	137	399	399
June	0	0	0	0	270	270	275	275
July	0	0	0	0	286	286	435	435
August	0	0	0	0	713	713	273	273
September	0	0	0	0	517	517	259	259
October	0	0	0	0	636	636	241	227
November	0	0	0	0	542	542	224	224
December	0	0	0	0	486	486	228	228
Average	1	0	0	0	336	336	301	300
1999 January	0	0	0	0	471	471	132	132
February	ŏ	ŏ	ŏ	Ŏ	681	681	205	205
March	ő	0	0	0	791	791	324	324
April	0	0	0	0	824	824	286	279
	0	0	0	0	720	720	227	227
May	0	0	0	0	691	691	259	259
June	0	0	0	0	670	670	311	311
July	0	0	0	0	660	660	348	348
August	0	0	0	0				
September	-	-	-	-	748	748	261	261
October	0	0	0	0	867	867	205	205
November	0	0	0	0	717	717	216	216
December	0	0	0	0	651	651	200	186
Average	0	0	0	0	707	707	248	246
2000 January	0	0	0	0	254	254	239	218
February	0	0	0	0	719	719	267	264
March	0	0	0	0	468	468	162	162
3-Month Average	0	Ö	0	Ō	475	475	222	214
1999 3-Month Average	0	0	0	0	646	646	221	221
1998 3-Month Average	ŏ	Ŏ	Ŏ	Ŏ	56	56	321	321

a The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined products imported from West European refining areas may have been produced from Middle East crude oil.

b Imports from the Neutral Zone between Kuwait and Saudi Arabia are included in Saudi Arabia.

(s)=Less than 500 barrels per day.

Notes: Beginning in October 1977, Strategic Petroleum Reserve imports e included.

U.S. geographic coverage is the 50 States and the District of Notes: E are included. Columbia.

Sources: Bahrain: Energy Information Administration (EIA), Form EIA-814, "Monthly Imports Report." All Other Data: 1973-1980—EIA, Petroleum Supply Monthly, February 1993, Table S3. 1981 forward—EIA, Petroleum Supply Monthly, May 2000, Table S3.

Imports from the Neutral Zone between Ruwalt and Saudi Alabia are included in Saudi Arabia.

C A small amount of Iranian crude oil entered the United States in January 1988 from the Virgin Islands. The oil originated in Iran and was exported to the Virgin Islands prior to the signing of Executive Order 12613 on October 29, 1987.

Table 3.3b Petroleum Imports From Qatar, Saudi Arabia, U.A.E., and Total Persian Gulf (Thousand Barrels per Day)

				Persian	Gulf ^a			
	Q	atar	Saudi	Arabia ^b	United Ar	ab Emirates	To	otal ^a
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1973 Average	7	7	486	462	71	71	848	802
1974 Average	17	17	461	438	74	69	1,039	992
1975 Average	18	18	715	701	117	117	1,165	1,121
1976 Average	24	24	1,230	1,222	254	254	1,840	1,825
1977 Average	67	67	1,380	1,373	335	333	2,448	2,418
1978 Average	64	64	1,144	1,142	385	385	2,219	2,212
1979 Average	31	31	1,356	1,347	281	281	2,069	2,049
1980 Average	22	22	1,261	1,250	172	172	1,519	1,508
1981 Average	7	7	1,129	1,112	81	77	1,219	1,196
1982 Average	7	7	552	530	92	81	696	659
1983 Average	(s <u>)</u>	0	337	321	30	18	442	405
1984 Average	5	4	325	309	117	90	506	450
1985 Average	(s)	0	168	132	45	35	311	244
1986 Average	13	12	685	618	44	38	912	796
1987 Average	0	0	751	642	61	56	1,077	949
1988 Average	0	0	1,073	911	29	23	1,541	1,357
1989 Average	2	2	1,224	1,116	28	21	1,861	1,734
1990 Average	4	4	1,339	1,195	17	9	1,966	1,801
1991 Average	0	0	1,802	1,703	3	2	1,845	1,743
1992 Average	1	0	1,720	1,597	6	0	1,778	1,636
1993 Average	1 0	0 0	1,414	1,282	14 13	12	1,782	1,637
1994 Average	0	0	1,402	1,297	10	11 5	1,728	1,615 1.479
1995 Average	0	0	1,344	1,260	3	3	1,573	
1996 Average	4	0	1,363	1,248	2	0	1,604	1,488
1997 Average	4	U	1,407	1,293	2	U	1,755	1,635
1998 January	0	0	1,515	1,438	0	0	1,804	1,726
February	18	18	1,470	1,360	0	0	1,826	1,716
March	0	0	1,552	1,406	13	13	2,066	1,920
April	0	0	1,527	1,348	20	20	2,111	1,933
May	0	0	1,362	1,279	0	0	1,915	1,815
June	15	0	1,647	1,566	0	0	2,207	2,111
July	15	0	1,615	1,575	0	0	2,351	2,296
August	0	0	1,500	1,468	0	0	2,486	2,453
September	0	0	1,606	1,532	0	0	2,383	2,308
October	0	0 0	1,316	1,228	0	0	2,194	2,092
November	0	-	1,386	1,323	0	0	2,153	2,089
December	0 4	0	1,402	1,326	0 3	0 3	2,116	2,040
Average	4	1	1,491	1,404	3	3	2,136	2,044
1999 January	0	0	1,511	1,410	0	0	2,114	2,012
February	0	0	1,510	1,437	0	0	2,396	2,324
March	34	0	1,645	1,584	0	0	2,794	2,698
April	31	0	1,444	1,379	5	0	2,591	2,483
May	0	0	1,502	1,406	0	0	2,449	2,352
June	0	0	1,515	1,419	19	0	2,484	2,369
July	0	0	1,412	1,271	0	0	2,393	2,252
August	18	0	1,394	1,299	3	0	2,422	2,306
September	14	0	1,451	1,341	0	0	2,474	2,350
October	0	0	1,284	1,188	0	0	2,356	2,260
November	11	11	1,350	1,288	0	0	2,294	2,232
December	8 10	0 1	1,455 1,456	1,391 1 367	0 2	0 0	2,314	2,228
Average	10	'	1,456	1,367	2	U	2,423	2,322
2000 January	4	0	1,539	1,483	0	0	2,036	1,955
February	2	0	1,268	1,228	0	0	2,256	2,210
March	9	0	1,533	1,474	17	0	2,189	2,104
3-Month Average	5	0	1,450	1,399	6	0	2,158	2,087
1999 3-Month Average	12	0	1,557	1,478	0	0	2,436	2,345
1998 3-Month Average	6	6	1,514	1,403	4	4	1,901	1,790

^a The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined products imported from West European refining areas may have been produced from Middle East crude oil.

Description of the Neutral Zone between Kuwait and Saudi Arabia are included in Cardi Arabia.

Notes: Beginning in October 1977, Strategic Petroleum Reserve imports are included. Totals may not equal sum of components due to independent U.S. geographic coverage is the 50 States and the District of rounding. Columbia.

included in Saudi Arabia.

⁽s)=Less than 500 barrels per day.

Table 3.3c Petroleum Imports From Algeria, Ecuador, Gabon, Indonesia, and Libya (Thousand Barrels per Day)

					Other OPEC ^a					
	Αlς	geria	Ecu	ador ^b	Ga	bon ^C	Indo	nesia	L	ibya
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1973 Average	136	120	48	47	0	0	213	200	164	133
1974 Average	190	180	42	42	23	23	300	284	4	4
1975 Average	282	264	57	57	27	27	390	379	232	223
1976 Average	432	408	51	51	28	26	539	537	453	444
1977 Average	559	544	57 54	55	42 41	35 38	541 573	507 533	723	704 638
1978 Average	649 636	634 608	42	38 30	41	36 42	420	380	654 658	642
1980 Average	488	456	27	17	26	25	348	314	554	548
I981 Average	311	261	48	38	35	35	366	318	319	317
1982 Average	170	90	42	32	40	40	248	226	26	23
1983 Average	240	176	61	56	59	59	338	315	0	0
1984 Average	323	194	55	47	58	57	343	304	1	0
1985 Average	187	84	67	56	52	51	314	292	4	0
1986 Average	271	78	77	64	26	25	318	297	0	0
1987 Average	295	115	29	23	35	35	285	262	0	0
1988 Average	300	58 60	47	33 80	16	15 49	205	186 159	0	0 0
1989 Average	269 280	60 63	89 49	38	50 64	49 64	183 114	158 98	0	0
1990 Average	253	44	63	53	84	84	111	102	0	0
1992 Average	196	24	65	62	124	123	78	70	ŏ	ŏ
1993 Average	220	24	(b)	(b)	152	151	81	65	Ŏ	Ŏ
1994 Average	243	21	(b)	}b Ś	194	194	111	92	Ŏ	Ö
1995 Average	234	27	(b)	(b)	(°)	(c)	88	64	0	0
1996 Average	256	8	(b)	(b)	(°)	(°)	59	44	0	0
1997 Average	285	6	(b)	(b)	(c)	(°)	58	51	0	0
1000	040		(b)	(b)	(C)	/ C \	00	00	•	
1998 January	316	0	(b)	(b)	(C)	(0)	36	33 24	0	0
February March	295 255	0	(b (\b\	(c)	(c)	24 50	47	0	0 0
April	336	0	}b{	} b {	}c{	} c {	44	26	0	0
May	330	0	(b)	}b	(c)	\c\	21	21	0	0
June	362	21	}b {	} b {	(c)	(c)	0	0	Õ	ŏ
July	308	20	(b)	(b)	(c)	(°)	96	84	Ö	Ō
August	264	0	(b)	(b)	(°)	(°)	59	41	0	0
September	306	0	(b)	(b)	(°)	(°)	73	54	0	0
October	289	21	(b)	(b)	(°)	(°)	102	89	0	0
November	219	22	(b)	(b)	(°)	(°)	183	138	0	0
December	200	31	(b)	(b)	(c)	(c)	102	43	0	0
Average	290	10	(")	(5)	(°)	(°)	66	50	0	0
1999 January	240	20	(b)	(b)	(C)	(C)	80	75	0	0
February	203	0	}b{	} b {	}c{	} c {	66	66	0	Ő
March	298	6	ìb′,	}b;	(c)	(c)	43	40	Ö	Ö
April	304	80	(b)	(b)	(c)	(c)	98	94	0	0
May	293	107	(b)	(b)	(°)	(°)	82	76	0	0
June	245	7	(b)	(b)	(°)	(°)	56	42	0	0
July	302	48	(b)	(b)	(c)	(c)	38	33	0	0
August	249	0	(b)	(b)	(°)	(°)	72	63	0	0
September	255	4 0	(b)	(b)	(0)	(0)	94 98	66	0	0
October November	183 210	11	(b)	(b)	(c)	(6)	98 74	79 68	0	0
December	277	15	}b{	ìbί	(c)	\c\	93	87	0	0
Average	255	25	(b)	(b)	(°)	(°)	75	66	ŏ	ŏ
2000 January	226	3	(b)	(b)	(°)	(°)	31	22	0	0
February	153	0	(b)	(b)	(c)	(°)	32	28	0	0
March	199 104	0	(b)	(b)	(c)	(c)	45 36	45 33	0	0
3-Month Average	194	1	()	,	()	` ,	36	32	0	0
999 3-Month Average998 3-Month Average	248 288	9 0	(b) (b)	(b)	(c)	(°)	63 37	60 35	0	0

a The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined products imported from West European refining areas may have been produced from Middle East crude oil.
 b Ecuador withdrew from OPEC on December 31, 1992. As of January 1993, imports from Ecuador appear on Table 3.3f under "Non-OPEC."
 C Gabon withdrew from OPEC on December 31, 1994. As of January

^{1995,} imports from Gabon appear on Table 3.3f under "Non-OPEC."

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

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

Sources: 1973-1980: Energy Information Administration (EIA), Petroleum Supply Monthly, February 1993, Table S3. 1981 forward: EIA, Petroleum Supply Monthly, May 2000, Table S3.

Table 3.3d Petroleum Imports From Nigeria, Venezuela, Total Other OPEC, and Total OPEC

			Other	OPECa				
	Nig	geria	Ven	ezuela	Т	otal	T OF	otal PEC ^b
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
973 Average	459	448	1.135	344	2.156	1,293	2.993	2.095
974 Average	713	697	979	319	2,253	1,549	3,280	2,540
975 Average	762	746	702	395	2,452	2,091	3,601	3,211
976 Average	1,025	1,014	700	241	3,229	2,721	5,066	4,545
977 Average	1,143	1,130	690	250	3,754	3,225	6,193	5,643
978 Average	919	910	646	181	3.536	2.972	5.751	5.184
979 Average	1,080	1,069	690	293	3,569	3,063	5,637	5,112
980 Average	857	841	481	156	2.781	2,356	4,300	3.864
981 Average	620	611	406	147	2,106	1,726	3,323	2,922
	514	510	412	155	1.451	1.075	2,146	1.734
982 Average	302	301	422	164	1,422	1,073	1.862	1,734
983 Average	302 216	207	548	253	1,422	1,072	2.049	1,477
984 Average								
985 Average	293	280	605	306	1,522	1,069	1,830	1,312
986 Average	440	437	793	416	1,926	1,317	2,837	2,113
987 Average	535	529	804	488	1,983	1,451	3,060	2,400
988 Average	618	607	794	439	1,981	1,339	3,520	2,696
989 Average	815	800	873	495	2,279	1,642	4,140	3,376
990 Average	800	784	1,025	666	2,332	1,713	4,296	3,514
991 Average	703	683	1,035	668	2,249	1,634	4,092	3,377
992 Average	681	665	1,170	826	2,313	1,770	4,092	3,406
993 Average	740	722	1,300	1.010	2.493	1,972	4,273	3,609
994 Average	637	624	1,334	1,034	2,520	1,965	4,247	3,580
995 Average	627	621	1,480	1,151	2,430	1,862	4,002	3,341
996 Average	617	595	1,676	1,303	2,609	1,950	4,211	3,438
997 Average	698	689	1,773	1,394	2,814	2,140	4,569	3,775
737 Average	030	003	1,773	1,334	2,014	2,140	4,505	3,773
998 January	630	625	1,597	1,319	2,578	1,977	4,382	3,703
February	560	560	1,764	1,357	2,643	1,941	4,469	3,657
March	845	845	1,698	1,313	2,848	2,205	4,915	4,126
April	822	822	1,743	1,423	2,945	2,272	5,056	4,205
May	899	892	1,911	1,549	3,160	2,463	5,058	4,278
June	771	755	1,616	1,374	2.749	2,150	4,956	4,261
July	873	871	1,779	1.445	3.055	2,420	5.407	4.716
August	736	726	1.703	1.349	2.762	2,116	5.247	4.569
September	502	496	1.490	1.199	2.370	1,749	4.753	4.057
October	633	626	1,963	1,548	2,988	2,284	5,181	4,376
	574	545	1,708	1,367	2,684	2,204	4.837	4,161
November	490							
December		483	1,651	1,271	2,443	1,828	4,560	3,868
Average	696	689	1,719	1,377	2,771	2,125	4,905	4,169
999 January	687	686	1,615	1,222	2,622	2,003	4,736	4,015
February	687	661	1,710	1,290	2,666	2,017	5,062	4,341
March	659	630	1,335	998	2,334	1,673	5,129	4,372
April	901	866	1.694	1,357	2.996	2.397	5.587	4.880
May	606	572	1,472	1,186	2,453	1,942	4,902	4,294
June	703	667	1,388	1,067	2,392	1,783	4,875	4,151
July	636	614	1,501	1,239	2,477	1,935	4,870	4,187
	800	766	1,390	1,259	2,511	1,980	4,933	4.286
August	535	505	1,418	1,120	2,311	1,695	4,933 4,775	4,200
September	543	505 522		1,120	2,301	1,695		3.902
October			1,333				4,514	
November	588	548	1,205	942	2,077	1,569	4,372	3,801
December Average	490 652	450 623	1,328 1,447	1,069 1,139	2,189 2,429	1,621 1,853	4,503 4,853	3,849 4,175
_			,	,	,	•	,	-
000 January	490	439	1,333	1,051	2,079	1,515	4,115	3,470
February	663	642	1,550	1,183	2,397	1,854	4,653	4,064
March	1,027	994	1,553	1,209	2,824	2,248	5,013	4,353
3-Month Average	728	693	1,477	1,147	2,434	1,873	4,592	3,960
99 3-Month Average	677	659	1,548	1,166	2,537	1,894	4,973	4,239

^a The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined products imported from West European refining areas may have been

Table 3.3f under "Non-OPEC." Imports from Bahrain are accounted for under "Other Non-OPEC" on Table 3.3h.

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

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

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

refined products imported from West European refining areas may have been produced from Middle East crude oil.

DOPEC includes the Persian Gulf nations that are displayed on Tables 3.3a and 3.3b except Bahrain, which is not a member of OPEC, and the nations displayed under "Other OPEC" on Tables 3.3c and 3.3d. Ecuador withdrew from OPEC on December 31, 1992; as of January 1993, imports from Ecuador appear on Table 3.3f under "Non-OPEC." Gabon withdrew on December 31, 1994; as of January 1995, imports from Gabon appear on

Table 3.3e Petroleum Imports From Angola, Australia, Bahama Islands, Brazil, Canada, and China

	Non-OPEC ^a												
	A	ngola	Au	ıstralia		nhama lands	В	Brazil	C	anada	C	China	
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	
1973 Average	49	49	2	0	174	0	9	0	1,325	1,001	(s)	0	
1974 Average	49	48	1	0	164	0	2	0	1,070	791	0	0	
1975 Average	75	7 <u>1</u>	5	0	152	0	5	0	846	600	0	0	
1976 Average	12 24	7 17	2	0 0	118	0 0	0	0 0	599 517	371 279	0	0	
1977 Average 1978 Average	24	6	5	0	171 160	0	0	0	467	279 248	0	0	
1979 Average	43	39	6	ŏ	147	Ö	1	ŏ	538	271	13	13	
1980 Average	42	37	1	Ö	78	Ö	3	1	455	199	(s)	0	
1981 Average	49	45	5	0	74	Ō	23	14	447	164	`18	0	
1982 Average	44	42	5	(s)	65	0	47	19	482	214	40	8	
1983 Average	78	71	4	0	125	0	41	2	547	274	34	6	
1984 Average	90	85	38	25	88	0	60	(s)	630	341	46	15	
1985 Average	110	104	37	21	40	0	61	0	770	468 570	59	36	
1986 Average 1987 Average	112 192	102 180	41 58	30 49	37 37	0 0	50 84	0 0	807 848	570 608	90 82	68 63	
1988 Average	212	203	64	59	32	ŏ	98	Ö	999	681	88	82	
1989 Average	284	279	36	31	34	ŏ	82	ŏ	931	630	80	76	
1990 Average	237	236	53	47	37	ŏ	49	Ŏ	934	643	80	77	
1991 Average	254	254	26	21	35	0	22	0	1,033	743	91	87	
1992 Average	336	336	19	17	36	0	20	0	1,069	797	90	84	
1993 Average	336	336	19	18	28	0	33	0	1,181	900	51	50	
1994 Average	331	322	17	16	29	0	31	1	1,272	983	65	64	
1995 Average	367	360	16	16	2	0 0	8	0	1,332	1,040	53	53	
1996 Average1997 Average	351 427	344 425	31 48	25 31	1 1	0	9 5	0 0	1,424 1,563	1,075 1,198	57 49	57 48	
1997 Average	421	423	40	31	'	U	3	U	1,303	1,190	43	40	
1998 January	430	427	10	0	0	0	6	0	1,703	1,336	15	14	
February	434	434	57	48	4	0	2	0	1,738	1,366	41	41	
March	353	351	44	30	0	0	27	0	1,464	1,132	64	63	
April May	457 516	452 508	68 82	14 60	0 21	0 0	11 42	0	1,586 1,600	1,241 1,302	62 70	62 70	
June	399	399	77	33	11	0	55	0	1,688	1,404	81	81	
July	591	591	69	48	0	ő	29	ő	1,669	1,364	73	73	
August	427	427	42	21	Õ	Ö	38	Ö	1,564	1,248	57	57	
September	506	502	77	23	10	0	33	0	1,575	1,227	20	20	
October	470	457	71	30	0	0	29	0	1,570	1,202	25	24	
November	524	520	31	31	0	0	19	0	1,495	1,199	0	0	
December	509	505	57	36	0	0	22	0	1,542	1,184	1	0	
Average	468	465	57	31	4	0	26	0	1,598	1,266	42	42	
1999 January	389	389	0	0	0	0	2	0	1,617	1,235	(s)	0	
February	349	333	73	49	0	0	6	0	1,355	1,082	1	0	
March	283	283	53	53	0	0	5	0	1,359	1,053	30	30	
April	401	393 276	19 55	19 37	7 23	0 0	16 29	0	1,298	1,012	22 2	21 0	
May June	283 326	326	56	34	12	0	39	0	1,471 1,473	1,133 1,169	66	19	
July	316	316	30	30	8	0	31	0	1,473	1,342	19	19	
August	309	309	65	47	0	0	26	0	1,563	1,205	72	33	
September	465	465	110	65	ő	Ö	16	Ö	1,392	1,062	37	34	
October	444	444	0	0	0	0	18	0	1,604	1,218	0	0	
November	307	307	22	22	0	0	36	0	1,588	1,264	1	0	
December Average	181 337	165 333	23 42	23 31	0 4	0 0	18 20	0 0	1,673 1,507	1,287 1,173	1 21	0 13	
									-				
2000 January	217	215	21	21	0	0	39	0	1,718	1,314	7	0	
February	186	177	8 44	0 44	0	0 0	2 9	0	1,677	1,215	22	21	
March 3-Month Average	312 240	308 235	25	44 22	0	0	9 17	0	1,571 1,655	1,209 1,247	91 40	37 19	
_													
1999 3-Month Average 1998 3-Month Average	340 405	335 403	41 36	33 25	0 1	0 0	4 12	0 0	1,446 1,632	1,125 1,275	11 40	10 39	

^a The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined products imported from West European refining areas may have been produced from Middle East crude oil.

(s)=Less than 500 barrels per day.

Notes: Beginning in October 1977, Strategic Petroleum Reserve imports

are included. U.S. geographic coverage is the 50 States and the District of Columbia.

Table 3.3f Petroleum Imports From Colombia, Ecuador, Gabon, Italy, Malaysia, and Mexico

1973 Average 9 0 125 0 12 1 16 1974 Average 9 0 774 0 12 1 1 8 1975 Average 9 0 774 0 12 1 8 5 7 1 7 7 1976 Average 9 0 0 277 0 8 5 7 1 7 7 1976 Average 9 0 0 39 0 18 16 8 16 8 9 8 1977 Average 17 0 0 39 0 0 18 16 8 17 9 8 1977 Average 17 0 0 39 0 0 18 16 8 17 9 8 1977 Average 17 0 0 39 0 0 18 16 8 17 9 8 19 1977 Average 17 0 0 39 0 0 18 16 8 17 9 8 19 1978 Average 18 0 0 30 0 0 66 52 439 31 31 31 379 Average 4 0 0 18 10 0 66 52 439 31 31 31 379 Average 4 1 0 0 118 0 36 33 522 439 43 31 3282 Average 5 1 0 0 118 0 36 33 522 439 43 32 3282 Average 5 1 0 0 18 10 0 36 33 522 44 39 43 32 3282 Average 2 3 0 0 45 16 0 1 3 63 33 522 48 1884 Average 2 3 0 0 45 16 0 1 1 0 9 478 166 71 31 31 31 31 31 31 31 31 31 31 31 31 31							Non-	OPECa					
1973 Average 9 0 125 0 12 1 1 16 1974 Average 9 0 774 0 12 1 8 1974 Average 9 0 774 0 12 1 8 5 7 17 7 1976 Average 9 0 774 0 12 1 8 5 7 17 7 1976 Average 9 0 774 0 18 5 7 17 7 7 1976 Average 9 0 39 0 18 16 8 7 8 8 5 7 1 7 7 1976 Average 12 1 6 39 0 0 18 16 8 7 8 8 18 7 7 8 8 19 1977 Average 12 1 0 0 5 19 19 0 0 66 52 19 19 19 1978 Average 14 8 0 30 0 0 66 52 439 43 19 1978 Average 4 4 0 4 4 0 7 0 66 52 439 43 19 1978 Average 5 1 0 0 111 0 36 33 522 4439 19 1982 Average 5 1 0 0 111 0 36 33 522 4439 19 1982 Average 5 1 0 0 118 (6) 2 4 18 688 64 1984 Average 5 1 0 0 1 11 0 36 33 522 4439 19 19 1985 Average 2 3 0 16 (6) 1 1 0 448 65 19 19 19 19 19 19 19 19 19 19 19 19 19		Co	lombia	Ecu	uadorb	Ga	abon ^c		Italy	Ma	laysia	Me	exico
1974 Average		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1975 Average	1973 Average	9	2	_	_	_	_	125	0	12	1	16	1
1975 Average						_	_						2
1977 Average	1975 Average	9		-	_	-	-	27			5	71	70
1978 Average	1976 Average				_	-	_						87
1979 Average													177
1982 Average	1978 Average												316
1982 Average				-					-				437
1982 Average	1980 Average			-			-						507
1983 Average	1981 Average												469
1984 Average	1982 Average												645
1985 Average	1983 Average								(s)				
1986 Average											-		
1987 Average													
1988 Average													
1989 Average													674
1991 Average 163 123 47 3 24 24 807 75 1992 Average 126 102 55 0 10 10 830 78 1993 Average 171 141 81 78 31 0 11 10 830 78 1993 Average 171 141 81 78 31 0 11 10 919 84 1994 Average 161 146 91 91 2 22 0 10 6 6 984 93 1995 Average 219 207 97 96 229 229 5 0 8 6 10 10 6 6 984 93 1995 Average 219 207 97 96 229 229 5 0 8 6 10 11 6 1,068 1,02 1997 Average 271 270 115 114 230 230 7 0 23 8 1,385					_		_						716
1991 Average 163 123 47 3 24 24 807 75 1992 Average 126 102 55 0 10 10 830 78 1993 Average 171 141 81 78 31 0 11 10 830 78 1993 Average 171 141 81 78 31 0 11 10 919 84 1994 Average 161 146 91 91 2 22 0 10 6 6 984 93 1995 Average 219 207 97 96 229 229 5 0 8 6 10 10 6 6 984 93 1995 Average 219 207 97 96 229 229 5 0 8 6 10 11 6 1,068 1,02 1997 Average 271 270 115 114 230 230 7 0 23 8 1,385				_	_		_						689
1993 Average 126 102 555 0 10 10 10 830 78 1993 Average 171 141 81 78 31 0 111 10 919 86 1994 Average 161 146 91 91 22 0 0 10 6 984 93 1995 Average 219 207 97 96 229 229 5 0 8 6 1,068 1,02 1996 Average 234 226 104 96 184 184 8 0 11 6 1,244 1,20 1997 Average 271 270 115 114 230 230 7 0 23 8 1,385 1,36 1998 January 345 345 89 89 277 277 26 0 0 17 11 1,444 1,43 1998 January 301 294 103 103 278 278 6 0 6 4 49 1,250 1,250 March 266 296 75 75 235 235 17 0 10 10 10 1,272 1,24 April 388 388 88 81 244 244 24 2 0 82 6 6 1,538 1,50 May 401 385 125 116 194 194 35 0 95 87 1,361 1,34 June 321 313 75 67 128 126 188 10 35 19 1,400 1,37 July 288 229 89 89 211 211 8 0 46 38 1,416 1,33 August 367 363 188 158 118 118 118 10 0 11 4 1,153 1,134 August 367 363 362 107 96 202 20 0 0 16 0 1 1,177 1,33 September 383 382 134 134 270 270 0 0 25 16 1,177 1,33 October 411 409 130 125 116 134 134 20 0 0 11 6 1,177 1,33 Cotober 488 479 41 33 200 270 70 12 0 35 26 1,351 1,32 1999 January 445 440 66 66 66 163 163 0 0 28 13 1,371 1,30 Aperage 354 349 101 98 207 207 12 0 35 26 1,351 1,32 1999 January 445 440 66 66 66 163 163 163 0 0 28 13 1,378 1,23 Harch 577 572 123 123 111 111 10 0 0 0 1,477 1,36 1,361 Apure 321 315 172 122 20 9 8 0 1,477 1,36 1,361 Apure 321 343 349 101 98 207 207 0 0 0 25 16 1,417 1,36 1,361 Apure 321 343 349 101 98 207 207 0 0 0 25 16 1,417 1,36 1,361 Apure 322 333 349 101 98 207 207 0 0 0 25 16 1,417 1,36 1,361 Apure 322 313 34 39 101 98 207 207 0 0 0 25 16 1,417 1,36 1,361 Apure 322 315 112 112 92 92 8 8 0 31 122 1,320 1,27 July 608 500 88 88 88 114 114 10 0 0 17 17 17 1,369 1,300 Apure 322 315 112 112 12 92 92 8 0 3 1 122 1,320 1,27 July 608 500 88 88 88 114 114 114 0 0 0 77 17 1,369 1,300 Apure 322 315 112 112 12 92 92 8 0 0 34 13 1,321 1,321 Apure 322 315 112 112 12 92 92 8 0 0 34 13 1,321 1,330 Apure 335 387 136 136 159 159 8 0 56 22 1,283 1,317 Apure 335 387 136 136 159 159 8 0 56 22 1,283 1,300 1,300 Apure 335 387 136 136 136 159 159 8 0 56 22 1,283 1,300 1,300 Apure 335 387 136 136 136 138 139													759
1993 Average 171 141 81 78 31 0 11 10 919 86 1994 Average 219 207 97 96 229 229 5 0 8 6 1,068 1,02 1995 Average 219 207 97 96 184 184 8 0 11 6 1,02 1997 Average 271 270 115 114 230 230 7 0 23 8 1,385 1,365				_	_								787
1995 Average 219 207 97 96 229 229 5 0 8 6 1068 10.0 1995 Average 234 226 104 96 184 184 8 0 11 6 1.244 1.20 1997 Average 271 270 115 114 230 230 7 0 23 8 1.385 1.36 1998 January 345 345 89 89 277 277 26 0 177 11 1 1444 1.43 1.36 1.36 1998 January 345 345 89 89 277 277 26 0 177 11 1 1 1 1444 1.43 1.44 1.43 1.44 1.43 1.44 1.44				81	78	_							863
1995 Average 219 207 97 96 229 5 0 8 6 1,068 1,02 1996 Average 224 226 104 96 184 184 8 0 11 6 1,244 1,22 1997 Average 271 270 115 114 230 230 7 0 23 8 1,385 1,444 1,436 1,444 1,444 1,444 1,444 1,444 1,444 1,444 1,444 1,444 1,444 1,444 1,444 2 0 88 66 1,538 1,538 1,538 1,538 1,538 1,538 1,538 1,538 1,538 1,538 1,538 1,440 1,440 1,440 <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td>_</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>939</td>						_	_						939
1996 Average 234 226 104 96 184 184 8 0 11 6 1,244 1,20 1997 Average 271 270 115 114 230 230 7 0 23 8 1,385 1,385 1998 January 345 345 89 89 277 277 26 0 17 11 1,444 1,43 February 301 294 103 103 278 275 275 235 235 17 0 10 1,272 1,22 March 296 296 75 75 235 235 235 278 6 0 64 49 1,250 1,23 March 296 296 75 75 235 235 235 0 95 87 1,361 1,38 Jule 2238 298 89 211 216 18 0 36 <td></td> <td></td> <td></td> <td></td> <td></td> <td>229</td> <td>229</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1.027</td>						229	229						1.027
1997 Average 271 270 115 114 230 230 7 0 23 8 1,385 1,365 1998 January 345 345 89 89 277 277 26 0 17 11 1,444 1,43 February 301 294 103 103 278 278 6 0 64 49 1,250 1,23 March 296 296 75 75 235 235 17 0 10 10 1,272 1,24 April 358 358 88 81 244 244 24 2 0 82 66 1,361 1,36 May 401 335 125 116 194 194 35 0 95 87 1,361 1,38 July 238 229 88 89 211 211 80 355 19 1,400 1,37 <													1,207
February 301 294 103 103 278 278 6 0 6 64 49 1,250 1,23 March 296 296 75 75 235 235 17 0 10 10 10 1,272 1,24 April 358 358 88 81 244 244 2 0 82 66 1,538 1,50 May 401 385 125 116 194 194 35 0 95 87 1,361 1,34 June 321 313 75 67 126 126 18 0 35 19 1,400 1,37 July 238 229 89 89 211 211 8 0 46 38 1,416 1,38 August 367 363 158 158 118 118 10 0 11 4 1,153 1,13 September 363 362 107 96 202 202 0 0 16 0 11 4 1,153 1,13 September 363 362 107 96 202 202 0 0 0 16 0 1,417 1,36 October 411 409 130 125 115 115 18 0 9 0 1,179 1,16 November 352 352 134 134 270 270 0 0 25 16 1,417 1,35 December 488 479 41 38 220 220 6 0 19 10 1,371 1,30 Average 354 349 101 98 207 207 12 0 35 26 1,351 1,32 1999 January 445 440 66 66 163 163 163 0 0 0 28 13 1,308 1,23 February 480 458 45 45 141 141 17 0 20 0 1,278 1,23 March 577 572 123 123 111 111 10 0 0 0 1,27 14 1,360 1,31 May 439 427 128 128 161 161 30 0 67 56 1,285 1,21 June 322 315 112 112 92 92 8 8 0 31 22 1,320 1,27 July 608 590 88 88 114 114 10 0 17 17 17 1,369 1,30 August 576 561 133 133 95 95 0 0 56 22 1,283 1,20 Cotober 432 432 432 163 183 186 186 7 0 39 36 1,184 1,20 Cotober 432 432 432 163 183 186 186 7 0 39 36 1,184 1,120 Cotober 432 432 432 163 183 186 186 7 0 39 36 1,184 1,120 Cotober 433 439 128 128 161 161 30 0 67 56 1,285 1,210 Lyne 608 590 88 88 114 114 0 0 17 17 17 1,369 1,30 August 576 561 133 133 95 95 0 0 56 22 1,283 1,20 Cotober 432 432 163 183 186 186 7 0 39 36 1,184 1,120 Cotober 432 432 163 183 186 186 7 0 39 36 1,184 1,120 Cotober 432 432 163 183 186 186 7 0 39 36 1,184 1,120 Cotober 432 432 163 183 186 186 7 0 39 36 1,184 1,120 Cotober 433 431 128 128 128 126 16 13 0 32 13 1,300 1,230 2000 January 452 426 95 95 139 139 16 0 78 65 1,340 1,230 1,231 1999 3-Month Average 501 491 79 79 138 138 9 0 16 6 4 1,360 1,300 1,300		271	270	115	114	230	230	7	0	23	8	1,385	1,360
February 301 294 103 103 278 278 6 0 6 64 49 1,250 1,23 March 296 296 75 75 235 235 17 0 10 10 10 1,272 1,24 April 358 358 88 81 244 244 2 0 82 66 1,538 1,50 May 401 385 125 116 194 194 35 0 95 87 1,361 1,34 June 321 313 75 67 126 126 18 0 35 19 1,400 1,37 July 238 229 89 89 211 211 8 0 46 38 1,416 1,38 August 367 363 158 158 118 118 10 0 11 4 1,153 1,13 September 363 362 107 96 202 202 0 0 16 0 11 4 1,153 1,13 September 363 362 107 96 202 202 0 0 0 16 0 1,417 1,36 October 411 409 130 125 115 115 18 0 9 0 1,179 1,16 November 352 352 134 134 270 270 0 0 25 16 1,417 1,35 December 488 479 41 38 220 220 6 0 19 10 1,371 1,30 Average 354 349 101 98 207 207 12 0 35 26 1,351 1,32 1999 January 445 440 66 66 163 163 163 0 0 0 28 13 1,308 1,23 February 480 458 45 45 141 141 17 0 20 0 1,278 1,23 March 577 572 123 123 111 111 10 0 0 0 1,27 14 1,360 1,31 May 439 427 128 128 161 161 30 0 67 56 1,285 1,21 June 322 315 112 112 92 92 8 8 0 31 22 1,320 1,27 July 608 590 88 88 114 114 10 0 17 17 17 1,369 1,30 August 576 561 133 133 95 95 0 0 56 22 1,283 1,20 Cotober 432 432 432 163 183 186 186 7 0 39 36 1,184 1,20 Cotober 432 432 432 163 183 186 186 7 0 39 36 1,184 1,120 Cotober 432 432 432 163 183 186 186 7 0 39 36 1,184 1,120 Cotober 433 439 128 128 161 161 30 0 67 56 1,285 1,210 Lyne 608 590 88 88 114 114 0 0 17 17 17 1,369 1,30 August 576 561 133 133 95 95 0 0 56 22 1,283 1,20 Cotober 432 432 163 183 186 186 7 0 39 36 1,184 1,120 Cotober 432 432 163 183 186 186 7 0 39 36 1,184 1,120 Cotober 432 432 163 183 186 186 7 0 39 36 1,184 1,120 Cotober 432 432 163 183 186 186 7 0 39 36 1,184 1,120 Cotober 433 431 128 128 128 126 16 13 0 32 13 1,300 1,230 2000 January 452 426 95 95 139 139 16 0 78 65 1,340 1,230 1,231 1999 3-Month Average 501 491 79 79 138 138 9 0 16 6 4 1,360 1,300 1,300	1998 January	345	345	89	89	277	277	26	0	17	11	1 444	1,432
March 296 296 75 75 235 235 17 0 10 10 1,272 1,24 April 358 358 88 81 244 24 2 0 82 66 1,538 1,55 May 401 385 125 116 194 194 35 0 95 87 1,361 1,34 June 321 313 75 67 126 126 18 0 35 19 1,400 1,37 July 238 229 89 89 211 211 8 0 46 38 1,416 1,38 August 367 363 158 158 118 118 10 0 11 4 1,153 1,13 September 363 362 130 125 115 115 18 0 9 0 1,417 1,35													1,233
April 358 358 88 81 244 244 2 0 0 82 66 1,538 1,50 May 401 385 125 116 194 194 35 0 95 87 1,361 1,34 June 321 313 75 67 126 126 18 0 35 19 1,400 1,37 July 238 229 89 89 211 211 8 0 46 38 1,416 1,38 August 367 363 158 158 118 118 10 0 11 4 1,153 1,13 September 363 362 107 96 202 202 0 0 16 0 1,417 1,36 October 411 409 130 125 115 115 18 0 9 0 1,417 1,36 November 352 352 134 134 270 270 0 0 25 16 1,417 1,36 December 488 479 41 38 220 220 6 0 19 10 1,371 1,30 Average 334 349 101 98 207 207 12 0 35 26 1,351 1,32 1999 January 445 440 66 66 163 163 163 0 0 28 13 1,308 1,23 February 480 458 45 45 141 141 17 0 20 0 1,278 1,23 March 577 572 123 123 111 111 10 0 0 0 1,278 1,23 March 577 572 123 123 111 111 10 0 0 0 1,278 1,23 March 435 425 61 61 269 269 19 0 27 14 1,360 1,31 May 439 427 128 128 161 161 30 0 67 56 1,285 1,21 June 322 315 112 112 92 92 8 0 31 22 1,320 1,27 July 608 590 88 88 114 114 0 0 17 17 17 1,369 1,30 August 576 561 133 133 95 95 0 0 56 42 1,283 1,20 Cotober 413 396 185 179 190 190 6 0 30 11 2,28 1,28 1,29 Locember 395 387 136 136 136 186 186 7 0 39 36 1,184 1,20 Locember 432 432 432 163 163 186 186 7 0 39 36 1,184 1,20 Locember 433 421 128 128 128 128 128 128 128 128 128 1	March												1,248
May	April												1,507
June 321 313 75 67 126 126 18 0 35 19 1,400 1,37			385	125	116	194	194		0	95	87		1,343
July 238 229 89 89 211 211 8 0 46 38 1,416 1,38 August 367 363 158 158 118 110 0 11 4 1,153 1,13 September 363 362 107 96 202 202 0 0 16 0 1,417 1,36 October 411 409 130 125 115 115 18 0 9 0 1,417 1,36 November 352 352 134 134 270 270 0 0 25 16 1,417 1,36 December 488 479 41 38 220 220 6 0 19 10 1,371 1,30 Average 354 349 101 98 207 207 12 0 35 26 1,351 1,32 <td< td=""><td></td><td>321</td><td>313</td><td>75</td><td>67</td><td>126</td><td>126</td><td>18</td><td>0</td><td>35</td><td>19</td><td>1,400</td><td>1,379</td></td<>		321	313	75	67	126	126	18	0	35	19	1,400	1,379
August 367 363 158 158 158 118 118 10 0 111 4 1,153 1,13		238	229	89	89	211	211	8	0	46	38	1,416	1,389
September 363 362 107 96 202 202 0 0 16 0 1,417 1,36 October 411 409 130 125 115 115 18 0 9 0 1,417 1,36 November 352 352 134 134 270 270 0 0 25 16 1,417 1,35 December 488 479 41 38 220 220 6 0 19 10 1,371 1,30 Average 354 349 101 98 207 207 12 0 35 26 1,351 1,32 1999 January 445 440 66 66 163 163 0 0 28 13 1,308 1,23 February 440 458 45 45 141 141 17 0 0 0 1,278 1,23		367	363	158	158	118	118	10	0	11	4	1,153	1,139
November 352 352 134 134 270 270 0 0 25 16 1,417 1,35 December 488 479 41 38 220 220 6 0 19 10 1,371 1,35 Average 354 349 101 98 207 207 12 0 35 26 1,351 1,32 1999 January 445 440 66 66 66 163 163 0 0 28 13 1,308 1,23 February 480 458 45 45 141 141 17 0 20 0 1,278 1,23 March 577 572 123 123 111 111 10 0 0 0 1,278 1,23 March 577 572 123 123 111 111 110 0 0 0 1,447 1,365		363	362	107	96	202	202	0	0	16	0	1,417	1,367
December 488 479 41 38 220 220 6 0 19 10 1,371 1,30 Average 354 349 101 98 207 207 12 0 35 26 1,351 1,32 1999 January 445 440 66 66 163 163 0 0 28 13 1,308 1,23 February 480 458 45 45 141 141 17 0 20 0 1,278 1,23 March 577 572 123 123 111 111 10 0 0 1,485 1,42 April 435 425 61 61 269 269 19 0 27 14 1,360 1,31 May 439 427 128 128 161 161 30 0 67 56 1,285 1,21 <th< td=""><td>October</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1,163</td></th<>	October												1,163
Average 354 349 101 98 207 207 12 0 35 26 1,351 1,321 1999 January 445 440 66 66 163 163 0 0 28 13 1,308 1,23 February 480 458 45 45 141 141 17 0 20 0 1,278 1,23 March 577 572 123 123 111 111 10 0 0 0 1,485 1,42 April 435 425 61 61 61 269 269 19 0 27 14 1,360 1,31 May 439 427 128 128 161 161 30 0 67 56 1,285 1,21 June 322 315 112 112 92 92 8 0 31 22 1,320 1,27	November												1,357
1999 January													1,301
February	Average	354	349	101	98	207	207	12	0	35	26	1,351	1,321
February 480 458 45 45 141 141 17 0 20 0 1,278 1,23 March 577 577 123 123 111 111 10 0 0 0 1,485 1,42 April 435 425 61 61 269 269 19 0 27 14 1,360 1,31 May 439 427 128 128 161 161 30 0 67 56 1,285 1,21 June 322 315 112 112 92 92 8 0 31 22 1,320 1,27 July 608 590 88 88 114 114 0 0 17 17 1,369 1,30 August 576 561 133 133 95 95 0 0 53 49 1,288 1,17 September 395 387 136 136 159 159 8 0	1999 January		440	66	66	163	163		0		13	1,308	1,237
March 577 572 123 123 111 111 10 0 0 1,485 1,42 April 435 425 61 61 6269 269 19 0 27 14 1,360 1,31 May 439 427 128 128 161 161 30 0 67 56 1,285 1,21 June 322 315 112 112 92 92 8 0 31 22 1,320 1,27 July 608 590 88 88 114 114 0 0 17 17 1,369 1,30 August 576 561 133 133 95 95 0 0 53 49 1,288 1,17 September 395 387 136 136 159 159 8 0 56 22 1,283 1,20 October <td></td> <td>-</td> <td></td> <td>1,231</td>											-		1,231
April 435 425 61 61 269 269 19 0 27 14 1,360 1,31 May 439 427 128 128 128 161 161 30 0 67 56 1,285 1,21 June 322 315 112 112 92 92 8 0 31 22 1,320 1,27 July 608 590 88 88 114 114 0 0 17 17 1,369 1,30 August 576 561 133 133 95 95 0 0 53 49 1,288 1,17 September 395 387 136 136 159 159 8 0 56 22 1,283 1,20 October 432 432 163 163 186 186 7 0 39 36 1,184 1,12 November 416 396 185 179 190 190 6 <td>March</td> <td></td> <td>1,426</td>	March												1,426
June 322 315 112 112 92 92 8 0 31 22 1,320 1,27 July 608 590 88 88 114 114 0 0 17 17 1,369 1,30 August 576 561 133 133 95 95 0 0 53 49 1,288 1,17 September 395 387 136 136 159 159 8 0 56 22 1,283 1,20 October 432 432 163 163 186 186 7 0 39 36 1,184 1,12 November 416 396 185 179 190 190 6 0 30 10 1,200 1,13 December 433 421 128 128 216 216 13 0 32 13 1,236 1,18 Average 464 453 114 114 158 158 10 0 34 21 1,300 1,23 2000 January 452 426 95 95 139 139 16 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1,313</td></t<>													1,313
July 608 590 88 88 114 114 0 0 17 17 1,369 1,30 August 576 561 133 133 95 95 0 0 53 49 1,288 1,17 September 395 387 136 136 159 159 8 0 56 22 1,283 1,20 October 432 432 163 163 186 186 7 0 39 36 1,184 1,12 November 416 396 185 179 190 190 6 0 30 10 1,200 1,13 December 433 421 128 128 216 216 13 0 32 13 1,236 1,18 Average 464 453 114 114 158 158 10 0 34 21 1,300 1,23 2000 January 452 426 95 95 139 139 16													1,212
August 576 561 133 133 95 95 0 0 53 49 1,288 1,17 September 395 387 136 136 159 159 8 0 56 22 1,283 1,20 October 432 432 163 163 186 186 7 0 39 36 1,184 1,12 November 416 396 185 179 190 190 6 0 30 10 1,200 1,13 December 433 421 128 128 216 216 13 0 32 13 1,236 1,18 Average 464 453 114 114 158 158 10 0 34 21 1,300 1,23 2000 January 452 426 95 95 139 139 16 0 78 65 1,340 1,25 February 370 353 102 102 155 155 4													1,271
September 395 387 136 136 159 159 8 0 56 22 1,283 1,20 October 432 432 163 163 186 186 7 0 39 36 1,184 1,12 November 416 396 185 179 190 190 6 0 30 10 1,200 1,13 December 433 421 128 128 216 216 13 0 32 13 1,236 1,18 Average 464 453 114 114 158 158 10 0 34 21 1,300 1,23 2000 January 452 426 95 95 139 139 16 0 78 65 1,340 1,25 February 370 353 102 102 155 155 48 0 64 36 1,219 1,14 March 453 450 145 145 136 128 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1,304</td></td<>													1,304
October 432 432 163 163 186 186 7 0 39 36 1,184 1,12 November 416 396 185 179 190 190 6 0 30 10 1,200 1,13 December 433 421 128 128 216 216 13 0 32 13 1,236 1,18 Average 464 453 114 114 158 158 10 0 34 21 1,300 1,23 2000 January 452 426 95 95 139 139 16 0 78 65 1,340 1,25 February 370 353 102 102 155 155 48 0 64 36 1,219 1,14 March 453 450 145 145 136 128 29 0 34 15 1,342 1,24 3-Month Average 426 411 114 114 143 140 31 0 59 39 1,302 1,21													1,174
November 416 396 185 179 190 190 6 0 30 10 1,200 1,13 December 433 421 128 128 216 216 13 0 32 13 1,236 1,18 Average 464 453 114 114 158 158 10 0 34 21 1,300 1,23 2000 January 452 426 95 95 139 139 16 0 78 65 1,340 1,25 February 370 353 102 102 155 155 48 0 64 36 1,219 1,14 March 453 450 145 145 136 128 29 0 34 15 1,342 1,24 3-Month Average 426 411 114 114 143 140 31 0 59 39 1,302 1,21 1999 3-Month Average 501 491 79 79 138 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1,205</td></td<>													1,205
December 433 421 128 128 216 216 13 0 32 13 1,236 1,18 Average 464 453 114 114 158 158 10 0 34 21 1,300 1,23 2000 January 452 426 95 95 139 139 16 0 78 65 1,340 1,25 February 370 353 102 102 155 155 48 0 64 36 1,219 1,14 March 453 450 145 145 136 128 29 0 34 15 1,342 1,24 3-Month Average 426 411 114 114 143 140 31 0 59 39 1,302 1,21 1999 3-Month Average 501 491 79 79 138 138 9 0 16 4 1,360 1,30													
Average 464 453 114 114 158 158 10 0 34 21 1,300 1,23 2000 January 452 426 95 95 139 139 16 0 78 65 1,340 1,25 February 370 353 102 102 155 155 48 0 64 36 1,219 1,14 March 453 450 145 145 136 128 29 0 34 15 1,342 1,24 3-Month Average 426 411 114 114 143 140 31 0 59 39 1,302 1,21 1999 3-Month Average 501 491 79 79 138 138 9 0 16 4 1,360 1,30	November							-					
2000 January 452 426 95 95 139 139 16 0 78 65 1,340 1,25 February 370 353 102 102 155 155 48 0 64 36 1,219 1,14 March 453 450 145 145 136 128 29 0 34 15 1,342 1,24 3-Month Average 426 411 114 114 143 140 31 0 59 39 1,302 1,21 1999 3-Month Average 501 491 79 79 138 138 9 0 16 4 1,360 1,30													1,182 1,235
February 370 353 102 102 155 155 48 0 64 36 1,219 1,14 March 453 450 145 145 136 128 29 0 34 15 1,342 1,24 3-Month Average 426 411 114 114 143 140 31 0 59 39 1,302 1,21 1999 3-Month Average 501 491 79 79 138 138 9 0 16 4 1,360 1,30	_		400		05		400		^	70	05	,	,
March													1,256
3-Month Average 426 411 114 114 143 140 31 0 59 39 1,302 1,21 1999 3-Month Average 501 491 79 79 138 138 9 0 16 4 1,360 1,30													
1999 3-Month Average 501 491 79 79 138 138 9 0 16 4 1,360 1,30													
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	J											,	,
4000 2 Month Average 24E 242 00 00 00 262 262 47 0 00 00 02 4304 430	1999 3-Month Average 1998 3-Month Average	501 315	491 312	79 89	79 89	138 263	138 263	9 17	0 0	16 29	4 23	1,360 1,324	1,300 1,307

a The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined products imported from West European refining areas may have been produced from Middle East crude oil.

b Through 1992, Ecuador was a member of OPEC. See Table 3.3c.
c Through December 1994, Gabon was a member of OPEC. See Table

⁼Not applicable. (s)=Less than 500 barrels per day.

Beginning in October 1977, Strategic Petroleum Reserve imports are included. U.S. geographic coverage is the 50 States and the District of Columbia.

Sources: 1973-1980: Energy Information Administration (EIA), *Petroleum Supply Monthly*, February 1993, Table S3. 1981 forward: EIA, *Petroleum Supply Monthly*, May 2000, Table S3. Sources:

Petroleum Imports From Netherlands, Netherlands Antilles, Norway, Table 3.3g Puerto Rico, Russia, and Spain

						Non-	OPECa					
	Neth	nerlands		nerlands ntilles	N	orway	Pue	rto Rico	Ru	ıssia ^b	S	pain
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1973 Average	53	0	585	0	1	0	99	0	26	0	26	0
1974 Average	43	0	511	0	_1	. 1	90	0	20	0	12	0
1975 Average	19	4	332	0	17	12	90	0	14	0	1	0
1976 Average	8 31	0 4	275 211	0 0	36 50	35 48	88 105	0	11 12	2 2	1 10	0
1977 Average 1978 Average	5	2	229	0	104	104	94	Ö	8	1	3	0
1979 Average	23	7	231	ŏ	75	75	92	ŏ	1	ò	4	ŏ
1980 Average	2	(s)	225	0	144	144	88	0	1	Ó	1	0
1981 Average	30	(s)	197	0	119	114	62	0	5	(s)	1	(s)
1982 Average	35	(s)	175	0	102	102	50	0	1	. 0	3	(s)
1983 Average	65	3	189	0	66	65	40	0	1	(s)	2	(s)
1984 Average	65	3 0	188 40	0 0	114	112	42 28	0	13 8	(s)	11	0
1985 Average1986 Average	58 54	Ö	40 25	0	32 60	31 53	28 21	0	8 18	(s) (s)	29 53	1 0
1987 Average	60	Ö	29	0	80	70	21	0	11	(5)	55	0
1988 Average	61	ŏ	36	ŏ	67	62	22	Ŏ	29	ŏ	68	Ŏ
1989 Average	49	Ó	42	Ō	138	127	32	Ō	48	Ó	67	Ō
1990 Average	55	0	31	0	102	96	32	0	45	1	47	0
1991 Average	29	0	81	0	82	74	27	0	29	1	33	0
1992 Average	26	0	65	0	127	119	26	0	18	5	32	0
1993 Average	10	0 0	82 98	0	142 202	137	29 22	0	55 30	36 27	37 37	0
1994 Average	32 15	0	98 52	0	202 273	190 258	15	0	30 25	2 <i>1</i> 14	37 16	1
1995 Average1996 Average	19	0	64	Ö	313	293	20	Ö	25 25	18	29	1
1997 Average	25	ŏ	74	ŏ	309	288	16	ŏ	13	3	21	Ö
1000 1	40		07	•	047	000	40	0			00	
1998 January	10 25	0 0	97 101	0 0	217 169	208 169	18 21	0	0 12	0 0	22 13	0
February March	5	0	80	0	210	198	5	0	3	0	4	0
April	40	0	73	0	232	232	7	0	(s)	ő	9	Ő
May	36	ő	67	Ö	196	172	18	Ö	0	Ö	14	Ŏ
June	31	0	103	0	283	252	13	0	34	34	26	0
July	59	0	84	0	369	361	21	0	69	69	34	0
August	21	0	45	0	287	260	23	0	1	0	17	0
September	26	0	69	0	201	162	12	0	34	0	16	0
October	49	0	95	0	199	186	20	0	15	0	4	0
November December	53 14	0 0	124 46	0 0	262 202	252 199	12 15	0	54 63	0 0	28 33	0
Average	31	ŏ	82	ŏ	236	221	15	Ŏ	24	9	18	Ŏ
71101ugu	٠.	ŭ		ŭ	200			ŭ		ŭ		•
1999 January	37	0	94	0	216	179	18	0	11	0	4	0
February	7	0	155	0	203	157	0	0	28	0	3	0
March	19	0	58 76	0 0	248	199	3	0	26	0	5	0
April May	34 57	0 0	76 77	0	254 276	192 244	15 10	0	41 79	22 40	13 26	0
June	22	0	28	0	491	463	15	0	131	40 22	20	0
July	34	0	83	0	351	341	13	0	105	32	8	0
August	35	ŏ	58	ŏ	238	222	12	ŏ	121	0	13	Ö
September	2	Ö	30	Ö	235	195	22	Ö	124	Ö	(s)	Ō
October	17	0	49	0	341	292	13	0	110	0	22	0
November	24	0	44	0	288	255	12	0	60	16	23	0
December Average	11 25	0 0	24 64	0 0	371 293	326 256	15 13	0 0	31 72	12 12	9 11	0 0
7.701ugo												
2000 January	12	0	74	0	314	262	14	0	29	0	37	0
February March	45 37	0 0	41 74	0	381 346	328 305	15 13	0	108 61	0 17	30 23	0
3-Month Average	37 31	0	63	0	346 346	298	13	0	65	6	23 30	0
J												
1999 3-Month Average 1998 3-Month Average	21 13	0 0	101 92	0 0	223 200	179 193	7 14	0 0	22 5	0 0	4 13	0 0

^a The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined products imported from West European refining areas may have been produced from Middle East crude oil.

D Imports from other States in the former U.S.S.R. may be included in

(s)=Less than 500 barrels per day.

Beginning in October 1977, Strategic Petroleum Reserve imports d. U.S. geographic coverage is the 50 States and the District of Notes: are included. Columbia.

imports from Russia for the years 1973 through 1992.

Table 3.3h Petroleum Imports From Trinidad and Tobago, United Kingdom, Virgin Islands, Other Non-OPEC, Total Non-OPEC, and Total Imports

					Non	-OPEC ^a						
		inidad Tobago		nited ngdom	Virgiı	n Islands		ther OPEC ^b	1	Total		otal ports
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1973 Average	255	60	15	0	329	0	153	36	3,263	1,149	6,256	3,244
1974 Average	251	63	. 8	, 0	391	0	122	30	2,832	937	6,112	3,477
1975 Average	242	115	14	(s)	406	0	120	14	2,454	893	6,056	4,105
1976 Average	274 289	104 134	31 126	13 97	422 466	0 0	203 287	101 157	2,247 2.614	742 971	7,313 8.807	5,287 6.615
1977 Average 1978 Average	253	142	180	169	428	ŏ	239	146	2,612	1.172	8,363	6,356
1979 Average	190	123	202	197	431	ŏ	269	192	2,819	1,407	8,456	6,519
1980 Average	176	115	176	173	388	0	219	162	2,609	1,399	6,909	5,263
1981 Average	133	102	375	369	327	0	236	163	2,672	1,474	5,996	4,396
1982 Average	112	92	456	441	316	0	306	174	2,968	1,754	5,113	3,488
1983 Average	96	83	382	365	282	0	378	215	3,189	1,853	5,051	3,329
1984 Average	94 113	87 98	402 310	378 278	294 247	0 0	411 394	210 137	3,388	1,914	5,437	3,426 3,201
1985 Average	125	93	350	276 317	247	0	426	144	3,237 3,387	1,888 2.065	5,067 6,224	3,201 4.178
1986 Average	106	75	352	304	272	0	459	196	3,617	2,274	6,678	4,176
1988 Average	97	71 71	315	254	242	ŏ	487	196	3,882	2,411	7,402	5,107
1989 Average	94	73	215	160	321	Ö	457	197	3,921	2,467	8,061	5,843
1990 Average	96	76	189	155	282	0	417	180	3,721	2,381	8,018	5,894
1991 Average	88	72	138	106	243	0	282	137	3,535	2,405	7,627	5,782
1992 Average	95	70	230	200	249	0	335	149	3,796	2,676	7,888	6,083
1993 Average	74 77	55 62	350 458	312 396	254 328	0 0	452 450	240 239	^C 4,347 4,749	^C 3,178 3,483	8,620 8,996	6,787 7,063
1994 Average 1995 Average	70	62 62	383	341	278	0	302	181	4,833	3,889	8,835	7,003
1996 Average	76	58	308	216	313	ŏ	440	265	5.267	4.070	9.478	7,508
1997 Average	61	56	226	169	300	ŏ	422	250	5,593	4,450	10,162	8,225
1998 January	64	54	249	166	283	0	424	276	5,745	4,636	10,127	8,339
February	60	60	170	89	296	0	378	224	5,522	4,388	9,991	8,045
March	63	53	95	70	334	0	464	236	5,119	3,998	10,034	8,124
April	78	48	309	221	272	0	533	254	6,048	4,780	11,105	8,985
May	69 64	53 56	248 231	133 125	292	0	561	287 245	6,046	4,709	11,104	8,987
June	90	56	171	36	310 360	0	589 545	245 235	5,970 6.242	4,533 4.791	10,926 11.649	8,795 9.507
July August	79	53	384	295	281	0	703	466	5,785	4,607	11,032	9.177
September	44	38	154	109	277	ŏ	589	335	5,746	4,443	10,499	8,500
October	65	57	384	278	268	Ö	554	245	5,680	4,291	10,861	8,667
November	38	38	400	283	266	0	520	327	6,023	4,779	10,860	8,940
December	79	72	199	119	274	0	498	321	5,698	4,484	10,258	8,352
Average	66	53	250	161	293	0	531	288	5,803	4,537	10,708	8,706
1999 January	52	34	215	167	300	0	479	370	5,445	4,292	10,181	8,308
February	48	38	243	165	289	0	534	348	5,274	4,046	10,336	8,387
March	28 49	18 37	296 319	242 143	319 258	0 0	422 648	276 280	5,460 5,640	4,386 4,200	10,589 11,227	8,757 9,080
April May	24	18	558	479	298	0	585	302	5,963	4,512	10,865	8,806
June	58	33	325	299	268	0	555	273	5,749	4,450	10,624	8,601
July	57	31	616	510	259	ŏ	585	300	6,380	5,036	11,250	9,222
August	53	36	307	256	206	0	576	278	5,801	4,398	10,734	8,684
September	83	67	461	383	278	0	500	244	5,791	4,424	10,566	8,470
October	75	66	337	267	284	0	591	310	5,914	4,537	10,428	8,439
November	66	42	333	281	267	0	454	286	5,552	4,384	9,924	8,185
December Average	92 57	64 40	198 351	174 281	236 272	0 0	432 530	233 291	5,373 5,699	4,242 4,412	9,876 10,551	8,091 8,588
2000 January	89	71	240	171	252	0	496	216	5.680	4.249	9,795	7,719
February	71	52	229	149	298	ŏ	669	304	5,743	4,032	10,396	8,096
March	60	37	243	216	223	0	506	150	5,755	4,309	10,768	8,661
3-Month Average	73	53	238	179	257	0	555	222	5,725	4,200	10,318	8,160
1999 3-Month Average	42	30	252	192	303	0	477	330	5,397	4,248	10,370	8,487
1998 3-Month Average	63	56	171	109	305	0	423	246	5,460	4,339	10,053	8,173

^a The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined products imported from West European refining areas may have been produced from Middle East crude oil.
^b Includes Bahrain, which is shown on Table 3.3a.
^c As of January 1993, includes petroleum imported from Ecuador, which withdrew from OPEC on December 31, 1992. As of January 1995, includes petroleum imported from Gabon, which withdrew from OPEC on December 31, 1994.

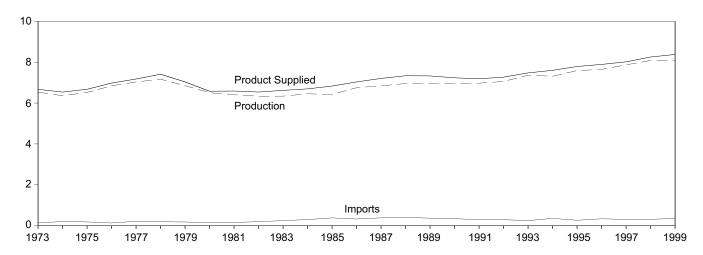
(s)=Less than 500 barrels per day.

Notes:
Beginning in October 1977, Strategic Petroleum Reserve imports are included.
Totals may not equal sum of components due to independent rounding.
U.S. geographic coverage is the 50 States and the District of rounding. Columbia.

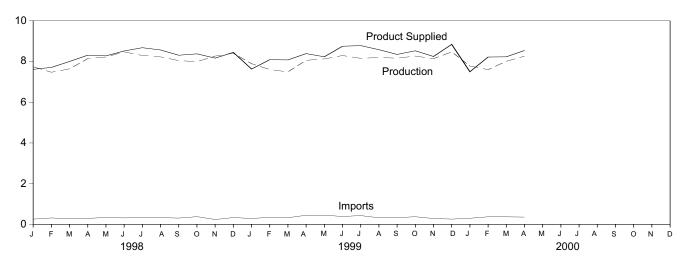
Finished Motor Gasoline Figure 3.2

(Million Barrels per Day, Except as Noted)

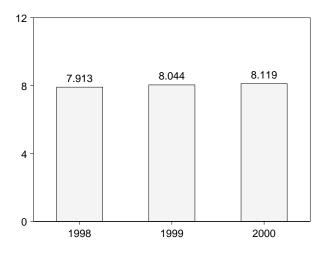
Overview, 1973-1999



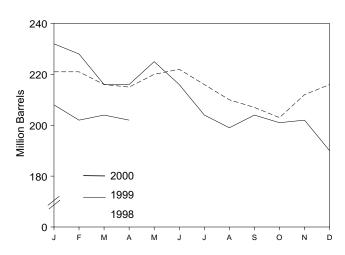
Overview, Monthly



Product Supplied, January-April



Stocks, End of Month



Note: Because vertical scales differ, graphs should not be compared. Source: Tables 3.4

Table 3.4 Finished Motor Gasoline Supply and Disposition

	Sup	ply		Disposition			Gasoline ocks ^a	
	Total Production	Imports ^b	Stock Change ^{b,c}	Exports	Product Supplied	Totald	Finished	Oxygenates Stocks ^a
		Thou	ısand Barrels pei	Day			Million Barrels	
973 Average	6,535	134	-9	4	6,674	209	NA	NA
974 Average	6,360	204	24	2	6,537	^e 218	NA	NA
975 Average	6,520	184	e 28	2	6,675	235	NA	NA
976 Average	6,841	131	-10	3	6,978	231	NA	NA
977 Average	7,033	217	72	2	7,177	258	NA	NA
978 Average	7,169	190	-54	1	7,412	238	NA	NA
979 Average	6,852	181	-2	(s)	7,034	237	NA	NA
980 Average	6,506	140	66	ìí	6,579	^e 261	NA	NA
981 Averagef	6,405	157	e-28	2	6,588	253	203	NA
982 Average	6,338	197	-25	20	6,539	e 235	^e 194	NA
983 Average	6,340	247	e-45	10	6,622	222	186	NA
984 Average	6,453	299	54	6	6,693	243	205	NA
985 Average	6,419	381	-41	10	6,831	223	190	NA
986 Average	6,752	326	11	33	7,034	233	194	NA
987 Average	6,841	384	-15	35	7,206	226	189	NA
988 Average	6,956	405	3	22	7,336	228	190	NA
989 Average	6,963	369	-35	39	7,328	213	177	NA
990 Average	6,959	342	10	55	7,235	220	181	NA
991 Average	6,975	297	3	82	7,188	219	182	NA
992 Average	7,058	294	-11	96	7,268	216	178	NA NA
993 Average	⁹ 7,360	247	26	105	9 7.476	226	187	h13
994 Average	7,312	356	-31	97	7,601	215	176	17
995 Average	7,588	265	-40	104	7,789	202	161	12
	7,647	336	-12	104	7,769 7,891	195	157	13
996 Average 997 Average	7,870	309	26	137	8,017	210	166	12
998 January	7,744	259	256	128	7,618	221	174	13
February	7,476	316	-43	124	7,711	221	173	14
March	7,640	281	-203	121	8,004	216	167	14
April	8,144	294	45	81	8,312	215	168	14
May	8,224	342	185	103	8,279	220	174	13
June	8,474	318	113	159	8,520	222	177	14
	8,300	328	-169	117	,	216	172	14
July	,		-151		8,680		167	
August	8,228	331		141	8,568	210		13
September	8,048	310	-116	163	8,310	207	164	13
October	7,992	379	-128	121	8,378	203	160	12
November	8,269	239	253	89	8,167	212	168	13
December Average	8,406 8,082	336 311	137 15	153 125	8,451 8,253	216 216	172 172	14 14
_	ŕ	200			•			4.4
999 January	7,896	289	426	130	7,630	232	185	14
February	7,608	347	-240	105	8,091	228	178	15 15
March	7,492	327	-343	81	8,081	216	168	15
April	8,061	449	36	85	8,389	216	169	13
May	8,129	450	247	100	8,233	225	177	15
June	8,295	389	-139	71	8,752	216	172	14
July	8,157	432	-283	89	8,783	204	164	13
August	8,198	324	-162	101	8,583	199	159	14
September	8,165	334	22	128	8,350	204	159	15
October	8,270	375	-13	130	8,528	201	159	15
November	8,142	289	54	128	8,249	202	160	13
December	8,474	260	-286	177	8,843	190	152	14
Average	8,077	356	-56	111	8,378	190	152	14
000 January	7,778	302	454	127	7,498	208	166	14
February	_ 7,602	_ 373	-330	_ 83	_ 8,222	202	156	15
March	^R 8,013	^R 371	R 44	^R 108	R 8,232	204	157	14
April	E 8,263	E 359	E -35	E 114	E 8,543	E 202	E 156	NA
4-Month Average	E 7,916	E 351	E 40	E 108	E 8,119	E 202	E 156	NA
999 4-Month Average	7,766	352	-26	100	8,044	216	169	13
998 4-Month Average	7,755	287	15	113	7,913	215	168	14

^a Stocks are at end of period.

imbalance of motor gasoline blending components. See Note 2 at end of section.

h See Note 1 at end of section.

Note: Geographic coverage is the 50 States and the District of Columbia. Sources: 1973-1980: Energy Information Administration (EIA), Petroleum Supply Monthly, February 1993, Table S4. 1981 forward: EIA, Petroleum Supply Monthly, May 2000, Table S4.

b From 1981 forward, blending components are excluded.

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

d Includes motor gasoline blending components and gasohol, but excludes

oxygenates, which are reported separately.

See Note 4 at end of section. See Note 2 at end of section.

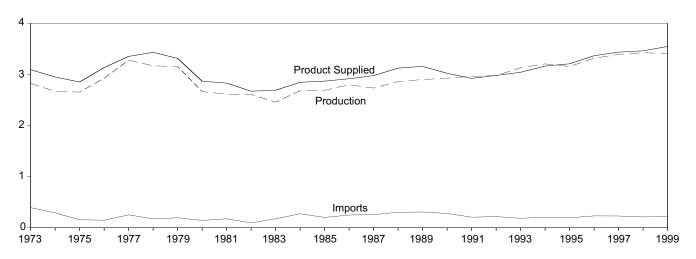
^g Beginning in 1993, motor gasoline production and product supplied include blending of fuel ethanol and an adjustment to correct for the

R=Revised. NA=Not available. E=Estimate. (s)=Less than 500 barrels per

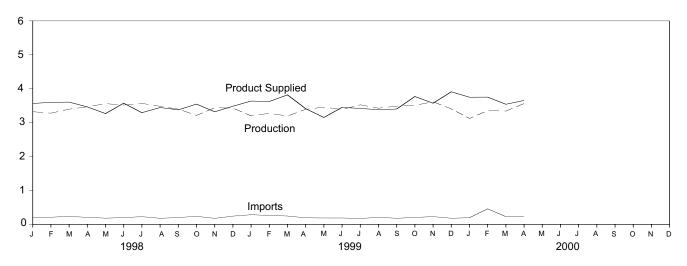
Figure 3.3 Distillate Fuel

(Million Barrels per Day, Except as Noted)

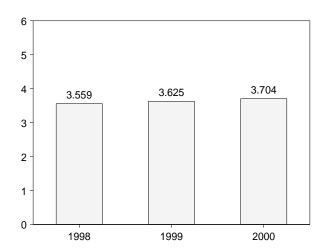
Overview, 1973-1999



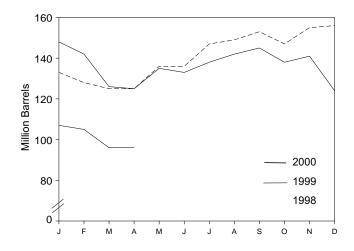
Overview, Monthly



Product Supplied, January-April



Stocks, End of Month



Source: Table 3.5.

Table 3.5 Distillate Fuel Oil Supply and Disposition

		Supply			Disposition			Stocksa		
			Crude Oil					Sulfur (Content	
	Total Production	Imports	Used Directly ^b	Stock Change ^c	Exports	Product Supplied ^b	Total	0.05 Percent or Less ^d	Greater Than	
	- roddolloll	Importo	Thousand Ba		LAPORTO	Сарриса	Million Barrels			
1973 Average	2,822	392	2	115	9	3,092	196	NA	NA	
1974 Average	2,669	289	2	e 10	2	2,948	f 200	NA	NA NA	
1975 Average	2,654	155	2	e,f -41	1	2,851	209	NA	NA	
1976 Average	2,924	146	1	-62	1	3,133	186	NA	NA	
1977 Average	3,278	250	1	176	1	3,352	250	NA	NA	
1978 Average	3,167	173	1	-93	3	3,432	216	NA	NA	
1979 Average	3,153	193	1	34	3	3,311	229	NA	NA	
1980 Average	2,662	142	1	-64	3	2,866	f 205	NA	NA	
1981 Average ^g	2,613	173	10	^f -38	5	2,829	_. 192	NA	NA	
1982 Average	2,606	93	10	-35	74	2,671	^f 179	NA	NA	
1983 Average	2,456	174	-	^f -124	64	2,690	140	NA	NA	
1984 Average	2,681	272	-	57	51	2,845	161	NA	NA	
1985 Average	2,687	200	-	-48	67	2,868	144	NA	NA	
1986 Average	2,798	247	-	31	100	2,914	155	NA	NA	
1987 Average	2,731	255	-	-56	66	2,976	134	NA	NA	
1988 Average	2,859	302	-	-30	69	3,122	124	NA	NA	
1989 Average	2,899	306	-	-49	97	3,157	106	NA	NA	
1990 Average	2,925	278	-	73	109	3,021	132	NA	NA	
1991 Average	2,962	205	-	31	215	2,921	144	NA	NA	
1992 Average	2,974	216	-	-8	219	2,979	141	NA	NA	
1993 Average	3,132	184	-	. 1	274	3,041	141	9 64	9 77	
1994 Average	3,205	203	-	12	234	3,162	145	73	73	
1995 Average	3,155	193	-	-41	183	3,207	130	67	63	
1996 Average	3,316	230	-	-10	190	3,365	127	68	58	
1997 Average	3,392	228	-	32	152	3,435	138	68	70	
1998 January	3,323	195	_	-182	133	3,566	133	68	65	
February	3,280	213	_	-184	79	3,598	128	65	63	
March	3,397	237	_	-100	129	3,606	125	64	61	
April	3,468	209	_	26	186	3,465	125	63	63	
May	3,560	185	_	355	121	3,268	136	68	68	
June	3,520	202	_	(s)	149	3,574	136	68	68	
July	3,569	229	_	343	161	3,294	147	73	74	
August	3,482	181	_	67	150	3,446	149	72	77	
September	3,399	203	_	118	107	3,377	153	73	80	
October	3,215	239	_	-169	75	3,547	147	69	79	
November	3,438	179	_	242	54	3,320	155	74	81	
December	3,431	245	_	47	145	3,484	156	 77	79	
Average	3,424	210	_	48	124	3,461	156	77	79	
	-,					-, -				
1999 January	3,200	286	_	-268	117	3,637	148	75	73	
February	3,276	265	_	-199	116	3,624	142	74	68	
March	3,196	248	_	-534	159	3,820	126	69	57	
April	3,394	195	_	-14	191	3,412	125	68	57	
May	3,457	190	-	306	187	3,154	135	72	63	
June	3,388	190	-	-53	180	3,450	133	68	65	
July	3,526	173	-	157	123	3,419	138	71	67	
August	3,427	212	_	127	130	3,383	142	69	73	
September	3,487	181	_	104	162	3,402	145	73	72	
October	3,511	207	_	-243	192	3,770	138	69	69	
November	3,614	230	_	101	170	3,574	141	72	69	
December	3,408	182	_	-533	212	3,910	124	68	56	
Average	3,407	213	-	-88	162	3,546	124	68	56	
2000 January	3,124	198		-560	132	3,750	107	66	41	
	3,124	459	_	-560 -53	112	3,750 3,753	107	64	41	
February March	3,354 R 3,342	R 230	_	-53 R -298	R 211	8 3,660	R 96	R 60	R 36	
April	E 3,563	E 228	_	E -34	E 170	E 3,655	E 96	E 64	E 32	
4-Month Average	E 3,344	E 276	_	E -241	E 157	E 3,704	E 96	E 64	E 32	
-						-,				
1999 4-Month Average	3,265	249	-	-257	146	3,625	125	68	57	
1998 4-Month Average	3,368	213	_	-109	133	3,559	125	63	63	

a Stocks are at end of period.
 b Beginning in January 1983, crude oil used directly as distillate fuel oil is reported as crude oil product supplied on Table 3.2b rather than as distillate

fuel oil product supplied.

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

d By weight.
See Note 6 at end of section.
See Note 4 at end of section.

^g See Note 3 at end of section.

R=Revised. NA=Not available. -=Not applicable. E=Estimate.

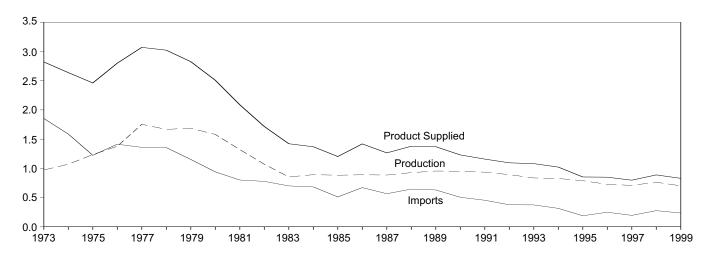
Totals may not equal sum of components due to independent Geographic coverage is the 50 States and the District of Notes: rounding. Columbia.

Sources: 1973-1980: Energy Information Administration (EIA), Petroleum Supply Monthly, February 1993, Table S5. 1981 forward: EIA, Petroleum Supply Monthly, May 2000, Table S5.

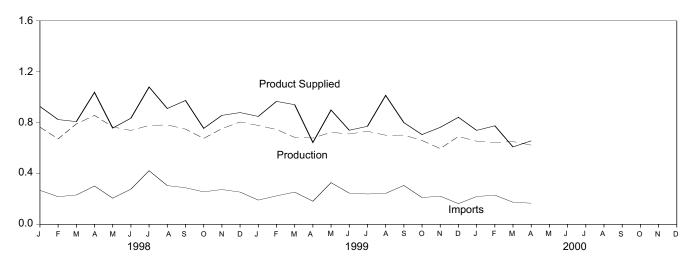
Figure 3.4 Residual Fuel

(Million Barrels per Day, Except as Noted)

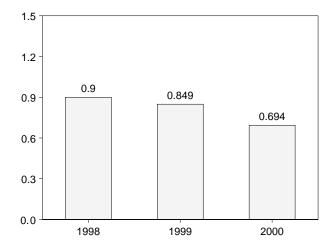
Overview, 1973-1999



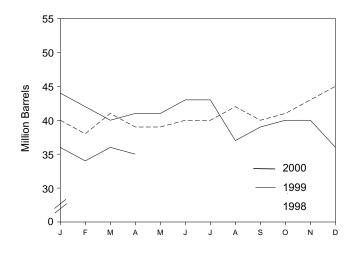
Overview, Monthly



Product Supplied, January-April



Stocks, End of Month



Note: Because vertical scales differ, graphs should not be compared. Source: Table 3.6.

Table 3.6 Residual Fuel Oil Supply and Disposition

		Supply			Disposition		
	Total Production	Imports	Crude Oil Used Directly ^a	Stock Change ^b	Exports	Product Supplied ^a	Stocks ^c
	<u>'</u>		Thousand Ba	rrels per Day	•		Million Barrel
				_			
973 Average	971	1,853	17	-5	23	2,822	53 d 60
974 Average	1,070	1,587	13	17 d -2	14	2,639	
975 Average	1,235	1,223	15		15	2,462	74
976 Average	1,377	1,413	17	-5	12	2,801	72
977 Average	1,754	1,359	13	48	6	3,071	90
978 Average	1,667	1,355	13	1	13	3,023	90
979 Average	1,687	1,151	12	15	9	2,826	ູ 96
980 Average	1,580	939	12	_, -10	33	2,508	^d 92
981 Average ^e	1,321	800	48	d -37	118	2,088	_. 78
982 Average	1,070	776	48	-32	209	1,716	^d 66
983 Average	852	699	_	d -55	185	1,421	49
984 Average	891	681	_	12	190	1,369	53
985 Average	882	510	_	-7	197	1,202	50
986 Average	889	669	_	-8	147	1,418	47
987 Average	885	565	_	(s)	186	1,264	47
988 Average	926	644	_	-8	200	1,378	45
989 Average	954	629	_	-0 -2	215	1,370	44
990 Average	950	504	_	13	213	1,229	49
			_	4	226	,	
991 Average	934	453 375	-	-		1,158	50
992 Average	892	375	-	-20	193	1,094	43
993 Average	835	373	-	4	123	1,080	44
994 Average	826	314	-	-6	125	1,021	42
995 Average	788	187	-	-13	136	852	37
996 Average	726	248	-	24	102	848	46
997 Average	708	194	_	-15	120	797	40
998 January	765	268	_	-25	131	927	40
February	672	218	_	-53	120	824	38
March	790	231	_	79	135	808	41
April	857	302	_	-47	168	1,038	39
May	766	206	_	-13	227	757	39
June	739	277	_	30	152	835	40
July	778	422	_	-4	124	1,080	40
August	782	305	_	71	105	911	42
	749	288	_	-70	133	974	40
September October	676	256	_	38	139	755	41
			_				
November	753	274	_	61	110	857	43
December	805	254	_	72	108	879	45
Average	762	275	-	12	138	887	45
999 January	778	191	_	-13	133	849	44
February	746	224	_	-67	70	967	42
March	684	254	_	-75	72	941	40
April	679	182	_	32	185	644	41
May	724	328	_	(s)	153	899	41
June	711	246	_	67	151	740	43
July	732	239	_	18	182	771	43
August	701	244	_	-193	124	1,014	37
September	702	306	_	73	136	800	39
October	660	211	_	7.5 35	130	706	40
			_	-5			
November	596	222	_		60	763	40
December	691	163	_	-141	154	842	36
Average	700	234	-	-23	129	828	36
000 January	654	219	_	-3	137	739	36
February	643	230	_	-51	149	775	34
March	^R 651	^R 174	_	^R 50	^R 167	^R 609	^R 36
April	E 623	E 167	_	E 9	E 124	E 657	E 35
4-Month Average	E 643	E 197	-	E 2	E 144	^E 694	E 35
999 4-Month Average	722	213	_	-30	115	849	41
	773	255		-10	139	900	39

^a Beginning in January 1983, crude oil used directly as residual fuel oil is reported as crude oil product supplied on Table 3.2b rather than as residual

fuel oil product supplied.

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

C Stocks are at end of period.

d See Note 4 at end of section.

e See Note 3 at end of section.

R=Revised. – =Not applicable. E=Estimate. (s)=Less than +500 barrels per day and greater than -500 barrels per day.

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

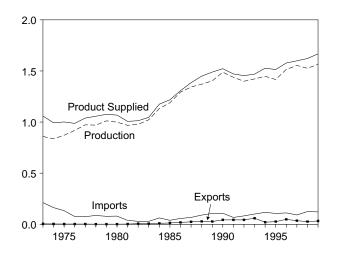
Sources: 1973-1980: Energy Information Administration (EIA),

Petroleum Supply Monthly, February 1993, Table S6. 1981 forward: EIA, Petroleum Supply Monthly, May 2000, Table S6.

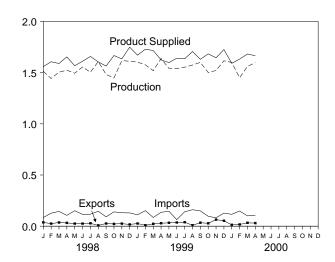
Figure 3.5 Jet Fuel

(Million Barrels per Day, Except as Noted)

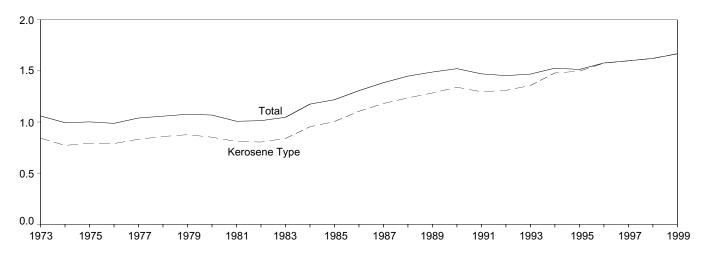
Overview, 1973-1999



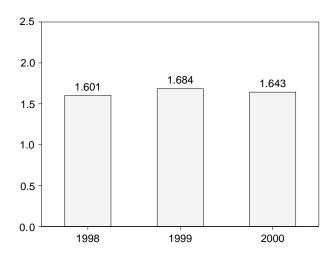
Overview, Monthly



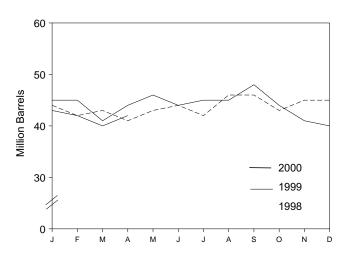
Product Supplied by Type, 1973-1999



Product Supplied, January-April



Stocks, End of Month



Note: Because vertical scales differ, graphs should not be compared. Source: Table 3.7.

Table 3.7 Jet Fuel Supply and Disposition

		Supply			Dis	sposition				
	Р	roduction				Prod	uct Supplied	:	Stocksa	
	Total	Kerosene Type	Imports	Stock Change ^b	Exports	Total	Kerosene Type	Total	Kerosene Type	
			Thousa	and Barrels	per Day			Million Barrels		
1973 Average	859	679	212	8	4	1,059	842	29	23	
1974 Average	836	641	163	2	3	993	771	^c 29	^c 24	
1975 Average	871	691	133	c 2	2	1,001	791 700	30	25	
1976 Average	918 973	731 787	76 75	5 7	2 2	987 1,039	789 831	32 35	26 28	
1977 Average1978 Average	973	791	75 86	-2	1	1,059	858	34	28	
1979 Average	1,012	835	78	13	i	1,076	876	39	33	
1980 Average	999	811	80	10	i	1,068	851	c 42	c 36	
1981 Average	968	775	38	c -4	2	1,007	809	41	34	
1982 Average	978	778	29	-12	6	1,013	804	c 37	^c 31	
1983 Average	1,022	817	29	c (s)	6	1,046	839	39	32	
1984 Average	1,132	919	62	9	9	1,175	953	42	35	
1985 Average	1,189	983	39	-4	13	1,218	1,005	40	34	
1986 Average	1,293	1,097	57 67	25	18	1,307	1,105	50	43	
1987 Average	1,343	1,138	67	(s)	24	1,385	1,181	50	42 29	
1988 Average	1,370 1,403	1,164 1,197	90 106	-17 -8	28 27	1,449 1,489	1,236 1,284	44 41	38 34	
1989 Average 1990 Average	1,488	1,311	108	-6 31	43	1,522	1,264	52	46	
1991 Average	1,438	1,274	67	-9	43	1,471	1,296	49	44	
1992 Average	1,399	1,254	82	-16	43	1,454	1,310	43	39	
1993 Average	1,422	1,309	100	-7	59	1,469	1,357	40	38	
1994 Average	1,448	1,410	117	18	20	1,527	1,480	47	46	
1995 Average	1,416	1,407	106	-19	26	1,514	1,497	40	39	
1996 Average	1,515	1,513	111	(s)	48	1,578	1,575	40	40	
1997 Average	1,554	1,554	91	11	35	1,599	1,598	44	44	
1998 January	1,513	1,512	85	3	37	1,559	1,558	44	44	
February	1,443	1,443	127	-61	25	1,606	1,605	42	42	
March	1,504	1,503	144	23	36	1,589	1,596	43	43	
April	1,524	1,523	106	-56	32	1,654	1,654	41	41	
May	1,494	1,493	151	54	25	1,567	1,568	43	43	
June	1,555	1,554	116	35	25	1,611	1,611	44	44	
July	1,504	1,503 1,608	117 146	-65 141	28 8	1,658 1,605	1,659	42 46	42 46	
August September	1,608 1,482	1,482	91	-17	26	1,564	1,605 1,565	46	46	
October	1,448	1,447	140	-102	22	1,667	1,668	43	43	
November	1,617	1,617	131	89	25	1,634	1,634	45 45	45	
December	1,611	1,611	130	-26	17	1,749	1,750	45	45	
Average	1,526	1,525	124	2	26	1,622	1,623	45	45	
_	•	•				•	•			
1999 January	1,603	1,603	111	18	26	1,670	1,670	45	45	
February	1,576	1,576	152	-10	9	1,729	1,729	45	45	
March	1,519	1,518 1,637	85 136	-136 121	23 29	1,716 1,624	1,717	41 44	41 44	
April May	1,637 1,542	1,637 1,542	136 145	56	33	1,524	1,628 1,598	44 46	44 46	
June	1,539	1,538	64	-74	36	1,641	1,650	44	44	
July	1,553	1,552	141	20	39	1,635	1,638	45	44	
August	1,574	1,574	161	21	9	1,706	1,706	45	45	
September	1,600	1,600	149	85	34	1,630	1,631	48	48	
October	1,501	1,500	97	-112	28	1,683	1,684	44	44	
November	1,521	1,521	82	-106	64	1,645	1,648	41	41	
December	1,616	1,615	128	-34	53	1,725	1,726	40	40	
Average	1,565	1,564	121	-13	32	1,667	1,669	40	40	
2000 January	1,599	1,599	116	110	13	1,591	1,586	43	43	
February	1,450	1,450	148	51	17	1,632	1,628	42	42	
March	R 1,561	R 1,561	R 101	R -53	R 33	R 1,682	R 1,679	R 40	R 40	
April	E 1,597	E 1,597	E 107	E 8	E 30	E 1,665	E 1,665	E 42	E 42	
4-Month Average	E 1,553	^E 1,553	E 118	E 4	^E 24	^E 1,643	E 1,640	E 42	^E 42	
1999 4-Month Average	1,584	1,583	120	-3	22	1,684	1,686	44	44	
1998 4-Month Average	1,497	1,496	115	-22	33	1,601	1,603	41	41	

R=Revised. E=Estimate. (s)=Less than +500 barrels per day and greater

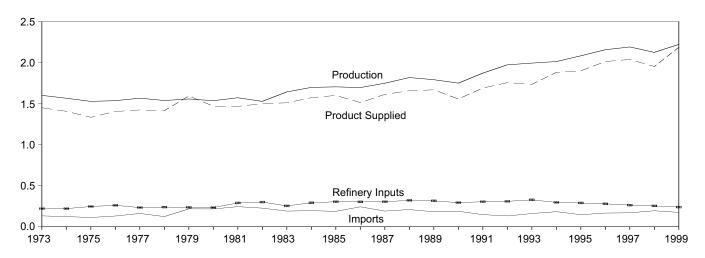
than -500 barrels per day.
Note: Geographic coverage is the 50 States and the District of Columbia.
Sources: 1973-1980: Energy Information Administration (EIA),
Petroleum Supply Monthly, February 1993, Table S7.
Petroleum Supply Monthly, May 2000, Table S7.

a Stocks are at end of period.
b A negative number indicates a decrease in stocks and a positive number indicates an increase.
c See Note 4 at end of section.

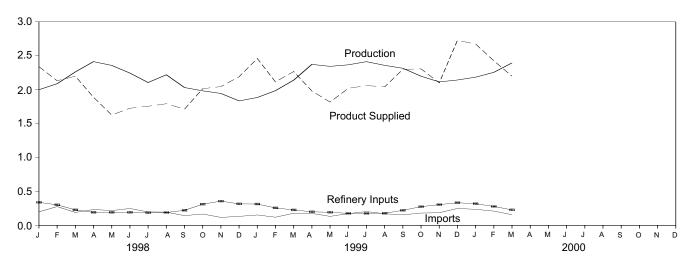
Figure 3.6 Liquefied Petroleum Gases

(Million Barrels per Day, Except as Noted)

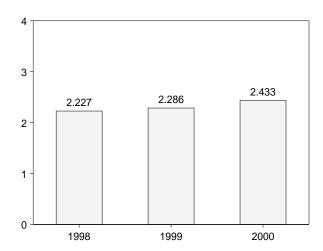
Overview, 1973-1999



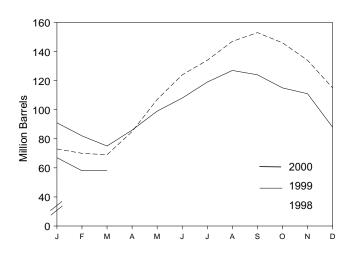
Overview, Monthly



Product Supplied, January-March



Stocks, End of Month



Note: Because vertical scales differ, graphs should not be compared.

Source: Table 3.8.

Table 3.8 Liquefied Petroleum Gases Supply and Disposition

	Sup	ply		Dispo	sition		
	Total Production	Imports	Stock Change ^a	Refinery Inputs	Exports	Product Supplied	Stocks ^b
			Thousand Ba	arrels per Day		-	Million Barrels
1973 Avorago	1,600	132	35	220	27	1,449	99
1973 Average	1,565	123	38	220	27 25	1,449	c 113
1974 Average	1,527	112	c 35	246	26 26	1,333	125
1975 Average		130	-24	260	26 25		116
1976 Average	1,535 1,566	161	-24 55	233	18	1,404 1,422	136
1977 Average	1,537	123	-12	239	20	1,422	° 132
1978 Average	1,556	217	° -70	236	15	1,592	111
979 Average	1,535	216	27	233	21	1,469	c 120
980 Average	1,571	244	c 18	289	42	1,466	135
981 Average	d 1,527	226	-111	300	65	1,499	c 94
982 Average	1,642	190	°-4	253	73	1,509	° 101
983 Average		195	°-19	291	73 48	,	
984 Average	1,697	187	-75	304	46 62	1,572	101
985 Average	1,704		-75 80	30 4 302		1,599	74
986 Average	1,695	242			42	1,512	103
987 Average	1,748	190	-15	304	38	1,612	97
988 Average	1,817	209	1	321	49	1,656	97
989 Average	1,791	181	-47	315	35	1,668	80
990 Average	1,749	188	48	293	40	1,556	98
991 Average	1,871	147	-15	304	41	1,689	92
992 Average	1,972	131	-10	309	49	1,755	89
993 Average	1,993	160	49	327	43	1,734	106
994 Average	2,012	183	-19	296	38	1,880	99
995 Average	2,082	146	-17	289	58	1,899	93
996 Average	2,156	166	-19	278	51	2,012	86
997 Average	2,190	169	9	263	50	2,038	89
998 January	2,000	200	-534	340	53	2,340	73
February	2,088	277	-122	303	52	2,132	70
March	2,262	192	-14	229	41	2,199	69
April	2,414	234	527	193	39	1,889	85
May	2,358	219	726	193	31	1,627	107
June	2,245	249	546	193	28	1,727	124
July	2,106	199	328	187	34	1,756	134
August	2,220	196	407	190	25	1,793	147
September	2,032	144	212	222	28	1,713	153
October	1,983	168	-225	313	49	2,015	146
November	1,945	118	-402	358	61	2,046	134
December	1,835	133	-608	317	67	2,191	115
Average	2,124	194	70	253	42	1,952	115
999 January	1,885	154	-812	315	75	2,460	91
February	1,986	121	-332	258	64	2,115	82
March	2,141	179	-208	228	32	2,268	75
April	2,373	177	348	200	21	1,981	86
May	2,344	133	431	194	33	1,818	99
June	2,367	174	307	177	37	2,020	108
July	2,413	204	339	177	39	2,061	119
August	2,359	172	264	179	47	2,042	127
September	2,316	155	-109	222	58	2,300	124
October	2,199	182	-283	276	81	2,307	115
November	2,115	186	-153	306	47	2,101	111
December	2,143	250	-729	334	61	2,727	88
Average	2,143 2,221	1 74	-729 - 78	239	50	2,185	88
<u>-</u>		227	670	200	404		67
000 January	2,185	237	-673	320	101	2,673	67 50
February	2,256	211	-318	279	81	2,426	58
March 3-Month Average	2,395 2,279	158 202	15 -325	229 276	109 97	2,199 2,433	58 58
_							
999 3-Month Average 998 3-Month Average	2,005 2,118	152 221	-455 -227	267 290	57 49	2,286 2,227	75 69

a A negative number indicates a decrease in stocks and a positive number indicates an increase.
 b Stocks are at end of period.
 c See Note 4 at end of section.
 d See Note 6 at end of section.

Liquefied petroleum gases include ethane, ethylene, propane,

propylene, normal butane, butylene, isobutane and isobutylene. Geographic coverage is the 50 States and the District of Columbia.

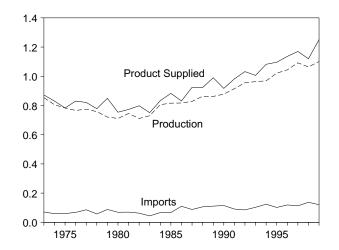
Sources: 1973-1980: Energy Information Administration (EIA), Petroleum Supply Monthly, February 1993, Table S8.

Petroleum Supply Monthly, May 2000, Table S9.

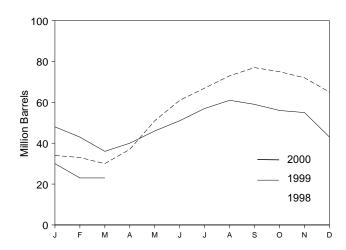
Figure 3.7 Propane and Propylene

(Million Barrels per Day, Except as Noted)

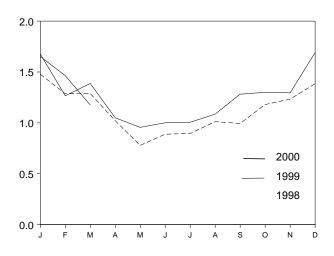
Overview, 1973-1999



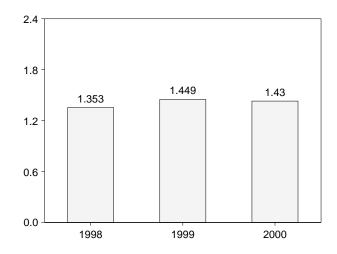
Stocks, End of Month



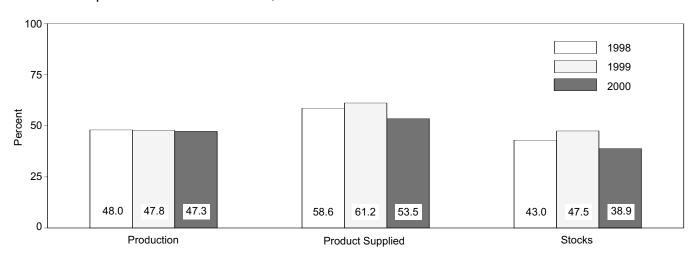
Product Supplied, Monthly



Product Supplied, January-March



Share of Liquefied Petroleum Gases, March



Note: Because vertical scales differ, graphs should not be compared. Sources: Table 3.9 and, for calculation of shares, data prior to rounding for publication in Tables 3.8 and 3.9.

Table 3.9 Propane and Propylene Supply and Disposition (A Subset of Table 3.8)

	Sup	ply		Dispo	sition			
	Total Production	Imports	Stock Change ^a	Refinery Inputs	Exports	Product Supplied	Stocksb	
			Thousand Ba	rrels per Day			Million Barrels	
1973 Average	854	71	30	8	15	872	65	
1974 Average	805	59	11	9	14	830	69	
1975 Average	783	60	36	11	13	783	82	
1976 Average	766	68	-22	12	13	830	74	
1977 Average	775	86	21	10	10	821	81	
1978 Average	758	57	15	13	9	778	^c 87	
1979 Average	721	88	^c -61	14	8	849	64	
1980 Average	711	69	6.12	12	10	754	c 65	
1981 Average	745	70	^c 18	5	18	773	76	
1982 Average	711 720	63 44	-59 ^ℂ -24	4 4	31 42	798 751	^c 54 ^c 48	
1983 Average	730 806	44 67	°-24 °7	4	43 30	751 833	58	
1984 Average1985 Average	816	67	-50	3	48	883	39	
1986 Average	817	110	64	4	28	831	63	
1987 Average	828	88	-41	8	24	924	48	
1988 Average	863	106	7	8	31	923	50	
1989 Average	862	111	-52	11	24	990	32	
1990 Average	878	115	48	(s)	28	917	49	
1991 Average	915	91	-3	(s)	28	982	48	
1992 Average	956	85	-24	(s)	33	1,032	39	
1993 Average	963	103	34	(s)	26	1,006	51	
1994 Average	969	124	-13	0	24	1,082	46	
1995 Average	1,021	102	-10	0	38	1,096	43	
1996 Average	1,044	119	(s) 3	0 0	28	1,136	43 44	
1997 Average	1,092	113	3	U	32	1,170	44	
1998 January	1,060	137 204	-310	0 0	29 28	1,478	34 33	
February	1,052	132	-58 -98	0	28	1,286	33 30	
March April	1,086 1,112	183	-96 252	0	22	1,288 1,021	37	
May	1,093	136	428	0	22	779	51	
June	1,059	179	336	Ö	13	889	61	
July	1,004	124	215	Ö	17	896	67	
August	1,056	157	186	0	15	1,012	73	
September	1,047	81	118	0	15	994	77	
October	1,047	123	-45	0	35	1,180	75	
November	1,086	92	-96	0	41	1,233	72	
December	1,060	108	-250	0	32	1,385	65	
Average	1,064	137	56	0	25	1,120	65	
999 January	1,041	121	-565	0	50	1,677	48	
February	1,047	110	-150	0	41	1,266	43	
March	1,023	142	-241 142	0	19	1,387	36	
April	1,078	128	143	0 0	13	1,050	40 46	
May	1,091 1,086	82 102	197 164	0	20 23	956 1,001	46 51	
June July	1,112	122	201	0	23 27	1,001	57	
August	1,111	113	107	0	32	1,086	61	
September	1,151	108	-43	0	20	1,282	59	
October	1,137	125	-103	ő	65	1,300	56	
November	1,149	123	-58	0	34	1,295	55	
December	1,188	178	-375	0	49	1,691	43	
Average	1,101	121	-61	0	33	1,251	43	
000 January	1,145	176	-425	0	94	1,652	30	
February	1,137	157	-223	0	53	1,464	23	
March	1,133	110	-18	0	84	1,176	23	
3-Month Average	1,138	148	-222	0	78	1,430	23	
999 3-Month Average	1,037	125	-324	0	36	1,449	36	
1998 3-Month Average	1,067	156	-159	0	28	1,353	30	

a A negative number indicates a decrease in stocks and a positive number indicates an increase.
 b Stocks are at end of period.
 c See Note 4 at end of section.
 (s)=Less than 500 barrels per day.
 Note: Geographic coverage is the 50 States and the District of Columbia.

Sources: 1973 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual." 1976 through 1980: Energy Information Administration (EIA), *Energy Data Reports*, Petroleum Statement, Annual." 1981 forward: EIA, *Petroleum Supply Monthly*, May 2000, Table S8.

Table 3.10 Other Petroleum Products Supply and Disposition

	Sup	ply		Dispo	sition		
	Total Production	Imports	Stock Change ^a	Refinery Inputs	Exports	Products Supplied	Stocks ^b
	•		Thousand Ba	arrels per Day			Million Barrels
1973 Average	2,833	290	1	750	162	2,211	179
1974 Average	2,722	269	25	665	172	2,129	° 188
		144	c-6	537	158		
1975 Average	2,547		-			2,001	188
1976 Average	2,725	129	(s)	524	172	2,158	188
1977 Average	2,939	130	20	514	164	2,371	195
1978 Average	3,076	80	-12	492	165	2,511	191
1979 Average	3,141	116	24	352	208	2,673	200
1980 Average	2,957	130	15	310	197	2,566	^c 205
1981 Average	2,771	188	^c -42	723	197	2,081	241
1982 Average	2,475	305	-68	787	205	^d 1,857	^c 216
1983 Average	2,437	382	c -6	712	236	1,877	^c 217
1984 Average	2,500	503	c -32	791	236	2,007	198
1985 Average	2,532	550	22	886	227	1,947	206
1986 Average	2,704	504	-15	888	291	2,045	201
1987 Average	2,737	543	-1	829	264	2,187	200
		645	22	799	294	2,303	208
1988 Average	2,773						
1989 Average	2,771	627	12	797	305	2,285	213
1990 Average	2,842	705	-32	887	289	2,402	201
1991 Average	2,826	675	18	936	277	2,269	208
1992 Average	2,928	707	-3	906	263	2,470	^c 207
1993 Average	^e 3,035	770	c -2	1,081	e300	^e 2,426	206
1994 Average	2,973	761	24	861	329	2,518	215
1995 Average	3,031	708	-23	958	348	2,457	206
1996 Average	3,108	879	-11	1,014	376	2,608	202
1997 Average	3,204	945	30	985	402	2,733	213
1998 January	3,108	782	415	702	420	2,352	226
February	3,100	794	384	659	406	2,446	236
March	3,081	825	269	770	387	2,481	245
April	3,153	975	-145	1,209	378	2,686	240
	3,133	1,014	-145 -75	1,095	402	2,876	238
May			-75 -147				
June	3,365	969		1,155	412	2,914	234
July	3,492	847	-271	1,182	431	2,998	225
August	3,575	697	-5	953	300	3,023	225
September	3,344	962	-33	1,012	370	2,957	224
October	3,240	1,012	-190	1,259	357	2,825	218
November	3,234	978	181	1,000	382	2,649	224
December	3,043	808	-138	1,012	312	2,665	219
Average	3,253	888	18	1,002	380	2,741	219
1000 January	2 225	0.40	220	007	207	2.604	220
1999 January	3,225	842	329	827	307	2,604	229
February	3,323	841	327	850	272	2,715	239
March	3,288	738	393	667	302	2,664	251
April	3,148	1,008	-88	1,081	352	2,811	248
May	3,351	814	24	1,380	321	2,440	249
June	3,269	961	-534	1,319	311	3,134	233
July	3,326	839	-250	1,255	325	2,835	225
August	3,451	936	-187	1,060	359	3,156	219
September	3,373	971	-146	1,089	345	3,056	215
October	3,137	917	-240	1,100	327	2,866	207
November	3,108	729	-120	867	396	2,695	204
December Average	3,099 3,258	801 866	-286 -66	1,286 1,066	439 338	2,461 2,786	195 195
				•			
2000 January	2,847	1,004	351	842	319	2,339	206
February	3,029	877	379	643	397	2,487	217
March	3,015	1,072	213	806	387	2,682	223
3-Month Average	2,962	987	313	766	367	2,503	223
1999 3-Month Average	3,277	806	350	779	294	2,659	251
1998 3-Month Average	3,096	800	355	719 712	404	2,426	245

a A negative number indicates a decrease in stocks and a positive number indicates an increase.
 b Stocks are at end of period.
 c See Note 4 at end of section.
 d See Note 6 at end of section.

Notes: Other petroleum products include pentanes plus, other hydrocarbons and alcohol, unfinished oils, gasoline blending components, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, jet fuel, liquefied petroleum gases, and crude oil that is used as fuel. Geographic coverage is the 50 States and the District of Columbia.

Sources: 1973-1980: Energy Information Administration (EIA), Petroleum Supply Monthly, February 1993, Table S9. 1981 forward: EIA, Petroleum Supply Monthly, May 2000, Table S10.

e Beginning in 1993, other petroleum products production, exports, and products supplied include an adjustment to oxygenates and motor gasoline blending components.
(s)=Less than +500 barrels per day and greater than -500 barrels per day.

Petroleum Notes

1. The Energy Information Administration (EIA) uses a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review such industry publications as the *Oil and Gas Journal* and *Oil Daily* for information on facilities or companies starting up or closing down operations. Those sources are augmented by articles in newspapers, letters from respondents indicating changes in status, and information received from survey systems.

To supplement routine frames maintenance and to provide more thorough coverage, a comprehensive frames investigation is conducted every 3 years. This investigation results in the reassessment and recompilation of the complete frame for each survey. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of data from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

In 1991, the EIA conducted a frame identifier survey of companies that produce, blend, store, or import oxygenates. A summary of the results from the identification survey was published in the *Weekly Petroleum Status Report* dated February 12, 1992, and in the February 1992 issue of the *Petroleum Supply Monthly*. In order to continue to provide relevant information about U.S. and regional gasoline supply, the EIA conducted a second frame identifier survey of those companies during 1992. As a result, numerous respondents were added to the monthly surveys effective in January 1993. See Explanatory Note 7 in the *Petroleum Supply Monthly*.

2. Motor Gasoline: Beginning in January 1981, the EIA expanded its universe to include non-refinery blenders and separated blending components from finished motor gasoline as a reporting category. Also, survey forms were modified to describe refinery operations more accurately.

Beginning with the reporting of January 1993 data, the EIA made adjustments to the product supplied series for finished motor gasoline. It was recognized that motor gasoline statistics published by the EIA through 1992 were underreported because the reporting system was (1) not collecting all fuel ethanol blending, and (2) there was a misreporting of motor gasoline blending components that were blended into finished gasoline. The adjustments are incorporated into EIA's data beginning in January 1993. To facilitate data analysis across the 1992-1993 period, EIA has prepared a table of 1992 data adjusted according to the 1993 basis. See *Petroleum Supply Monthly*, March 1993, Table H3.

3. Distillate and Residual Fuel Oils: The requirement to report crude oil in pipelines or burned on leases as either distillate or residual fuel oil has been eliminated.

Prior to January 1981, the refinery input of unfinished oils typically exceeded the available supply of unfinished oils. That discrepancy was assumed to be due to the redesignation of distillate and residual fuel oils received as such but used as unfinished oil inputs by the receiving refinery. The imbalance between supply and disposition of unfinished oils would then be subtracted from the production of distillate and residual fuel oils. Two-thirds of that 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 abovementioned adjustment.

Beginning in January 1993, the end-of-month stocks of distillate fuel oil are split into two sulfur categories (0.05 percent sulfur or less and greater than 0.05 percent sulfur) to meet Environmental Protection Agency requirements effective in October 1992. For further details, see the EIA, *Petroleum Supply Monthly*.

4. New Stock Basis: In January 1975, 1979, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys, affecting subsequent stocks reported and stock change 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—1,425; and 1982—1,461.

Motor Gasoline: 1974—225; 1980—263 (Total) and 214 (Finished); 1982—244 (Total) and 202 (Finished).

Distillate Fuel Oil: 1974—224; 1980—205; and 1982—186.

Residual Fuel Oil: 1974—75; 1980—91; and 1982—69.

Jet Fuel: 1974—30 (Total) and 24 (Kerosene Type); 1980—42 (Total) and 36 (Kerosene Type); and 1982—39 (Total) and 32 (Kerosene Type).

Liquefied Petroleum Gases: 1974—113; 1978—136; 1980—128; and 1982—102.

Propane and Propylene: 1978—86; 1980—69; and 1982—57.

Other Petroleum Products: 1974—190; 1980—207; and 1982—219.

Stock change calculations beginning in 1975, 1979, 1981, and 1983 were made by 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 the "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 now appear in the "Liquefied Petroleum Gases Supply and Disposition" table. This change affects stocks reported and stock change calculations in each table. Under the

new basis, end-of-year 1983 stocks, in million barrels, would have been:

Liquefied Petroleum Gases: 1983—108. Propane and Propylene: 1983—55. Other Petroleum Products: 1983—210.

In January 1993, changes were made in the monthly surveys to begin collecting bulk terminal and pipeline stocks of oxygenates. This change affected stocks reported and stock change calculations. However, a new basis stock level was not calculated for 1992 end-of-year stocks.

- 5. Stocks of Alaskan Crude Oil: 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 change calculations. Using the expanded coverage (new basis), 1980 end-of-year stocks, in million barrels, would have been 488 (Total) and 380 (Other Primary).
- **6. Data Discrepancies**: Due to differences internal to EIA data processing systems, some small discrepancies exist between data in the *Monthly Energy Review (MER)* and the *Petroleum Supply Annual (PSA)* and *Petroleum Supply Monthly (PSM)*. The data that have discrepancies are footnoted in Section 3 tables and summarized here.

Table	Data Series	Year Average	<i>MER</i> Data	PSA and PSM Data
3.1a	Natural Gas Plant Production	1976	1,604	1,603
3.1b	Exports, Total	1979	471	472
3.1b	Exports, Petroleum Products	1979	236	237
3.1b	Net Imports	1979	7,985	7,984
3.2a	Crude Used Directly	1976	´-19	⁻ -18
3.2a	Imports, SPR	1978	161	162
3.2a	Crude Úsed Directly	1978	-15	-14
3.2a	Crude Used Directly	1979	-14	-13
3.2a 3.2b	Crude Used Directly	1980	-14	-13
3.2b	Crude Losses	1976	14	15
3.2b	Crude Losses	1980	14	15
3.5	Stock Change	1974	10	9
3.5	Stock Change	1975	-41	-40
3.2b 3.5 3.5 3.8	Total Production	1982	1,527	1,525
3.10	Products Supplied	1982	1,857	1,856

Section 4. Natural Gas

Total dry natural gas production in the United States during April 2000 was forecast as 1.6 trillion cubic feet, 1 percent higher than production during April 1999.

Consumption of natural and supplemental gas in April 2000 was forecast as 1.7 trillion cubic feet, 1 percent lower than the level in April 1999.

Deliveries to residential consumers in April 2000 were forecast as 398 billion cubic feet, 5 percent lower than the previous April's deliveries. Total deliveries to industrial consumers during April 2000 were forecast as 730 billion cubic feet, 8 percent higher than the previous April's level.

Net imports of natural gas in April 2000 were forecast as 277 billion cubic feet, 4 percent higher than net imports in the previous April.

Stocks of working gas¹ in underground natural gas storage reservoirs at the end of April 2000 were forecast as 1.2 trillion cubic feet, 24 percent lower than the level of stocks available 1 year earlier.

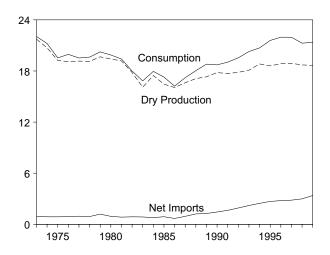
Net injections into underground storage during April 2000 were forecast as 25 billion cubic feet, 73 percent lower than the amount of net injections during April 1999.

¹Gas available for withdrawal.

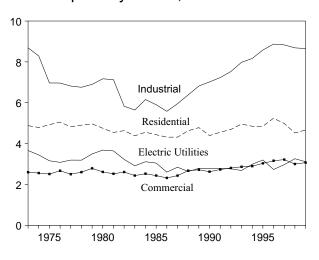
Figure 4.1 Natural Gas

(Trillion Cubic Feet)

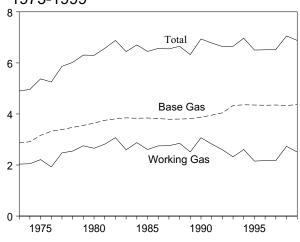
Overview, 1973-1999



Consumption by Sector, 1973-1999

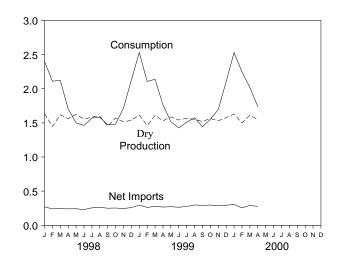


Underground Storage, End of Year, 1973-1999

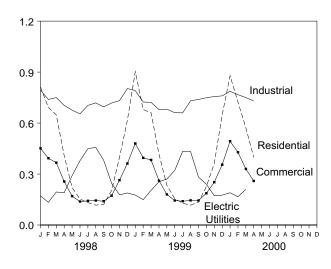


Note: Because vertical scales differ, graphs should not be compared. Sources: Tables 4.1, 4.3, 4.4, and 4.5.

Overview, Monthly



Consumption by Sector, Monthly



Underground Storage, End of Month

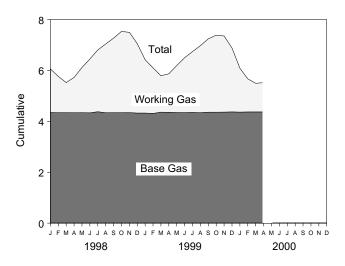


Table 4.1 Natural Gas Overview

	Dry Gas Production ^a	Supplemental Gaseous Fuels ^b	Net Imports ^c	Net Withdrawals From Storage ^d	Balancing Item ^e	Consumption ^f
1973 Total	g 21,731	NA	956	-442	-196	22,049
1974 Total	9 20,713	NA	882	-84	-289	21,223
1975 Total	g 19,236	NA	880	-344	-235	19,538
1976 Total	9 19,098	NA	899	165	-216	19,946
1977 Total	⁹ 19,163	NA	955	-557	-41	19,521
1978 Total	9 19 ,122	NA	913	-120	-287	19,627
1979 Total	9 19,663	NA	1,198	-248	-372	20,241
1980 Total	19,403	155	936	23	-640	19,877
1981 Total	19,181	176	845	-297	-500	19,404
1982 Total	17,820	145	882	-308	9 -537	18,001
1983 Total	16,094	132	864	447	9 -703	16,835
1984 Total	17,466	110	788	-197	-217	17,951
1985 Total	16,454	126	894	235	-428	17,281
1986 Total	16,059	113	689	-147	-493	16,221
1987 Total	16,621	101	939	-6	-444	17,211
1988 Total	17,103	101	1,220	59	-453	18,030
1989 Total	17,311	107	1,275	326	-218	18,801
1990 Total	17,810	123	1,447	-513	-150	18,716
1991 Total	17,698	113	1,644	80	-500	19,035
1992 Total	17,840	118	1,921	173	-508	19,544
1993 Total	18,095	119	2,210	-36	-110	20,279
1994 Total	18,821	111	2,462	-286	-400	20,708
1995 Total	18,599	110	2,687	415	-230	21,581
1996 Total	18,854 18,902	109 103	2,784	2 24	217 92	21,966
1997 Total	10,902	103	2,837	24	92	21,959
1998 January	1,637	11	270	486	-2	2,401
February	1,448	9	240	301	114	2,111
March	1,619	10	244	255	-4	2,123
April	1,562	8	240	-206	102	1,705
May	1,624	7	242	-402	29	1,500
June	1,556	6	230	-336	6	1,462
July	1,586	8	255	-326	49	1,572
August	1,598	8	264	-286	-1	1,583
September	1,454	7	250	-231	-10	1,471
October	1,571	8	253	-269	-81	1,482
November	1,515	10	246	32	-85	1,717
December	1,538	11	259	452	-131	2,129
Total	18,708	102	2,993	-530	-11	21,262
1999 January	RE 1,613	E 10	295	623	R -10	R 2,532
February	RE 1,462	E8	262	333	R 43	2,107
March	RE 1,611	E 8	276	297	R -53	2,139
April	RE 1,530	E 8	267	-91	R 50	1,764
May	RE 1,588	E 8	272	-337	R -14	1,517
June	RE 1.542	E 6	264	-306	R -80	1,426
July	RE 1,568	E ₇	276	-225	^R -116	1,510
August	RE 1.552	E 8	E 298	-238	R -44	^R 1,575
September	RE 1.520	E 7	E 292	-310	^R -65	^R 1,443
October	^{RE} 1.565	E 8	296	-148	^R -169	^R 1,552
November	^{RE} 1.531	E 8	290	30	^R -165	1.695
December	^{RE} 1,577	E 9	E 293	514	^R -288	R 2,106
Total	RE 18 ,659	^E 95	^E 3,381	141	^R -910	^R 21,366
2000 January	^E 1,629	E 8	RE 305	700	^{RE} -193	RE 2,530
2000 January	^L 1,629 RE 1,500	RE 8	RE 255	780 ^R 454	[™] -193 ^{RE} 31	RE 2,530 RE 2,247
February		F 9	F 291	N 454 RF 175	° 31 F-65	RF 2,247
March	F 1,611	F 8	· 291		· -65 F 7 0	··· 2,021
April	F 1,551		F 277	F-25	F -72	F 1,740
4-Month Total	^F 6,291	F 34	F 1,128	F 1,384	F-298	F 8,538
1999 4-Month Total	E 6,216	^E 34	1,100	1,162	30	8,542
	6,266		993	•		

^a "Marketed Production (Wet)" minus "Extraction Loss." See Table 4.2.

R=Revised. NA=Not available. E=Estimate. F=Forecast.

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

Sources: 1973-1992: Energy Information Administration (EIA), Natural Gas Annual 1998, Table 99. 1993 forward: EIA, Natural Gas Monthly, April 2000, Table 2, except for Balancing Item and Consumption, which Gas Annual 1998, Table 99. incorporate the most current electric utilities data from Table 4.4 of this report. Forecast values: Derived from EIA's Short-Term Integrated Forecasting System. See Note 9 at end of section.

b See Note 4 at end of section.

^c "Imports" minus "Exports." See Table 4.3.

d "Withdrawals" minus "Injections." Data for 1980-1998 cover underground storage and liquefied natural gas storage. All other time periods cover underground storage only. See also Note 8 at end of section.

^e See Note 7 at end of section. Since 1980, excludes transit shipments

that cross the U.S.-Canada border (i.e., natural gas delivered to its destination via the other country).

f See Note 6 at end of section.

^g May include unknown quantities of nonhydrocarbon gases.

Table 4.2 Natural Gas Production

	Gross Withdrawals ^a	Repressuring ^b	Nonhydro- carbon Gases Removed ^c	Vented and Flared ^d	Marketed Production ^e	Extraction Loss ^f	Dry Gas Production ⁹
4070 T. ()	04.007	4.474		0.40	h oo o 40	047	h o4 704
1973 Total	24,067	1,171	NA	248	h 22,648	917	^h 21,731
1974 Total	22,850	1,080	NA	169	^h 21,601	887	ⁿ 20,713
1975 Total	21,104	861	NA	134	^h 20,109	872	^h 19,236
1976 Total	20,944	859	NA	132	^h 19,952	854	^h 19,098
1977 Total	21,097	935	NA	137	^h 20,025	863	^h 19,163
1978 Total	21,309	1,181	NA	153	^h 19,974	852	^h 19,122
1979 Total	21,883	1,245	NA	167	^h 20,471	808	^h 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
			208			762	
1982 Total	20,272	1,388		93	18,582		17,820
1983 Total	18,659	1,458	222	95	16,884	790	16,094
1984 Total	20,267	1,630	224	108	18,304	838	17,466
1985 Total	19,607	1,915	326	95	17,270	816	16,454
1986 Total	19,131	1,838	337	98	16,859	800	16,059
1987 Total	20,140	2,208	376	124	17,433	812	16,621
1988 Total	20,999	2,478	460	143	17,918	816	17,103
		,					
1989 Total	21,074	2,475	362	142	18,095	785	17,311
1990 Total	21,523	2,489	289	150	18,594	784	17,810
1991 Total	21,750	2,772	276	170	18,532	835	17,698
1992 Total	22,132	2,973	280	168	18,712	872	17,840
1993 Total	22,726	3,103	414	227	18,982	886	18,095
1994 Total	23,581	3,231	412	228	19,710	889	18,821
1995 Total	23,744	3,565	388	284	19,506	908	18,599
1996 Total	24,114	3,511	518	272	19,812	958	18,854
1997 Total	24,114	3,492	599	256	19,866	964	18,902
1998 January	2.093	307	48	19	1,719	82	1,637
February	1,877	291	49	17	1,520	73	1,448
				20		73 81	,
March	2,081	310	51		1,700		1,619
April	1,994	284	50	20	1,640	78	1,562
May	2,035	266	47	16	1,705	81	1,624
June	1,975	271	49	21	1,634	78	1,556
July	2,002	265	51	20	1,666	80	1,586
August	2,024	273	53	20	1,678	80	1,598
September	1,874	276	51	20	1,527	73	1,454
October	2,026	297	58	21	1,650	79 79	1,571
	,				,		,
November	1,954	292	52	20	1,591	76	1,515
December	1,988	302	51	20	1,615	77	1,538
Total	23,924	3,433	611	234	19,646	938	18,708
1999 January	RE 2,091	E 317	58	E 20	^{RE} 1,696	E 82	^{RE} 1,613
February	^{RE} 1,882	E 274	54	^E 18	^{RE} 1,536	^{RE} 75	^{RE} 1,462
March	RE 2,080	E 307	59	E 21	RE 1.693	E 82	RE 1.611
April	RE 1.960	E 289	42	E 21	RE 1,608	E 78	RE 1,530
	RE 1,998	E 264	44	E 21	RE 1.669	E 81	RE 1,588
May							1,300 RF 4 5 40
June	RE 1,963	E 279	43	E 21	RE 1,620	E 79	RE 1,542
July	RE 1,995	E 283	44	E 21	RE 1,647	E 80	RE 1,568
August	^{RE} 1,974	E 282	42	E 20	^{RE} 1,631	^{RE} 79	^{RE} 1,552
September	RE 1,924	E 262	43	RE 22	^{RE} 1,597	RE 77	^{RE} 1,520
October	RE 2.038	E 325	45	E 23	^{RE} 1.645	RE 80	RE 1.565
November	RE 1,986	E 313	43	RE 22	RE 1,609	E 78	RE 1,531
December	RE 2,063	E 337	E 44	RE 23	RE 1,658	RE 80	RE 1,577
Total	RE 23,955	RE 3,531	E 561	RE 253	RE 19,610	RE 951	RE 18,659
1000 January	RE 2,122	RE 340	^E 46	RE 24		E 83	
2000 January	··- 2,122				E 1,712		E 1,629
February	E 1,953	E 313	E 43	E 22	^E 1,576	RE 76	RE 1,500
March	NA	NA	NA	NA	F 1,692	F 81	^F 1,611
April	NA	NA	NA	NA	F 1,630	^F 79	^F 1,551
4-Month Total	NA	NA	NA	NA	F 6,610	F 320	F 6,291
999 4-Month Total	^E 8,014	E 1,187	E 213	E 81	^E 6,532	E 317	^E 6,216
1998 4-Month Total	8,045	1,191	199	76	6,580	314	6,266

 $^{^{\}rm a}$ Gas withdrawn from gas and oil wells. $^{\rm b}$ The injection of natural gas into oil and gas formations for pressure maintenance and cycling purposes.

^c See Note 1 at end of section.

^d Vented: Natural gas released into the air on the base site or at processing plants. Flared: Natural gas burned in flares on the base site or at

gas processing plants. Flated. Natural gas buffled in flates of the base site of at gas processing plants.

e "Gross Withdrawals" minus "Repressuring," "Nonhydrocarbon Gases Removed," and "Vented and Flared." See Note 2 at end of section.

f See Note 3 at end of section.

^g "Marketed Production (Wet)" minus "Extraction Loss."

h May include unknown quantities of nonhydrocarbon gases. R=Revised. NA=Not available. E=Estimate. F=Forecast.

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

Sources: 1973-1992: Energy Information Administration (EIA), Natural Gas Annual 1998, Table 98. 1993 forward: EIA, Natural Gas Monthly, April 2000, Table 1. Forecast values: Derived from EIA's Short-Term Integrated Forecasting System. See Note 9 at end of section.

Table 4.3 Natural Gas Trade by Country

				Impo	orts					Exp	orts	
	Algeria ^a	Australia ^a	Canada ^b	Mexico b	Qatar ^a	Trinidad and Tobago ^a	United Arab Emirates ^a	Total	Canada ^b	Japan ^a	M exico ^b	Tota
973 Total	3	0	1,028	2	0	0	0	1,033	15	48	14	7
974 Total	0	Ō	959	(s)	0	0	0	959	13	50	13	7
975 Total	5	Ō	948	`ό	Ô	Ō	0	953	10	53	9	7
976 Total	10	Ö	954	Ö	Ö	Ö	Ö	964	8	50	7	6
977 Total	11	Ö	997	2	Ŏ	Ŏ	Ö	1,011	(s)	52	4	5
978 Total	84	ŏ	881	ō	ŏ	Ŏ	ŏ	966	(s)	48	4	5
979 Total	253	ŏ	1,001	ŏ	ŏ	Ŏ	ŏ	1,253	(s)	51	4	5
980 Total	86	ŏ	797	102	Ŏ	Ŏ	ŏ	985	(s)	45	4	4
981 Total	37	ŏ	762	105	Ö	Ö	ŏ	904	(s)	56	3	5
982 Total	55	Ö	783	95	0	Ö	ŏ	933	(s)	50	2	5
983 Total	131	0	712	75	0	0	0	933 918	• • •	53	2	5
	36	0	755	52	0	0	0	843	(s)	53	2	5
984 Total									(s)			
985 Total	24	0	926	0	0	0	0	950	(s)	53	2	5
986 Total	0	0	749	0	0	0	0	^c 750	9	50	2	6
987 Total	0	0	993	0	0	0	0	993	3	49	2	5
988 Total	17	0	1,276	0	0	0	0	1,294	20	52	2	7
989 Total	42	0	1,339	0	0	0	0	1,382	38	51	17	10
990 Total	84	0	1,448	0	0	0	0	1,532	17	53	16	8
991 Total	64	0	1,710	0	0	0	0	1,773	15	54	60	12
992 Total	43	0	2,094	0	0	0	0	2,138	68	53	96	21
993 Total	82	0	2,267	2	0	0	0	2,350	45	56	40	14
994 Total	51	0	2,566	7	0	0	0	2,624	53	63	47	16
95 Total	18	0	2,816	7	0	0	0	2,841	28	65	61	15
96 Total	35	0	2,883	14	0	0	5	2,937	52	68	34	15
997 Total	66	10	2,899	17	0	0	2	2,994	56	62	38	15
998 January	10	0	276	(s)	0	0	0	286	5	7	4	1
February	8	2	239	2	0	ő	Ö	251	5	4	3	1
March	5	0	257	(s)	0	0	Ö	263	8	7	4	1
April	3	0	247	3	0	0	Ö	253	5	6	3	1
May	8	0	244	1	0	0	Ö	252	2	2	6	1
June	5	2	236	(s)	0	0	Ö	243	2	6	6	1
	5	0	259	2	0	0	0	266	2	6	4	1
July		-			-		0				-	
August	3	2	269	1	0	0		275	(s)	6	5	1
September	5	0	255	2	0	0	0	262	1	8	3	1
October	5	0	260	1	0	0	0	266	2	6	5	1
November	5	2	248	0	0	0	3	258	4	4	5	1
December	8	2	261	1	0	0	3	275	5	6	_5	1
Total	69	12	3,052	15	0	0	5	3,152	40	66	53	15
99 January	13	0	290	5	0	0	0	308	2	6	5	1
February	7	3	259	4	2	0	0	276	3	6	5	1
March	13	0	279	1	0	0	0	293	5	6	6	1
April	8	Ō	266	4	2	Ö	Ō	280	2	6	5	1
May	4	0	270	7	0	5	0	286	3	6	6	1
June	3	2	256	5	2	7	Ö	275	2	4	5	
July	5	0	271	4	2	7	Ö	289	2	6	6	
August	3	2	288	6	0	10	Ö	d311	2	6	5	
September	8	0	284	5	5	4	0	305	2	6	5	
October	5	2	290	4	0	4	0	306	3	4	4	
November	2	0	288	6	2	7	3	309	8	6	5	
December	5	2	288 291	3	2	, 5	0	309	7	6	5 4	
Total	75	∠ 12	3,333	55	∠ 20	4 9	3	309 3,548	42	6 4	4 61	1 16
								-				
00 January February	5 5	0	^{RE} 305 ^E 254	E 3	0 0	8 5	0 0	^{RE} 321 ^E 267	E 7 E 7	6 2	E 4 E 4	E 1
2-Month Total	10	Ŏ	E 559	E 7	Ŏ	13	0	E 589	E 14	7	E 8	E 2
99 2-Month Total	20	3	549	9	2	0	0	583	6	11	9	2
JJ Z-WIUHHI I OTAI	20	ა	349	y		U	U	303	0	- 11	9	

See Note 5 at end of section. Totals may not equal sum of Notes: components due to independent rounding. U.S. geographic coverage is the

50 States and the District of Columbia.

Sources: 1973-1992: Energy Information Administration (EIA), Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." 1993 forward: EIA, Natural Gas Monthly, April 2000, Tables 5 and 6.

a As liquefied natural gas.
 b By pipeline, except for very small amounts of liquefied natural gas imported from Canada in 1973, 1977, and 1981 and exported to Mexico beginning in 1998. See Note 5 at end of section.

^c Includes 2 billion cubic feet of liquefied natural gas from Indonesia.

^d Includes 3 billion cubic feet of liquefied natural gas from Malaysia.

R=Revised. E=Estimate. (s)=Less than 500 million cubic feet.

Table 4.4 Natural Gas Consumption by End-Use Sector

				D	elivered to Co	nsumers			
	Lease and Plant Fuel	Pipeline Fuel ^a	Residential	Commercial	Industrial ^b	Vehicles	Electric Utilities	Total	Total Consumption
1973 Total	1,496	728	4,879	2,597	8,689	NA	3,660	19,825	22,049
1974 Total	1,477	669	4,786	2,556	8,292	NA	3,443	19,077	21,223
1975 Total	1,396	583	4,924	2,508	6,968	NA	3,158	17,558	19,538
1976 Total	1,634	548	5,051	2,668	6,964	NA	3,081	17,764	19,946
1977 Total	1,659	533	4,821	2,501	6,815	NA	3,191	17,329	19,521
1978 Total	1,648	530	4,903	2,601	6,757	NA	3,188	17,449	19,627
1979 Total	1,499	601	4,965	2,786	6,899	NA	3,491	18,141	20,241
1980 Total	1,026	635	4,752	2,611	7,172	NA	3,682	18,216	19,877
1981 Total	928	642	4,546	2,520	7,128	NA	3,640	17,834	19,404
1982 Total	1,109	596	4,633	2,606	5,831	NA	3,226	16,295	18,001
1983 Total	978	490	4,381	2,433	5,643	NA	2,911	15,367	16,835
1984 Total	1,077	529	4,555	2,524	6,154	NA	3,111	16,345	17,951
1985 Total	966	504	4,433	2,432	5,901	NA	3,044	15,811	17,281
1986 Total	923	485	4,314	2,318	5,579	NA	2,602	14,814	16,221
1987 Total	1,149	519	4,315	2,430	5,953	NA	2,844	15,542	17,211
1988 Total	1,096	614	4,630	2,670	6,383	NA	2,636	16,320	18,030
1989 Total	1,070	629	4,781	2,718	6,816	NA	2,787	17,102	18,801
1990 Total	1,236	660	4,391	2,623	7,018	(s)	2,787	16,820	18,716
1991 Total	1,129	601	4,556	2,729	7,231	(s)	2,789	17,305	19,035
1992 Total	1,171	588	4,690	2,803	7,527	1	2,766	17,786	19,544
1993 Total	1,172	624	4,956	2,862	7,981	1	2,682	18,483	20,279
1994 Total	1,124	685	4,848	2,895	8,167	2	2,987	18,899	20,708
1995 Total	1,220	700	4,850 5 244	3,031	8,580	3	3,197	19,660	21,581
1996 Total	1,250 1,203	711 751	5,241 4,984	3,158 3,215	8,870 8,832	3 4	2,732 2,968	20,005 20,004	21,966 21,959
1998 January	101	73	812	451	793	NA	171	2,227	2,401
February	90	64	692	393	739	NA	134	1,957	2,111
March	101	64	648	367	750	NA	194	1,959	2,123
April	97	51	408	256	704	NA	190	1,558	1,705
May	99	44	221	170	676	NA	290	1,357	1,500
June	96	43	153	138	654	NA	379	1,323	1,462
July	97	47	132	142	704	NA	449	1,428	1,572
August	98	47	117	144	719	NA	457	1,438	1,583
September	90	44	121	140	695	NA	381	1,337	1,471
October	98	44	203	173	718	NA	246	1,340	1,482
November	94	51	398	264	732	NA	178	1,572	1,717
December	96	64	616	362	803	NA_	189	1,969	2,129
Total	1,157	635	4,520	2,999	8,686	5	3,258	19,469	21,262
1999 January	E 106	76	903	480	791	NA	176	2,350	R 2,532
February	E 96	63	680	395	724	NA	149	1,948	2,107
March	^E 106	64	660	383	722	NA	204	1,969	2,139
April	E 101	53	417	261	679	NA	254	1,611	1,764
May	_ ^E 105	45	234	180	682	NA	270	1,367	1,517
June	RE 101	43	155	144	661	NA	322	1,282	1,426
July	^E 103	45	128	140	660	NA	434	1,361	1,510
August	RE 102	47	117	145	731	NA	432	1,426	^R 1,575
September	RE 100	43	135	144	739	NA	283	1,300	R 1,443
October	RE 103	46	227	187	749	NA	240	1,402	^R 1,552
November	E 101	51	362	252	756	NA	172	1,543	1,695
December	RE 104	63	648	355	760	NA	176	1,940	R 2,106
Total	RE 1,228	639	4,666	3,067	8,653	NA	3,113	19,500	^R 21,366
2000 January	RE 107	^R 76	R 878	R 493	R 787	NA	190	R 2,347	R 2,530
February	F 97	F 63	F 724	F 428	F 767	NA	R 167	RF 2,086	RF 2,247
March	F 104	F 55	RF 572	F 330	F 750	NA	R 210	RF 1,862	RF 2,021
April	F 100	F 46	F 398	F 259	F 730	NA	NA	F 1,593	F 1,740
4-Month Total	F 409	^F 241	^F 2,572	^F 1,510	F 3,034	NA	NA	^F 7,888	F 8,538
1999 4-Month Total 1998 4-Month Total	^E 409 389	256 251	2,659 2,559	1,519 1,466	2,915 2,986	NA NA	784 689	7,878 7,701	8,542 8,341

^a Natural gas consumed in the operation of pipelines, primarily in

compressors.

b Most deliveries to nonutility power producers are included in the industrial sector. In instances where the nonutility is primarily a commercial establishment, deliveries are included in the commercial sector.

R=Revised. NA=Not available. E=Estimate. F=Forecast. (s)=Less than 500 million cubic feet.

Natural gas includes supplemental gaseous fuels. Totals may

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

^{1973-1992:} Energy Information Administration (EIA), *Natural* 1998, Table 100. 1993 forward: EIA, *Natural Gas Monthly*, Sources: Gas Annual 1998, Table 100. April 2000, Table 3, except for the electric utilities values, which come from Table 7.7 of this report, and columns 8 and 9, which incorporate the values from column 7. **Forecast values:** Derived from EIA's Short-Term Integrated Forecasting System.

Table 4.5 Natural Gas in Underground Storage

(Volumes in Billion Cubic Feet)

	U	Natural Gas in nderground Storag End of Period	ge,	Change in W from Sam Previou	e Period	Si	torage Activity	
	Base Gas	Working Gas	Totala	Volume	Percent	Withdrawals	Injections	Net ^{b,c}
1973 Total	2,864	2,034	4,898	305	17.6	1,533	1,974	-442
1974 Total	2,912	2,050	4,962	16	.8	1,701	1,784	-84
1975 Total	3,162	2,212	5,374	162	7.9	1,760	2,104	-344
1976 Total	3,323	1,926	5,250	-286	-12.9	1,921	1,756	165
1977 Total	3,391	2,475	5,866	549	28.5	1,750	2,307	-557
1978 Total	3,473	2,547	6,020	72	2.9	2,158	2,278	-120
1979 Total	3,553	2,753	6,306	207	8.1	2,047	2,295	-248
1980 Total	3,642	2,655	6,297	-99	-3.6	1,910	1,896	14
1981 Total	3,752	2,817	6,569	162	6.1	1,887	2,180	-293
1982 Total	3,808	3,071	6,879	255	9.0	2,094	2,399	-306
1983 Total	3,847	2,595	6,442	-476	-15.5	2,142	1,700	442
1984 Total	3,830	2,876	6,706	281	10.8	2,064	2,252	-188
1985 Total	3,842	2,607	6,448	-270	-9.4	2,359	2,128	231
1986 Total	3,819	2,749	6,567	142	5.5	1,812	1,952	-140
1987 Total	3,792	2,756	6,548	7	.3	1,881	1,887	-6
1988 Total	3,800	2,850	6,650	94	3.4	2,244	2,174	69
1989 Total	3,812	2,513	6,325	-337	-11.8	2,804	2,491	313
1990 Total	3,868	3,068	6,936	555	22.1	1,934	2,433	-499
1991 Total	3,954	2,824	6,778	-244	-8.0	2,689	2,608	80
1992 Total	4,044	2,597	6,641	-227	-8.0	2,724	2,555	168
1993 Total	4,327	2,322	6,649	-275	-10.6	2,717	2,760	-43
1994 Total	4,360	2,606	6,966	284	12.2	2,508	2,796	-288
1995 Total	4,349	2,153	6,503	-453	-17.4	2,974	2,566	408
1996 Total	4,341	2,173	6,513	19	.9	2,911	2,906	6
1997 Total	4,350	2,175	6,525	2	.1	2,824	2,800	24
1998 January	4,347	1,712	6,060	215	14.5	538	69	468
February	4,342	1,426	5,768	286	25.2	365	75	291
March	4,342	1,183	5,524	192	19.4	382	136	246
April	4,339	1,386	5,725	334	31.9	80	280	-200
May	4,341	1,774	6,114	407	29.9	42	433	-391
June	4,335	2,114	6,449	381	22.1	52	379	-327
July	4,378	2,428	6,806	409	20.4	54	371	-317
August	4,340	2,698	7,038	358	15.4	58	336	-278
September	4,341	2,928	7,269	253	9.6	74	298	-224
October	4,342	3,191	7,533	302	10.6	46	308	-262
November	4,344	3,155	7,499	453	16.9	168	137	31
December Total	4,326 4,326	2,730 2,730	7,056 7,056	554 554	25.5 25.5	519 2,379	83 2,905	436 -526
1999 January	4,327	2.094	6,421	381	22.2	678	55	623
February	4,312	1,792	6,104	372	26.2	395	62	333
March	4,361	1,430	5,792	246	20.7	381	84	297
April	4,355	1,514	5,869	131	9.5	112	203	-91
May		1,847	6,192	72	4.0	43	380	-337
June	4,344	2,157	6,501	54	2.6	40	345	-306
July	4,350	2,390	6,740	-27	-1.1	78	303	-225
August	4,342	2,632	6,974	-66	-2.4	70	309	-238
September		2,884	7,245	-43	-1.5	42	352	-310
October	4,360	3,026	7,386	-165	-5.2	90	238	-148
November		2,991	7,355	-164	-5.2	200	170	30
December		2,509	6,881	-221	-8.1	568	54	514
Total	4,373	2,509	6,881	-221	-8.1	2,697	2,555	141
2000 January	4,363	_ 1,725	_ 6,088	-370	-17.6	829	48	780
February	R 4,371	R 1,300	R 5,672	R -491	R -27	532	78	R 454
March	RF 4,371	^{RF} 1,125	^{RF} 5,496	RF ₋ 306	RF -21	NA	NA	^{RF} 175
April	F 4,371	^F 1,150	^F 5,521	F-364	F -24.0	NA	NA	^F -25

 ^a For total underground storage capacity at the end of each calendar year, see Note 8 at end of section.
 ^b For 1980-1998, data differ from those shown on Table 4.1, which

ending stocks. See Note 8 at end of section.

R=Revised. F=Forecast.

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

Sources: See end of section.

b For 1980-1998, data differ from those shown on Table 4.1, which includes liquefied natural gas storage for that period.

^c Positive numbers indicate that withdrawals are greater than injections. Negative numbers indicate that injections are greater than withdrawals. Net withdrawals or injections may not equal the difference between applicable

Natural Gas 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 (NGA). Data are not available prior to 1980. Monthly data are reported by three States and computed for six States. Monthly data are preliminary until after publication of the EIA NGA. Differences between annual data published in the EIA NGA and the sum of the preliminary monthly data (January-December) are allocated proportionally to the months to create final monthly data. For further information on methods of estimating preliminary monthly data, see the EIA Natural Gas Monthly (NGM).

2. Production.

Annual data: Final annual data are from the EIA *NGA*. Estimated monthly data: 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 *NGM*.

Preliminary monthly data: Monthly data are considered preliminary until after publication of the EIA NGA. Preliminary monthly data are gathered from reports to the Interstate Oil Compact Commission and the U.S. Minerals Management Service. Volumetric data are converted, as necessary, to a standard 14.73 psi pressure base. Unless there are major changes, data are not revised until after publication of the EIA NGA.

Final monthly data: Differences between annual data in the EIA *NGA* and the sum of preliminary monthly data (January-December) are allocated proportionally to the months to create final 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 are from the EIA NGA, where they are estimated on the basis of 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 NGA.

Preliminary monthly data are estimated on the basis of 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 *NGA*. Final monthly data are estimated by allocating annual extraction loss data to the months on the basis of total natural gas marketed production data from the EIA *NGA*.

4. Supplemental Gaseous Fuels: Any gaseous substance that, introduced into or commingled with natural gas, increases the volume available for disposition. Such substances include, but are not limited to, propane-air, refinery gas, coke oven gas, still gas, manufactured gas, biomass gas, or air or inert gases added for Btu stabilization.

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

Monthly data are considered preliminary until after the publication of the EIA NGA. 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. The ratio is applied to the monthly sum of the three elements to compute a monthly supplemental gaseous fuels figure.

5. Imports and Exports: The United States imports natural gas via pipeline from Canada and Mexico. Liquefied natural gas (LNG) arrives via tanker from Algeria, United Arab Emirates, and Australia; one shipment of LNG was received from Indonesia in December 1986 and a shipment arrived from Qatar in February 1999. Very small amounts of LNG arrived from Canada in 1973 (667 million cubic feet), 1977 (572 million cubic feet), and 1981 (6 million cubic feet). The United States exports natural gas via pipeline to Canada and Mexico and LNG via tanker to Japan. A small amount of LNG went to Mexico in 1998.

Annual and final monthly data are from the annual EIA 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 NGM. Preliminary data are revised after the publication of the EIA U.S. Imports and Exports of Natural Gas.

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

Final data are from the EIA *NGA*. Monthly data are considered preliminary until after publication of the EIA *NGA*. For more detailed information on the methods of estimating preliminary and final monthly data, see the EIA *NGM*.

7. Balancing Item: The balancing item for natural gas represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas disposition. The differences may be due to quantities lost or to the effects of data reporting problems. Reporting problems include dif-

ferences due to the net result of conversions of flow data metered at varying temperature and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycle and calendar period time frames; and imbalances resulting from the merger of data reporting systems which vary in scope, format, definitions, and type of respondents.

The increase of 0.2 trillion cubic feet (Tcf) in the "Balancing Item" category in 1983, followed by a decline of 0.5 Tcf 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 temperatures during the last half of December 1983 resulted in a reported 0.3 Tcf increase in net withdrawals from underground storage for peak shaving as compared with the same period in 1982, but the effect of this cold weather was reflected primarily in 1984 consumption data. For underground storage data, see Table F2 in the May 1985 NGM, 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. The 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.

Monthly underground storage data are collected from the Federal Energy Regulatory Commission (FERC) Forms FERC-8 (interstate data) and EIA-191 (intrastate data). Beginning in January 1991, all data are collected on the revised Form EIA-191. Injection and withdrawal data from the FERC-8/EIA-191 survey are adjusted to correspond to data from Form EIA-176 following publication of the EIA *NGA*.

The final monthly and annual storage and withdrawal data for 1980-1996 include both underground and liquefied natural gas (LNG) storage. Annual data on LNG additions and withdrawals are from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying the ratio to the annual LNG data.

Total underground storage capacity at the end of each calendar year since 1975 (first year data were available), in billion cubic feet, was:

1975	6,280	1987	8,124
1976	6,544	1988	8,124
1977	6,678	1989	8,124
1978	6,890	1990	8,125
1979	6,929	1991	7,993
1980	7,434	1992	7,932
1981	7,805	1993	7,989
1982	7,915	1994	8,043
1983	7,985	1995	7,953
1984	8,043	1996	7,980
1985	8,087	1997	8,332

9. Forecast Values: Data values Preceded by "F" in this section are forecast values. They are derived from EIA's Short-Term Integrated Forecasting System (STIFS). The model is driven primarily by data and assumptions about key macroeconomic variables, the world oil price, and weather. The natural gas forecast relies on other variables as well, such as gas wellhead prices, electric power generation by other sources, and U.S. gas import capacity. Each month, EIA staff review the model output and make adjustments, if appropriate, based on their knowledge of developments in the natural gas industry.

The STIFS model results are published quarterly in EIA's *Short-Term Energy Outlook*, which is available from the National Energy Information Center (202-586-8800) and accessible on the world wide web at http://www.eia.doe.gov. Documentation for the model and instructions for downloading and operating it on a personal computer are provided.

Sources for Table 4.5

Storage Activity

1973-1975: Energy Information Administration (EIA) *Natural Gas Annual 1994, Volume 2,* Table 9. **1976-1979:** EIA, *Natural Gas Production and Consumption 1979,* Table 1.

1980-1992: EIA, *Historical Natural Gas Annual 1930 Through 1998*, Table 11.

1993 forward: EIA, *Natural Gas Monthly*, April 2000, Table 9.

Forecast values: derived from EIA's Short-Term Integrated Forecasting System. See Note 9 on this page.

Other Data

1973 and 1974: American Gas Association (AGA), Gas Facts, 1972 Data, Table 57, Gas Facts, 1973 Data, Table 57, and Gas Facts, 1974 Data, Table 40.
1975 and 1976: Federal Energy Administration (FEA), Form FEA-G318-M-O, "Underground Gas Storage Report," and Federal Power Commission (FPC), Form FPC-8, "Underground Gas Storage Report."

1977 and 1978: EIA, Form FEA-G-318-M-O, "Underground Gas Storage Report," and Federal Energy Regulatory Commission (FERC), Form FERC-8, "Underground Gas Storage Report.

1979-1992: EIA, Form EIA-191, "Underground Gas

Section 5. Oil and Gas Resource Development

The April 2000 rotary rig count was 805, 4 percent higher than the count in March and 62 percent higher than the count in April 1999. Of the total number of rigs in operation, 680 were onshore and 125 were offshore. For April 2000, the number of onshore rigs was up 71 percent, while the number of offshore rigs was up 26 percent from the April 1999 count. Rotary rigs drilling for natural gas as a share of total rigs stood at 76 percent in April 2000.

Total footage drilled in April 2000 was 11.8 million feet, down 12 percent from the footage drilled in March 2000 but up 67 percent from that drilled in April 1999.

The estimated number of exploratory and development oil and gas wells drilled during April 2000 was 1,691, 6 per-

cent higher than the number drilled in March 2000 and 88 percent higher than the number drilled in April 1999. The estimated number of oil wells drilled was 616, and the estimated number of gas wells was 1,075, 152 percent higher and 64 percent higher, respectively, than their April 1999 levels.

The estimated number of dry holes drilled in April 2000 was 378, up 4 percent from the number drilled in March 2000, and up 62 percent from the number drilled in April 1999.

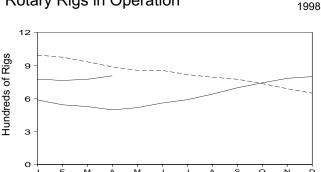
There were an estimated 2.8 thousand well servicing units active in April 2000, 37 percent higher than in

Figure 5.1 Oil and Gas Resource Development Indicators

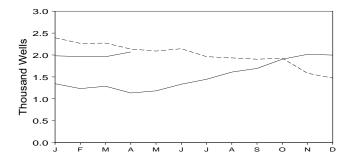
Active Well Servicing Units

5 Thousands of Units

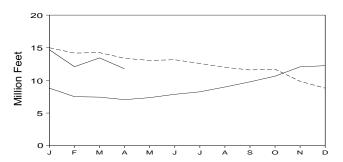
Rotary Rigs in Operation



Wells Drilled



Footage Drilled



Sources: Tables 5.1 and 5.2.

2000 1999

Table 5.1 Oil and Gas Drilling Activity Measurements

		ws Engaged mic Explora			Rotary F	Rigs in Ope	ration ^a			
					Site	ВуТ			Total Footage	Active Well Servicing
	Offshore	Onshore	Total	Offshore	Onshore	Oil	Gas	Totalb	Drilled ^c	Unitsd
	Mo	onthly Avera	ge		We	ekly Averaç	ge		Thousand Feet	Number
1973 Average	23	227	250	84	1,110	NA	NA	1,194	138,223	NA
1974 Average	31	274	305	94	1,378	NA	NA	1,472	153,374	ŅĄ
1975 Average		254	284	106	1,554	NA	NA	1,660	180,494	NA
1976 Average	25	237	262	129	1,529	NA	NA	1,658	186,982	2,601
1977 Average	27	281	308	167	1,834	NA	NA	2,001	215,866	2,828
1978 Average		327	352	185	2,074	NA	NA	2,259	238,669	2,988
1979 Average		370	400	207	1,970	NA	NA	2,177	244,798	3,399
1980 Average		493	530	231	2,678	NA	NA	2,909	314,654	4,089
1981 Average		637	681	256	3,714	NA	NA	3,970	413,112	4,850
1982 Average	57	531	588	243	2,862	NA	NA	3,105	378,295	4,248
1983 Average	47	426	473	199	2,033	NA	NA	2,232	317,986	3,732
1984 Average		445	494	213	2,215	NA	NA	2,428	371,392	4,663
1985 Average		333	378	206	1,774	NA	NA	1,980	313,045	4,716
1986 Average		176	200	99	865	NA	NA	964	181,856	3,036
1987 Average	24	153	177	95	841	NA	NA	936	162,178	3,060
1988 Average		153	182	123	813	554	354	936	156,354	3,341
1989 Average		109	132	105	764	453	401	869	134,439	3,391
1990 Average		102	125	108	902	532	464	1,010	153,701	3,658
1991 Average		85	104	81	779	482	351	860	143,021	3,331
1992 Average		64	76	52	669	373	331	721	121,124	2,732
1993 Average	16	63	79	82	672	373	364	754	135,118	3,158
1994 Average		NA	NA	102	673	335	427	775	124,809	2,961
1995 Average		NA	NA	101	622	323	385	723	117,832	3,043
1996 Average	NA	NA	NA	108	671	306	464	779	129,045	3,425
1997 Average	NA	NA	NA	122	821	376	564	943	156,661	3,499
1998 January		NA	NA	133	860	380	609	993	15,000	3,476
February	NA	NA	NA	139	835	380	589	974	14,185	3,378
March		NA	NA	136	796	327	601	932	14,259	3,283
April	NA	NA	NA	138	748	291	591	886	13,389	3,268
May		NA	NA	133	722	272	580	855	13,059	3,396
June	NA	NA	NA	128	726	267	585	854	13,165	3,079
July		NA	NA	121	695	264	549	816	12,594	3,147
August		NA	NA	118	674	226	565	792	11,998	2,973
September	NA	NA	NA	118	656	215	559	774	11,601	2,973
October		NA	NA	111	623	214	519	734	11,703	2,602
November	NA	NA	NA	109	579	190	499	688	9.864	2,539
December		ŇÁ	NA	102	545	155	491	647	8,810	2,244
		NA NA	NA NA	123	703	264	560	827	149,627	3,030
Average	IVA	NA	NA.	123	703	204	300	021	149,027	3,030
1999 January		NA	NA	104	483	125	461	587	8,817	1,932
February		NA	NA	101	441	117	425	542	7,511	1,904
March	NA	NA	NA	106	420	114	412	526	7,438	1,994
April		NA	NA	99	397	125	371	496	7,052	2,054
May		NA	NA	102	414	136	380	516	7,362	2,076
June		NA	NA	100	458	124	434	558	7,870	2,133
July		NA	NA	99	489	108	478	588	8,250	2,391
August	NA	NA	NA	106	533	111	527	639	8,990	2,388
September	NA	NA	NA	109	587	130	565	696	9,781	2,445
October	NA	NA	NA	111	630	137	601	741	10,648	2,472
November	NA	NA	NA	119	663	145	635	782	12,082	2,472
December	NA	NA	NA	122	676	161	636	798	12,253	2,500
Average		NA	NA	106	519	128	496	625	108,054	2,230
2000 January	NA	NA	NA	125	650	143	632	775	14,693	2,250
February	NA NA	NA NA	NA	123	641	143	616	763	12,094	2,705
March	NA NA	NA NA	NA	124	649	173	600	773	13,443	2,734
		NA NA	NA NA			173	609			E 2,809
April 4-Month Average		NA NA	NA NA	125 124	680 655	196 165	613	805 779	11,772 52,002	E 2,625
_									52,002	
1999 4-Month Average 1998 4-Month Average		NA NA	NA NA	102 136	433 813	120 346	415 598	535 949	30,818 56,833	1,971 3,351

^a Rotary rigs in operation are reported weekly. Monthly data are averages Rotary rigs in operation are reported weekly. Monthly data are averages of 4- or 5- week reporting periods, not calendar months. Multi-month data are averages of the reported data over the covered months, *not* averages of the weekly data. Annual data are averages over 52- or 53- weeks, not calendar years. Published data are rounded to the nearest whole number.
 b Sum of oil, gas, and miscellaneous other rigs (not shown).
 c Values shown are totals.
 d See Glossary.

NA=Not available. E=Estimate.

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

Sources: Crews Engaged in Seismic Exploration: Society

Exploration Geophysicists, Tulsa, Oklahoma, Monthly Seismic Crew Count.
Rotary Rigs in Operation: By Site - Baker Hughes, Inc., Houston, Texas, Rotary Rigs Running--by State. By Type - Baker Hughes, Inc., Houston, Texas, weekly phone recording.

Total Footage Drilled: Energy Information Administration computations, which are based on well reports submitted to the American Petroleum Institute by the Petroleum Information Corporation, Denver, Colorado.

Active Well Servicing Units: 1976 - July 1998—Association of Energy Service Companies, Dallas, Texas, Field Reports; August 1998 forward—Guiberson Well Service Products, a Halliburton Company. Carrollton. Texas. Company, Carrollton, Texas.

Table 5.2 Oil and Gas Wells Drilled

(Number of Wells)

		Explo	ratory			Develo	pment			Total		
	Oil	Gas	Dry	Total	Oil	Gas	Dry	Total	Oil	Gas	Dry	Total
1973 Total	642	1,067	5,952	7,661	9,525	5,866	4,368	19,759	10,167	6,933	10,320	27,420
1974 Total	859	1,190	6,833	8,882	12,788	5,948	5,283	24,019	13,647	7,138	12,116	32,901
1975 Total	982	1,248	7,129	9,359	15,966	6,879	6,517	29,362	16,948	8,127	13,646	38,721
976 Total	1,086	1,346	6,772	9,204	16,602	8,063	6,986	31,651	17,688	9,409	13,758	40,855
977 Total	1,164	1,548	7,283	9,995	17,581	10,574	7,702	35,857	18,745	12,122	14,985	45,852
978 Total	1,171	1,771	7,965	10,907	18,010	12,642	8,586	39,238	19,181	14,413	16,551	50,145
979 Total	1,321	1,907	7,437	10,665	19,530	13,347	8,662	41,539	20,851	15,254	16,099	52,204
980 Total	1,764	2,081	9,039	12,884	30,875	15,252	11,599	57,726	32,639	17,333	20,638	70,610
981 Total	2,636	2,514	12,349	17,499	40,962	17,652	15,440	74,054	43,598	20,166	27,789	91,553
982 Total	2,431	2,125	11,247	15,803	36,768	16,854	14,972	68,594	39,199	18,979	26,219	84,397
983 Total	2,023	1,593	10,148	13,764	35,097	12,971	14,005	62,073	37,120	14,564	24,153	75,837
984 Total	2,198	1,521	11,278	14,997	40,407	15,606	14,403	70,416	42,605	17,127	25,681	85,413
985 Total	1,679	1,190	8,924	11,793	33,439	12,978	12,132	58,549	35,118	14,168	21,056	70,342
986 Total	1,084	793	5,549	7,426	18,013	7,723	7,129	32,865	19,097	8,516	12,678	40,291
987 Total	925	754	5,049	6,728	15,239	7,301	6,063	28,603	16,164	8,055	11,112	35,331
988 Total	855	732	4,693	6,280	12,781	7,823	5,348	25,952	13,636	8,555	10,041	32,232
989 Total	607	705	3,924	5,236	9,597	8,834	4,264	22,695	10,204	9,539	8,188	27,931
990 Total	654	689	3,715	5,058	11,544	10,355	4,598	26,497	12,198	11,044	8,313	31,555
991 Total	592	534	3,314	4,440	11,178	8,992	4,282	24,452	11,770	9,526	7,596	28,892
992 Total	493	423	2,513	3,429	8,264	7,786	3,605	19,655	8,757	8,209	6,118	23,084
993 Total	502	548	2,469	3,519	7,905	9,469	3,859	21,233	8,407	10,017	6,328	24,752
1994 Total	570	726	2,405	3,701	6,151	8,812	2,902	17,865	6,721	9,538	5,307	21,566
1995 Total	542	570	2,198	3,310	7,085	7,784	2,877	17,746	7,627	8,354	5,075	21,056
996 Total	483	570	2,136	3,189	7,831	8,732	3,146	19,709	8,314	9,302	5,282	22,898
997 Total	428	536	2,110	3,074	10,008	10,791	3,592	24,391	10,436	11,327	5,702	27,465
998 January	48	51	185	284	785	1,025	299	2,109	833	1,076	484	2,393
February	30	50	175	255	712	991	307	2,010	742	1,041	482	2,265
March	37	51	169	257	731	1,011	273	2,015	768	1,062	442	2,272
April	30	50	160	240 234	645	995	256	1,896	675	1,045	416	2,136
May	22 30	49 49	163 155	234 234	568 611	976 985	312	1,856	590	1,025	475	2,090
June		49 46				965 924	313	1,909	641	1,034	468	2,143
July	21		148	215	588 545		235	1,747	609	970	383	1,962
August	18 23	48 47	144 141	210 211	545 529	951 941	228 223	1,724 1,693	563 552	999 988	372 364	1,934 1,904
September	23 17	51	133	201	401	1,062	264	,	418		397	1,904
October	15	45	125	185	356	840	202	1,727 1,398	371	1,113 885	327	1,583
November	12	43	118	172	290	826	185	1,390	302	868	303	1,363
Total	303	579	1,816	2,698	6,761	11,527	3,097	21,385	7,064	12,106	4,913	24,083
999 January	11	37	104	152	284	746	163	1,193	295	783	267	1,345
February	^R 13	36	99	^R 148	R 215	715	155	R 1,085	228	751	254	1,233
March	9	35	96	140	234	762	151	1,147	243	797	247	1,287
April	_ 10	31	90	_ 131	_ 234	625	143	1,002	244	656	233	1,133
May	R 13	32	94	^R 139	R 252	640	151	R 1,043	265	672	245	1,182
June	10	37	102	149	290	730	164	1,184	300	767	266	1,333
July	15	40	113	168	292	805	181	1,278	307	845	294	1,446
August	9	45	117	171	371	886	182	1,439	380	931	299	1,610
September	19	58	127	204	350	941	199	1,490	369	999	326	1,694
October	11	60	158	229	479	1,006	190	1,675	490	1,066	348	1,904
November	12	91	143	246	515	1,031	223	1,769	527	1,122	366	2,015
December	_ 17	68	146	231	422	1,056	289	1,767	439	1,124	435	1,998
Total	R 149	570	1,389	R 2,108	R 3,938	9,943	2,191	R 16,072	4,087	10,513	3,580	18,180
000 January	R 11	R 53	142	R 206	R 490	R 1,064	221	R 1,775	501	1,117	363	1,981
February	R 12	58	139	R 209	R 458	1,037	261	R 1,756	470	1,095	400	1,965
March	R 17	54	141	R 212	R 518	1,009	222	R 1,749	535	1,063	363	1,961
April 4-Month Total	21 61	51 216	147 569	219 846	595 2,061	1,024 4,134	231 935	1,850 7,130	616 2,122	1,075 4,350	378 1,504	2,069 7,976
999 4-Month Total	43	139	389	571	967	2,848	612	4,427	1,010	2,987	1,001	4,998
998 4-Month Total	145	202	689	1,036	2,873	4,022	1,135	8,030	3,018	4,224	1,824	9,066

R=Revised. Notes: These well counts include only the original drilling of a hole intended to discover or further develop already discovered oil or gas resources. Other drilling activities, such as drilling an old well deeper, drilling of laterals from the original well, drilling of service and injection wells, and drilling for resources other than oil or gas are excluded. Due to the methodology used to estimate ultimate well counts from the available partially

reported data, the counts shown on this page are frequently revised. See end Geographic coverage is the 50 States and the District of

Energy Information Administration computations, which are based on well reports submitted by the Petroleum Information Corporation, Denver, Colorado.

Oil and Gas Resource Development Notes

Three well types are considered in the *Monthly Energy Review (MER)* drilling statistics: "completed for oil," "completed for gas," and "dry hole." Wells that productively encounter both crude oil and natural gas are categorized as "completed for oil." Both development wells and exploratory wells (new field wildcats, new pool tests, and extension tests) are included in the statistics. All other classes of wells drilled in connection with the search for producible hydrocarbons are excluded.

Prior to the March 1985 MER, drilling statistics consisted of completion data for the above types and classes of wells as reported to the American Petroleum Institute (API) during a given month. Due to time lags between the date of well completion and the date of completion reporting to the API, as-reported well completions proved to be an inaccurate indicator of drilling activity. During 1982, for example, as-reported well completions rose, while the number of actual completions fell. Consequently, the drilling statistics published since the March 1985 MER are

Energy Information Administration(EIA) estimates produced by statistically imputing well counts and footage based on the partial data available from the API. These estimates are subject to continuous revision as new data, some of which pertain to earlier months and years, become available. Additional information about the EIA estimation methodology may be found in "Estimating Well Completions," the feature article published in the March 1985 *MER*.

Users of the well completion and footage figures published by the Energy Information Administration (EIA) prior to August 1998 should be aware that these data have been revised. The published well completion and footage figures are produced by the Well Completion Estimation Procedure (WELCOM) based on drilling records provided under contract to the EIA. Problems in the files received by EIA necessitated revision of the historical series for well completions and footage drilled. Queries regarding this matter may be directed to William Trapmann (202-586-6408 or william.trapmann@eia.doe.gov).

Section 6. Coal

Coal production in April 2000 totaled 88 million short tons, I percent lower than in April 1999. Coal production during the first 4 months of 2000 totaled 363 million short tons, 3 percent lower than production during the first 4 months of 1999.

Coal consumed by the electric power sector in February 2000 totaled 77 million short tons, 10 percent higher than the level in February 1999.

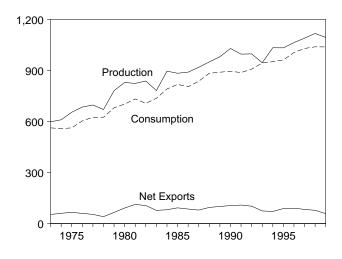
Electric utility coal stocks were 128 million short tons at the end of February 2000, slightly higher than the level a year earlier.

Coal exports in February 2000 totaled 4 million short tons, 4 percent lower than exports in February 1999. Coal imports in February 2000 totaled 698 thousand short tons, 4 percent lower than imports in February 1999.

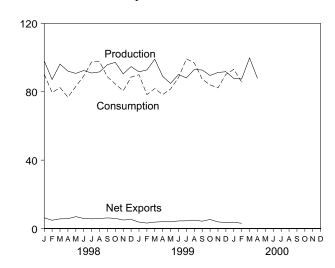
Figure 6.1 Coal

(Million Short Tons)

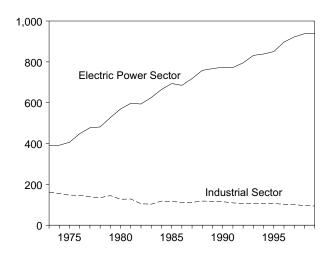
Overview, 1973-1999



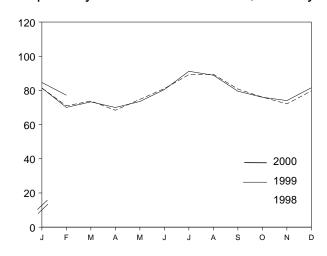
Overview, Monthly



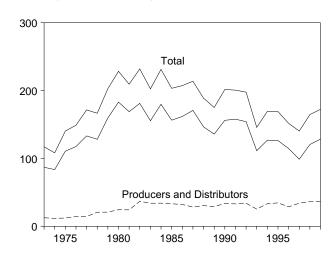
Consumption by Sector, 1973-1999



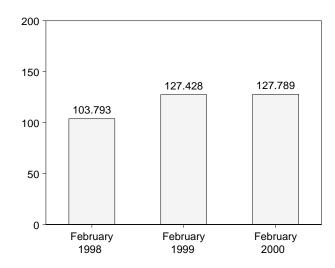
Consumption by Electric Power Sector, Monthly



Stocks, End of Year, 1973-1999



Stocks at Electric Utilities, End of Month



Note: Because vertical scales differ, graphs should not be compared. Sources: Tables 6.1, 6.2, and 6.3.

Table 6.1 Coal Overview

(Thousand Short Tons)

	Production	Consumption	Imports ^a	Exports	Stocksb
973 Total	598,568	562,584	127	53,587	117,155
			2,080		
74 Total	610,023	558,402		60,661	108,237
75 Total	654,641	562,640	940	66,309	140,391
76 Total	684,913	603,790	1,203	60,021	148,899
77 Total	697,205	625,291	1,647	54,312	171,543
78 Total	670,164	625,225	2,953	40,714	166,606
79 Total	781,134	680,524	2,059	66,042	202,812
80 Total	829,700	702,730	1,194	91,742	228,407
81 Total	823,775	732,627	1,043	112,541	209,423
	838.112	706,911	742	106,277	232,038
82 Total					
83 Total	782,091	736,672	1,271	77,772	202,584
84 Total	895,921	791,296	1,286	81,483	231,300
85 Total	883,638	818,049	1,952	92,680	203,367
986 Total	890,315	804,231	2,212	85,518	207,319
87 Total	918,762	836,941	1,747	79,607	213,780
88 Total	950,265	883,642	2,134	95,023	188,831
89 Total	980,729	889,699	2,851	100,815	175,087
90 Total	1,029,076	895,480	2,699	105,804	201,629
91 Total	995,984	887,621	3,390	108,969	200,682
992 Total	997,545	^c 907,655	3,803	102,516	197,685
993 Total	945,424	944,081	8,181	74,519	145,742
994 Total	1,033,504	951,461	8,870	71,359	169,358
995 Total	1,032,974	962,039	9,473	88,547	169,083
996 Total	1,063,856	1,005,573	8,115	90,473	151,627
997 Total	1,089,932	1,029,228	7,487	83,545	140,374
	,,	,, -	, -	,.	-,-
98 January	98,054	90,258	705	6,984	143,918
February	87,180	79,514	447	5,300	149,268
March	96,198	82,481	687	6,337	155,541
April	92,094	76,851	792	6,548	162,829
	90,736	83,121	475	7,416	165,693
May					
June	92,442	89,233	925	6,785	162,676
July	90,971	97,452	804	6,463	155,181
August	91,618	97,649	813	6,709	150,086
September	95,845	88,744	528	6,726	151,642
October	97,205	84,549	791	6,726	156,115
November	90.460	80,563	784	5,773	162,323
December	94,733	88,559	973	6,280	164,602
Total	1,117,535	1,038,972	8,724	78,048	164,602
99 January	91.675	89.988	739	4.492	164.861
February	92,775	78,356	726	3,922	174,671
			720 782	•	
March	99,060	81,862		4,548	183,905
April	88,984	78,348	715	4,698	188,260
May	84,895	81,631	421	4,345	192,083
June	90,136	88,280	961	5,405	189,546
July	88,102	99,273	670	5,175	176,910
August	93,035	96,868	900	5,800	171,829
September	92,728	87,441	818	5,100	171,455
October	89.560	84,029	684	5,966	171,433
November	91,292	82,283	1,097	4,986	177,325
December	91,750	90,151	575	4,039	172,411
Total	1,093,993	1,038,512	9,089	58,476	172,411
000 January	87,810	93,146	1,002	4,710	166,287
February	87,477	85,682	698	3,765	173,584
March	99,824	NA	NA	NA	NA
April	87,890	NA	NA	NA	NA
4-Month Total	363,000	NA	NA	NA	NA
200 4-Month Total	272 404	220 EE4	2 062	17 650	100 260
99 4-Month Total	372,494	328,554	2,963	17,659 25,460	188,260
998 4-Month Total	373,526	329,104	2,631	25,169	162,829

a Includes Puerto Rico.

NA=Not available.

Notes: Data through 1997 are final. Subsequent data are preliminary. For methodology used to calculate production, consumption, and stocks, see Notes 1, 2, and 3 at end of section. Totals may not equal sum of components due to independent rounding. Geographic coverage is the 50 States and the District of Columbia.

Sources: See end of section for sources. Forecast values are derived from EIA's Short-Term Integrated Forecasting System. See Note 4 at end of

a Includes Puerto Rico.
 b Stocks held by electric utilities, coke plants, general industry, and coal producers and distributors at end of period. Excludes stocks held at retail dealers for consumption by the residential and commercial sector.
 c There is a discontinuity in this time series between 1991 and 1992; beginning in 1992, includes coal consumed by "Other Power Producers." See Table 6.2.

Table 6.2 Coal Consumption by Sector

(Thousand Short Tons)

			End-Use Secto	orsa		EI	Electric Power Sector				
	Residential	Calva	Industrial		_	Flootvio	Other				
	and Commercial	Coke Plants	Other	Total	Transportation	Electric Utilities	Power Producers ^{a,b}	Total	Total		
1973 Total	11,117	94,101	68,038	162,139	116	389,212	NA	^c 389,212	562,584		
1974 Total		90,191	64,903	155,094	80	391,811	NA	^c 391,811	558,402		
1975 Total	9,410	83,598	63,646	147,244	24	405,962	NA	^c 405,962	562,640		
1976 Total	8,916	84,704	61,787	146,491	12	448,371	NA	^c 448,371	603,790		
1977 Total		77,739	61,463	139,202	ູ 9	477,126	NA	^c 477,126	625,291		
1978 Total		71,394	63,085	134,479	(d)	481,235	NA	^c 481,235	625,225		
1979 Total		77,368	67,717	145,085	(d)	527,051	NA	^c 527,051	680,524		
1980 Total	-, -	66,657	60,347	127,004	(d)	569,274	NA	^c 569,274	702,730		
1981 Total	,	61,014	67,395	128,409	(d)	596,797	NA	°596,797	732,627		
1982 Total		40,908	64,097	105,005	(d)	593,666	NA	^c 593,666	706,911		
1983 Total		37,033	65,980	103,013	(d)	625,211	NA	^c 625,211	736,672		
1984 Total		44,022	73,745	117,767	(d)	664,399	NA NA	^C 664,399	791,296		
1985 Total		41,056	75,372	116,429	(d)	693,841	NA NA	^C 693,841	818,049		
1986 Total		35,924	75,583	111,508	(d)	685,056	NA NA	^C 685,056	804,231		
1987 Total 1988 Total		36,957 41,888	75,175 76,252	112,132 118,140	(d)	717,894 758,372	NA NA	^c 717,894 ^c 758,372	836,941 883,642		
1989 Total		40,508	76,232 76,134	116,643	(d)	766,888	NA NA	^c 766,888	889,699		
1990 Total		38,877	76,330	115,207	(d)	773,549	NA NA	^c 773,549	895,480		
1991 Total		33,854	75,405	109,259	(d)	772,268	NA NA	^c 772,268	887,621		
1992 Total		32,366	74,042	106,408	(d)	779,860	15,234	e795,094	e907,655		
1993 Total		31,323	74,892	106,215	\ d \	813,508	18,137	831,645	944,081		
1994 Total		31,740	75,179	106,919	(d)	817,270	21,260	838,529	951,461		
1995 Total		33,011	73,055	106,067	(d)	829,007	21,158	850,165	962,039		
1996 Total		31,706	70,941	102,647	(d)	874,681	22,239	896,921	1,005,573		
1997 Total		30,203	70,599	100,802	(d)	900,361	21,603	921,964	1,029,228		
1998 January	553	2,345	5,977	8,322	(^d)	79,520	^{RE} 1,863	81,383	90,258		
February		2,097	5,965	8,062	(d)	69,097	RE 1,904	71,001	79,514		
March	452	2,293	5,950	8,243	(d)	71,817	^{RE} 1,969	73,786	82,481		
April		2,456	5,598	8,054	(d)	66,474	RE 1,936	68,410	76,851		
May		2,508	5,571	8,079	(d)	72,867	RE 1,908	74,775	83,121		
June		2,275	5,565	7,840	(d)	79,016	RE 2,061	81,077	89,233		
July		2,403	5,451	7,855	(d)	87,189	RE 2,050	89,239	97,452		
August		2,453	5,411	7,864	(d)	87,064	RE 2,377	89,441	97,649		
September		2,316	5,368	7,684	(d)	78,078	RE 2,713	80,791	88,744		
October		2,454	5,727	8,181	(d)	73,407	^{RE} 2,679 ^{RE} 2,670	76,086	84,549		
November		2,207 2,381	5,763	7,970	(d)	69,452	RE 2,813	72,122	80,563		
December Total		28,189	5,774 68,119	8,154 96,308	(d)	76,887 910,867	RE 26,941	79,700 937,808	88,559 1,038,972		
		2,287	E 700	8,007	(d)	70 575	RE 2.853	81,428	89,988		
1999 January February		2,207	5,720 5,722	7,844	(d)	78,575 67,220	RE 2,839	70,059	78,356		
March		2,122	5,722 5,716	8,103	(d)	70,643	RE 2,665	70,059	81,862		
April		2,496	5,397	7,892	(d)	66,961	RE 3,053	70,014	78,348		
May		2,448	5,389	7,838	\ d \	70,285	RE 3,235	73,520	81,631		
June		2,128	5,389	7,517	(d)	76,507	RE 4.000	80,507	88,280		
July		2,363	5,314	7,677	(d)	87,020	RE 4,171	91,191	99,273		
August		2,351	5,301	7,652	(d)	84,729	RE 4,159	88,888	96,868		
September		2,310	5,358	7,668	(d)	75,520	RE 4,014	79,534	87,441		
October		2,389	5,357	7,746	(d)	71,938	RE 4,064	76,002	84,029		
November		2,352	5,415	7,767	(d)	69,353	RE 4.693	74,046	82,283		
December		2,476	5,400	7,876	(d) (d)	75,369	^{RE} 6,201	81,570	90,151		
Total		28,108	65,478	93,586	(d)	894,120	RE 45,950	940,070	1,038,512		
2000 January		2,320	5,546	7,866	(^d)	76,490	E 8,160	84,650	93,146		
February		2,301	5,682	7,983	(d)	69,692	E 7,500	77,192	85,682		
2-Month Total	1,137	4,621	11,228	15,849	(d)	146,181	15,660	161,841	178,827		
1999 2-Month Total		4,408	11,443	15,851	(d)	145,796	5,692	151,488	168,344		
1998 2-Month Total	1,005	4,442	11,942	16,384	(°)	148,616	3,767	152,383	169,772		

a Most of the coal consumption at nonutility cogeneration plants is included in

the end-use sectors.

b Nonutility wholesale producers of electricity, and nonutility cogeneration plants that are not included in the end-use sectors. Only annual data are collected; prior to 1998, monthly estimates are derived from the annual total's daily rate; for 1998

forward, monthly estimates are developed from industry analysis.

^c Electric utilities only.

^d After 1977, small amounts of coal consumed by the Transportation Sector are included in "Other" under the Industrial Sector.

^e There is a discontinuity in this time series between 1991 and 1992; beginning in 1992, includes coal consumed by "Other Power Producers."

R=Revised. E=Estimate. NA=Not available.

Notes: For sector-specific reporting and estimating information, see Note 2 at end of section. Data through 1997 are final. Subsequent data are preliminary. Totals may not equal sum of components due to independent rounding. Geographic coverage is the 50 States and the District of Columbia. Sources: See end of section for sources. Forecast values are derived from

EIA's Short-Term Integrated Forecasting System. See Note 4 at end of section.

Table 6.3 Coal Stocks

(Thousand Short Tons)

		Cons	sumer			
	Coke	Other	Electric	Tatala	Producers and	T-4-13
	Plants	Industrial	Utilities	Totala	Distributors	Totala
072 Vaar	6 000	10,370	96.067	404 625	40 500	447.455
973 Year	6,998		86,967	104,625	12,530	117,155
974 Year	6,209	6,605	83,509	96,603	11,634	108,237
975 Year	8,797	8,529	110,724	128,283	12,108	140,391
976 Year	9,902	7,100	117,436	134,678	14,221	148,899
977 Year	12,816	11,063	133,219	157,318	14,225	171,543
978 Year	8,278	9,048	128,225	145,911	20,695	166,606
979 Year	10,155	11,777	159,714	181,986	20,826	202,812
980 Year	9,067	11,951	183,010	204,028	24,379	228,407
981 Year	6,475	9,906	168,893	185,274	24,149	209,423
982 Year	4.642	9,479	181.132	195,254	36,784	232.038
	,-	8.710	- , -	168.654	,	. ,
983 Year	4,346	-, -	155,598		33,931	202,584
984 Year	6,166	11,317	179,727	197,211	34,090	231,300
985 Year	3,420	10,438	156,376	170,234	33,133	203,367
986 Year	2,992	10,429	161,806	175,226	32,093	207,319
987 Year	3,884	10,777	170,797	185,459	28,321	213,780
988 Year	3,137	8,768	146,507	158,413	30,418	188,831
989 Year	2,864	7,363	135,860	146,087	29,000	175,087
990 Year	3,329	8,716	156,166	168,210	33,418	201.629
991 Year	,	,	157,876	167,711	32,971	200,682
	2,773	7,061				
992 Year	2,597	6,965	154,130	163,692	33,993	197,685
993 Year	2,401	6,716	111,341	120,458	25,284	145,742
994 Year	2,657	6,585	126,897	136,139	33,219	169,358
995 Year	2,632	5,702	126,304	134,639	34,444	169,083
996 Year	2.667	5.688	114.623	122,979	28,648	151.627
997 Year	1,978	5,597	98,826	106,401	33,973	140,374
998 January	1.947	5,252	100.406	107,605	36,313	143.918
	, -		,			-,
February	1,916	4,906	103,793	110,615	38,653	149,268
March	1,885	4,561	108,101	114,547	40,994	155,541
April	1,922	4,571	116,231	122,724	40,105	162,829
May	1,958	4,582	119,936	126,476	39,217	165,693
June	1,995	4,593	117,758	124,345	38,331	162,676
July	2,010	4,810	109,540	116,360	38,821	155,181
August	2,026	5,028	103,720	110,774	39,312	150,086
	,	,	,	,	,	,
September	2,042	5,246	104,552	111,839	39,803	151,642
October	2,037	5,345	110,021	117,403	38,712	156,115
November	2,031	5,445	117,225	124,702	37,621	162,323
December	2,026	5,545	120,501	128,072	36,530	164,602
999 January	1,983	5,280	119,382	126,645	38,216	164,861
February	1,941	5,014	127,428	134,383	40,288	174,671
March	1,898	4,749	134,897	141,544	42,361	183,905
April	1,957	4,723	139,495	146,175	42,085	188,260
	2,016	4,696	143,561	150,274	41,809	192,083
May					,	
June	2,075	4,670	141,267	148,013	41,533	189,546
July	2,042	4,818	130,673	137,533	39,377	176,910
August	2,009	4,966	127,633	134,608	37,221	171,829
September	1,975	5,114	129,302	136,391	35,064	171,455
October	1,965	5,268	132,608	139,840	34,830	174,670
November	1,954	5,421	135,355	142,730	34,595	177,325
December	1,943	5,575	128,493	136,011	36,400	177,323 172,411
	,	•	•	,	,	•
000 January February	1,611	4,730	121,780 ^R 127,789	128,121	38,166	166,287 173,584
	1,648	4,439	1177 /8G	133,876	39,708	1/3 58/

 $^{^{\}rm a}$ Includes stocks held at retail dealers for consumption by the residential and commercial sector in thousand short tons: 1973—290; 1974—280; 1975—233; 1976—240; 1977—220; 1978—360; and 1979—340.

R=Revised.

Notes: Stocks are at end of period. For sector-specific reporting and estimating information, see Note 3 at end of section. Data through 1997

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

Sources: See end of section for sources. Forecast values are derived from EIA's Short-Term Integrated Forecasting System. See Note 4 at end of section.

Coal 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 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 by using the average number of tons of coal per railcar loaded reported in the most recent "Quarterly Freight Commodity Statistics" from the Surface Transportation Board. If an average coal tonnage per railcar loaded is not available for a specific railroad, the national average is used. To derive the estimate of total weekly production, the total rail tonnage for the week is divided by the ratio of quarterly production shipped by rail and total quarterly production. Data for the corresponding quarter of previous years are used to derive this ratio. This method ensures that the seasonal variations are preserved in the production estimates.

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 EIA's Quarterly Coal Report. Initial estimates of annual production published in January of the following year are based on preliminary production data covering the first 9 months (three quarters) and weekly/monthly estimates for the fourth quarter. The fourth quarter estimates may or may not be revised when preliminary data become available in March of the following year, depending on the magnitude of the difference between the estimates and the preliminary data. In any event, all quarterly, monthly, and weekly production figures are adjusted to conform to the final annual production data published in the Monthly Energy Review in the fall of the following year.

2. Consumption: Coal consumption data are reported by major end-use sector. Estimated data for the most recent months (designated by an "E") are derived from forecasted values shown in the EIA Short-Term Energy Outlook (DOE/EIA-0202) table titled "Supply and Disposition of Coal: Mid World Oil Price Case." The monthly estimates are one-third of the quarterly values shown in the then current issue of the publication, regularly released in February, May, October, and November. The estimates are revised quarterly as collected data become available from the data sources. Sector-specific information follows.

Residential and Commercial—Prior to 1980, monthly consumption estimates for the residential and commercial sector were derived by using reported data to modify baseline figures developed by the Bureau of Mines. From 1980-1987, monthly estimates were derived by proportioning

reported quarterly data by using the ratios of monthly-to-quarterly consumption data 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 temperature degree-days. Quarterly consumption data were taken directly from reported data and were defined as distribution to the residential and commercial sector as reported by coal producers and distributors on Form EIA-6. Beginning in January 1988, monthly residential and commercial consumption estimates are derived from reported quarterly data by using monthly national average population weighted heating/cooling degree-days obtained from the National Oceanic and Atmospheric Administration. The monthly ratios are the monthly national sum of heating and cooling degree-days as a proportion of the quarterly national sum. Quarterly consumption data are taken directly from reported data.

Coke Plants—Prior to 1980, monthly coke plant consumption data were taken directly from reported data. From 1980-1987, coke plant consumption estimates were derived by proportioning reported quarterly data by using the ratios of monthly-to-quarterly consumption data in 1979, the last year in which monthly data were reported. Beginning in January 1988, monthly coke plant consumption estimates are derived from the reported quarterly data by using monthly ratios of raw steel production data from the American Iron and Steel Institute. The ratios are the monthly raw steel production from open hearth and basic oxygen process furnaces as a proportion of the quarterly production from those kinds of furnaces.

Other Industrial—Prior to 1978, monthly consumption data for the other industrial sector (all industrial users minus coke plants) were derived by using reported data to modify baseline consumption figures from the most recent Bureau of the Census Annual Survey of Manufactures or Census of Manufactures. For 1978 and 1979, monthly estimates were derived from data reported on Forms EIA-3 and EIA-6. From 1980-1987, monthly figures were estimated by proportioning quarterly data by using the ratios of monthly-to-quarterly consumption data in 1979, the last year in which monthly data were reported on Form EIA-3. Quarterly consumption data were derived by adding beginning stocks at manufacturing plants to current receipts and subtracting ending stocks at manufacturing plants. In this calculation, current receipts were 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 data were included where appropriate. Starting in January 1988, monthly consumption for the other industrial sector is estimated from reported quarterly data by using ratios derived from industrial production indices published by the Board of Governors of the Federal Reserve System. Indices for six major industry groups are used as the basis for calculating the ratios: foods, Standard Industrial

Classification (SIC) 20; paper and products, SIC 26; chemicals and products, SIC 28; petroleum products, SIC 29; clay, glass, and stone products, SIC 32; and primary metals, SIC 33. The monthly ratios are computed as the monthly sum of the weighted indices as a proportion of the quarterly sum of the weighted indices by using the 1977 proportion as the weights.

Electric Utilities—Monthly consumption data for electric utility plants are taken directly from reported data.

3. Stocks: Coal stocks data are reported by major end-use sector. Estimated data for the most recent months (designated by an "E") are derived from forecasted values shown in the EIA Short-Term Energy Outlook (DOE/EIA-0202) table titled "U.S. Coal Supply and Demand: Mid World Oil Price Case." The monthly estimates are one-third of the quarterly values shown in the then current issue of the publication, regularly released in February, May, October, and November. The estimates are revised quarterly as collected data become available from the data sources. Sector-specific information follows.

Coke Plants—Prior to 1980, monthly stocks at coke plants were taken directly from reported data. From 1980 forward, coke plant stocks are 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.

Other Industrial—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. For 1978-1982, monthly estimates were derived by judgmentally proportioning reported quarterly data based on representative seasonal patterns of supply and demand. From 1983 forward, other industrial coal stocks are 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.

Electric Utilities—Monthly stocks data at electric utility plants are taken directly from reported data.

Producers and Distributors—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. Forecast Values: Data values preceded by "F" in this section are forecast values. They are derived from EIA's Short-Term Integrated Forecasting System (STIFS). The model is driven primarily by data and assumptions about key macroeconomic variables, the world oil price, and weather. The coal forecast relies on other variables as well, such as alternative fuel prices (natural gas and oil)

and power generation by sources other than fossil fuels, including nuclear and hydroelectric power. Each month, EIA staff review the model output and make adjustments, if appropriate, based on their knowledge of developments in the coal industry.

The STIFS model results are published semi-annually (April and October) in EIA's *Short-Term Energy Outlook*, which is available from the National Energy Information Center (202-586-8800). Monthly updates are accessible on the world wide web at http://www.eia.doe.gov. Documentation for the model and instructions for downloading and operating it on a personal computer are provided.

5. Additional Information: EIA's *Quarterly Coal Report* provides additional information about coal data and estimation procedures.

Sources for Table 6.1

Production

1973-September 1977—U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977 forward—Energy Information Administration, *Weekly Coal Production*.

Consumption

Table 6.2.

Imports and Exports

U.S. Department of Commerce, Bureau of the Census, Monthly Reports IM-145 (Imports) and EM-545 (Exports).

Stocks

Table 6.3.

Sources for Table 6.2

Residential and Commercial

1973-1976—U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook*.

January-September 1977—DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers-Upper Lake Docks."

October 1977-1979—Energy Information Administration (EIA), Form EIA-2, "Monthly Coal Report, Retail Dealers-Upper Lake Docks."

1980 forward—EIA, Form EIA-6, "Coal Distribution Report," quarterly.

Industrial—Coke Plants

1973-September 1977—DOI, BOM, *Minerals Year-book* and *Minerals Industry Surveys*.

October 1977-1980—EIA, Form EIA-5/5A, "Coke and Coal Chemicals-Monthly/Annual Supplement."

1981-1984—EIA, Form EIA-5/5A, "Coke Plant Report-Quarterly/Annual Supplement."

1985 forward—EIA, Form EIA-5, "Coke Plant Report-Quarterly."

Industrial-Other

1973-September 1977—DOI, BOM, *Minerals Year-book* and *Minerals Industry Surveys*.

October 1977-1979—EIA, Form EIA-3, "Monthly Coal Consumption Report-Manufacturing Plants." 1980 forward—EIA, Form EIA-3, "Quarterly Coal Consumption Report-Manufacturing Plants," and Form EIA-6, "Coal Distribution Report," quarterly.

Electric Utilities

1973-September 1977—DOI, BOM, *Minerals Year-book* and *Minerals Industry Surveys*.

October 1977 forward—EIA, Form EIA-759 (formerly Form FPC-4), "Monthly Power Plant Report."

Other Power Producers

Annual Data—EIA, Form EIA-860B (formerly Form EIA-867), "Annual Electric Generator Report - Nonutility."

Monthly Estimates—Through 1997, derived from the daily rate of each annual total. For 1998 forward, estimated by EIA from industry analysis.

Sources for Table 6.3

Coke Plants

1973-September 1977—U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977-1980—Energy Information Administration (EIA), Form EIA-5/5A, "Coke and Coal Chemicals-Monthly/Annual."

1981-1984—EIA, Form EIA 5/5A, "Coke Plant Report-Quarterly/Annual Supplement."

1985 forward—EIA, Form EIA-5, "Coke Plant Report-Quarterly."

Other Industrial

1973-September 1977—DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977-1979—EIA, Form EIA-3, "Monthly Coal Consumption Report-Manufacturing Plants."

1980 forward—EIA, Form EIA-3, "Quarterly Coal Consumption Report-Manufacturing Plants," and Form EIA-6, "Coal Distribution Report," quarterly.

Electric Utilities

1973-September 1977—DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977 forward—EIA, Form EIA-759 (formerly Form FPC-4), "Monthly Power Plant Report."

Section 7. Electricity

Overview. Electricity is produced by electric utilities and nonutility power producers. Electric utilities are the traditional, regulated part of the industry; nonutility power producers are the unregulated, highly competitive part of the industry. In general, nonutility power producers are expanding rapidly as the industry moves away from regulated entities.

In 1999, U.S. electricity net generation totaled 3.7 trillion kilowatthours. Electric utilities generated 3.2 trillion kilowatthours (87 percent of the total) and nonutility power producers generated 0.5 trillion kilowatthours (13 percent). The Nation imported 43 billion kilowatthours of electricity and exported 14 billion kilowatthours.

Net Generation. In February 2000, net generation of electricity totaled 295 billion kilowatthours, 237 billion kilowatthours at utilities and 58 billion kilowatthours at nonutilities. At utilities, fossil fuels (primarily coal) accounted for 66 percent of net generation, nuclear 25 percent, and renewable resources 9 percent. At nonutilities, fossil fuels (primarily natural gas) accounted for 77 percent of the generation, 19 percent from renewable resources (primarily wood), and 4 percent other resources.

Electric Utility Retail Sales. In February 2000, utilities sold a total of 269 billion kilowatthours of electricity to end users, 8 percent more than in February 1999.

In February 2000, residential consumers purchased 98 billion kilowatthours (36 percent of the total), industrial consumers 85 billion kilowatthours of electricity (32 percent), commercial users 78 billion kilowatthours (29 percent), and other users 9 billion kilowatthours (3 percent).

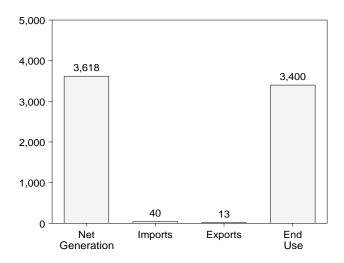
Consumption of Fossil Fuels. In February 2000, utilities consumed 69 million short tons of coal to generate electricity (3 percent more than in February 1999), 166 billion cubic feet of natural gas (11 percent more than a year earlier), and 6 million barrels of petroleum (55 percent less than a year earlier). Nonutility power producers consumed 10 million short tons of coal (146 percent more than a year earlier) and 247 billion cubic feet of natural gas (62 percent more than in February 1999).

Stocks of Coal and Petroleum. At the end of February 2000, electric utilities held 128 million short tons of coal and nonutility power producers held 17 million short tons, for total stocks of 145 million short tons. February 2000 total coal stocks were 8 percent above the level at the end of January 1999.

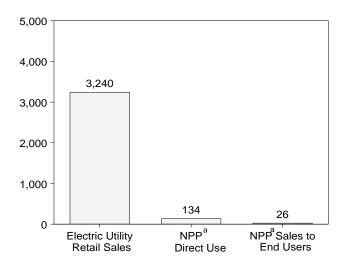
Figure 7.1 Electricity Overview

(Billion Kilowatthours)

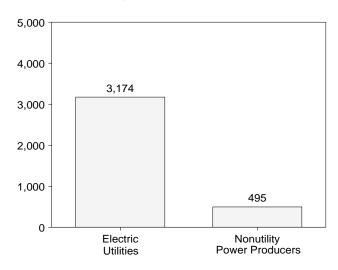
Overview, 1998



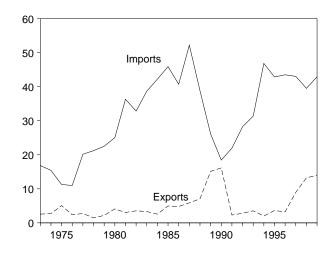
End Use, 1998



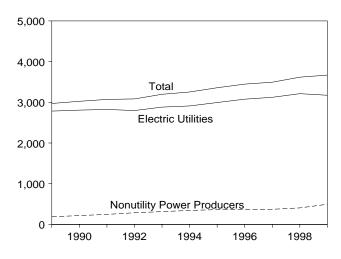
Net Generation, 1999



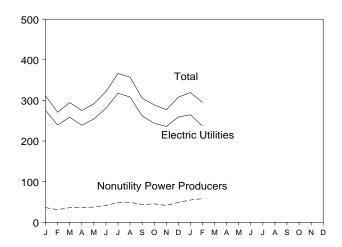
Trade, 1973-1999



Net Generation, 1989-1999



Net Generation, 1999 and 2000



^aNonutility power producers. Note: Because vertical scales differ, graphs should not be compared. Source: Table 7.1.

Table 7.1 Electricity Overview

(Billion Kilowatthours)

	Net Generation ^a						End Use					
		Nonutility				Losses and		Nonutility Po	wer Producers			
	Electric Utilities	Power Producers	Total	Imports ^b	Exportsb	Unaccounted for ^c	Electric Utility Retail Sales	Direct Sales to Used End Users				
1973 Total	1.861	NA	1,861	17	3	NA	1,713	NA	NA	NA		
1974 Total	1,867	NA	1,867	15	3	NA	1,706	NA	NA	NA		
1975 Total	1,918	NA	1,918	11	5	NA	1,747	NA	NA	NA		
1976 Total	2,038	NA	2,038	11	2	NA	1,855	NA	NA	NA		
977 Total	2.124	NA	2.124	20	3	NA	1,948	NA	NA	NA		
978 Total	2,206	NA	2,206	21	1	NA	2,018	NA	NA	NA		
979 Total	2,247	NA	2,247	23	2	NA	2,071	NA	NA	NA		
980 Total	2,286	NA	2,286	25	4	NA	2,094	NA	NA	NA		
981 Total	2,295	NA	2,295	36	3	NA	2,147	NA	NA	NA		
982 Total	2,241	ŇÁ	2,241	33	4	NA	2,086	NA	ŇÁ	NA		
983 Total	2,310	NA	2,310	39	3	NA	2,151	NA	NA	NA		
1984 Total	2,416	NA	2,416	42	3	NA	2,286	NA	NA NA	NA		
1985 Total	2,470	NA	2,470	46	5	NA	2,324	NA	NA NA	NA		
006 Total	2,487	NA NA	2,487	41	5	NA NA	2,369	NA	NA NA	NA		
986 Total		NA NA		52	6	NA NA		NA NA	NA NA	NA NA		
1987 Total	2,572		2,572				2,457					
1988 Total	2,704	NA	2,704	39	7	NA	2,578	NA	NA 840	NA		
1989 Total	2,784	e188	2,972	26	15	236	2,647	^e 83	^e 18	2,747		
1990 Total	2,808	e217	3,025	18	16	210	2,713	^e 84	e20	2,817		
1991 Total	2,825	e246	3,071	22	2	218	2,762	^e 100	e11	2,873		
992 Total	2,797	286	3,083	28	3	224	2,763	111	11	2,885		
1993 Total	2,883	314	3,197	31	4	236	2,861	111	16	2,988		
1994 Total	2,911	343	3,254	47	2	223	2,935	123	18	3,075		
1995 Total	2,995	363	3,358	43	4	235	3,013	134	16	3,162		
1996 Total	3,077	370	3,447	43	3	241	3,098	135	14	3,247		
1997 Total	3,123	372	3,494	43	9	240	3,140	131	18	3,289		
1998 January	265	NA	NA	3	1	NA	269	NA	NA	NA		
February	235	NA	NA	2	1	NA	247	NA	NA	NA		
March	257	NA	NA	3	1	NA	252	NA	NA	NA		
April	232	NA	NA	3	1	NA	238	NA	NA	NA		
May	265	NA	NA	3	1	NA	252	NA	NA	NA		
June	291	NA	NA	3	1	NA	282	NA	NA	NA		
July	318	NA	NA	5	1	NA	311	NA	NA	NA		
August	313	NA	NA	5	1	NA	317	NA	NA	NA		
September	279	NA	NA	4	1	NA	295	NA	NA	NA		
October	251	NA	NA	3	2	NA	264	NA	NA	NA		
November	239	NA	NA	2	1	NA	248	NA	NA	NA		
December	267	NA	NA	3	i	NA	265	NA	NA	NA		
Total	3,212	406	3,618	40	13	245	3,240	134	26	3,400		
999 January	275	36	311	2	2	NA	282	NA	NA	NA		
February	240	31	271	2	1	NA	250	NA	NA	NA		
March	259	36	295	3	ż	NA	260	NA	NA	NA		
April	239	36	275	4	1	NA	246	NA	NA	NA		
May	254	37	292	4	i	NA	253	NA	NA	NA		
June	280	41	322	4	i	NA	284	NA	NA	NA		
July	318	49	366	4	i	NA NA	323	NA NA	NA NA	NA		
August	308	49	357	4	1	NA NA	321	NA NA	NA NA	NA		
	262	49 44	306	5	1	NA NA	293	NA NA	NA NA	NA NA		
September	262 244		289	5 5								
October		45			1	NA NA	264	NA NA	NA NA	NA		
November	236	41	277	5	1	NA	251	NA	NA	NA		
December Total	259 3,174	49 495	308 3,668	4 43	1 14	NA NA	269 3,296	NA NA	NA NA	NA NA		
000 January	265	55	319	R 4	R 1	NA	286	NA	NA	NA		
February	237	58	295	4	1	NA NA	269	NA NA	NA NA	NA		
2-Month Total	502	113	614	8	1	NA NA	555	NA NA	NA NA	NA NA		
1999 2-Month Total	515	67	582	4	3	NA	533	NA	NA	NA		
OUU - MUILLI I I I I I I I I I I I I I I I I I	501	NA	NA	5	2	NA NA	516	NA	NA NA	NA		

^a Gross output of electricity (measured at the generator terminals) minus power

before 1992.

R=Revised. NA=Not available.

R=Revised. NA=Not available.

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

Sources: Net Generation: Tables 7.2-7.4. Imports and Exports: See end of section. Electric Utility Retail Sales: Table 7.5. Nonutility Power Producers End Use: 1989-1997: Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." 1998: EIA, Form EIA-860B, "Annual Electric Generator Report-Nonutility." 1999: EIA, Form EIA-900, "Monthly Nonutility Power Report." Losses and Unaccounted for and End Use Total: Calculated.

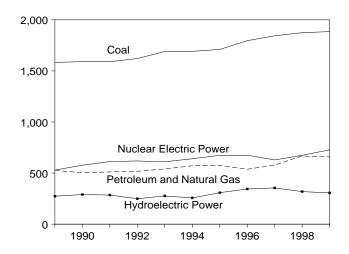
Calculated.

a Gross output of electricity (measured at the generator terminals) minus power plant use.
b Electricity transmitted across U.S. borders with Canada and Mexico.
c Energy losses that occur between the point of generation and delivery to the customer, and data collection frame differences and nonsampling error. See Note 11 at end of Section 2 for discussion on electrical system energy losses.
d Facility use of onsite net electricity generation.
e Data for 1989-1991 were collected for facilities with capacities of 5 megawatts or more. In 1992, the threshold was lowered to include facilities with capacities of 1 megawatt or more. Estimates of the 1-to-5 megawatt range for 1989-1991 were derived from historical data. The estimation did not include retirements that came on line occurred prior to 1992 and included only the capacity of facilities that came on line

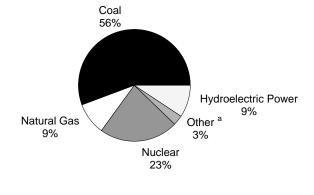
Electricity Net Generation Figure 7.2

(Billion Kilowatthours, Except as Noted)

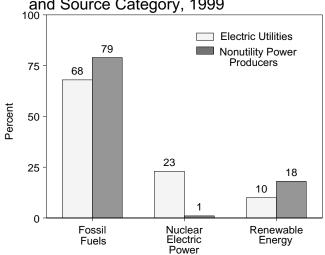
By Major Source, 1989-1999



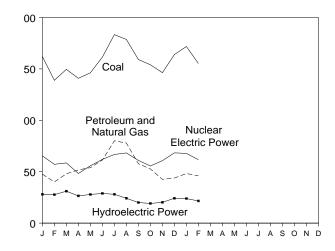
Electric Utility Sources, 1999



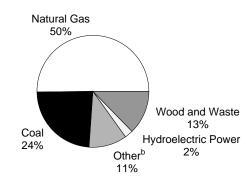
Shares of Net Generation by Producer Type and Source Category, 1999



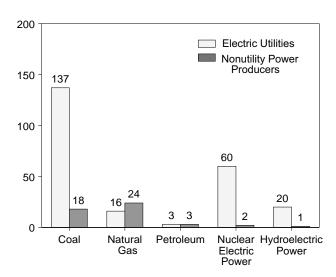
By Major Source, 1999 and 2000



Nonutility Power Producer Sources, 1999



By Selected Source, February 2000



Source: Table 7.2-7.4.

^aPetroleum, geothermal, wood, waste, wind, and solar. ^bPetroleum, other gas, geothermal, wind, solar, hydrogen, sulfur, batteries, chemicals, and purchased steam. Note: Because vertical scales differ, graphs should not be compared.

Table 7.2 Electricity Net Generation

(Million Kilowatthours)

	F	ossil Fuels						Re	newable	Energy			
	Coal ^a	Petro- leum ^b	Natural Gas ^c	Other Gas ^d	Nuclear Electric Power	Hydro- electric Pumped Storage ^e	Conven- tional Hydro- electric Power	Geo- thermal	Wood ^f	Waste ^g	Wind	Solarh	Total ⁱ
1989 Total	1.583.824	163,861	363,942	(^j)	529.402	(^k)	273.665	14.879	27,728	9,958	2,280	623	2.971.863
1990 Total	1.590.305	124,048	378,342	(i)	576,974	-3.508	293,013	15.788	30,413	13,163	3,035	646	3,024,867
1991 Total	1,589,940	118,957	392,590	(i)	612,642	-4,541	289,506	16,040	33,165	15,750	3,019	759	3,071,329
1992 Total	1.621.085	99,424	418,301	(i)	618,841	-4,177	253,088	16,422	35,580	17,777	2.888	727	3,083,367
1993 Total	1,690,010	112,353	428,417	(i)	610,367	-4,036	280,494	17,025	36,788	18,520	3,022	874	3,196,924
1994 Total	1,691,690	105,503	465,928	12,110	640,492	-3,378	260,166	16,756	37,804	19,084	3,447	803	3,253,799
1995 Total	1,710,176	75,260	498,541	13,506	673,402	-2,725	311,004	14,359	36,396	20,279	3,164	803	3,357,837
1996 Total	1,795,710	81,683	455,835	14,169	674,729	-3,088	347,448	15,126	36,779	20,672	3,376	879	3,446,994
1997 Total	1,844,104	93,025	485,440	11,175	628,644	-4,041	358,946	14,569	34,231	20,585	3,222	870	3,494,222
1998 Total	1,873,946	126,932	540,638	8,514	673,702	-4,441	323,330	14,726	31,789	21,286	2,988	856	3,617,873
1999 January	162,137	12,202	E 35,444	E 671	65,399	-554	28,568	1,231	3,921	1,935	178	2	311,135
February	138,923	9,632	E 30,413	^E 586	57,235	-357	28,071	1,024	3,187	1,833	174	5	270,726
March	149,581	10,385	E 37,589	E 655	58,578	-380	31,445	1,184	3,501	1,895	237	9	294,680
April	140,865	9,008	E 42,826	E 681	48,315	-464	26,932	1,175	3,387	2,033	321	18	275,095
May	146,190	9,687	E 44,266	E 684	55,809	-676	28,549	1,042	3,445	2,068	528	33	291,625
June	161,498	10,643	E 50,673	E 736	62,025	-571	29,476	1,199	3,320	2,008	519	56	321,583
July	183,393	14,495	E 65,571	E 920	R 66,804	-606	28,634	1,232	3,734	2,001	487	55	R 366,719
August	178,724	12,210	E 65,700	E 942	68,279	-761	24,923	1,270	3,630	1,957	404	55	357,333
September	159,153	8,078	E 49,713	E 841	61,029	-424	20,454	1,218	3,354	1,866	254	44	305,581
October	154,031	6,340	E 46,373	E 851	55,593	-472	19,601	1,261	3,568	1,714	173	25	289,058
November	146,365	4,868	E 37,681	E 775	60,749	-449	20,671	1,168	3,334	1,898	99	14	277,173
December	163,992	5,325	E 38,544	E 798	R 68,364	-393	24,565	1,234	3,430	1,919	256	5	R 308,039
Total	1,884,851	112,873	E 544,792	E 9,139	R 728,179	-6,107	311,889	14,239	41,812	23,125	3,630	323	R 3,668,747
2000 January	171,818	8,777	E 39,467	E 786	R 67,831	-523	24,421	1,228	3,481	1,829	298	3	R 319,417
February	155,254	6,054	E 39,986	E 878	61,688	-446	22,011	NA	NA	ΝA	NA	NA	295,012
2-Month Total	327,072	14,830	^E 79,453	E 1,664	129,519	-968	46,433	NA	NA	NA	NA	NA	614,429
1999 2-Month Total	301,059	21,834	E 65,857	E 1,257	122,634	-911	56,639	2,255	7,108	3,767	353	7	581,861

^a Coal, fine coal, anthracite culm, bituminous gob, lignite waste, tar coal, waste

waste, tall oil, waste alcohol, medical waste, paper pellets, sludge waste, solid byproducts, tires, agricultural byproducts, closed loop biomass, fish oil, and straw.

h Solar thermal and photovoltaic energy.

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

Sources: Tables 7.3 and 7.4.

This table represents the entire U.S. electric power sector. See Table 7.3 for electric utilities only. See Table 7.4 for nonutility power producers only.

coal, and coke breeze.

^b Fuel oil nos. 1, 2, 4, 5, and 6, crude oil, petroleum coke, kerosene, liquid butane, liquid propane, methanol, liquid byproducts, oil waste, sludge oil, and tar

oil.

^C Includes supplemental gaseous fuels, waste heat, and waste gas.

d Butane, propane, blast furnace gas, coke oven gas, refinery gas, and process

gas.

e Pumped storage facility production minus energy used for pumping.

f Wood, wood waste, black liquor, red liquor, spent sulfite liquor, pitch, wood sludge, peat, railroad ties, and utility poles.

g Municipal solid waste, landfill gas, methane, digester gas, liquid acetonitrile

Solar thermal and photovoltaic energy.

Data prior to 1999 include hydrogen, sulfur, batteries, chemicals, and purchased steam, which are not separately displayed on this table. Data for 1999 forward exclude these components.

^j Included in natural gas.

k Included in conventional hydroelectric power.

R=Revised. NA=Not available. E=Estimate.

Table 7.3 Electricity Net Generation at Electric Utilities

(Million Kilowatthours)

	F	ossil Fuels					F	Renewable	Energy			
	Coal	Petro- leum ^a	Natural Gas ^b	Nuclear Electric Power	Hydro- electric Pumped Storage ^c	Conven- tional Hydro- electric Power	Geo- thermal	Woodd	Waste ^e	Wind	Solar ^f	Total
1973 Total	847,651	314,343	340,858	83,479	(^g)	272,083	1,966	130	198	NA	0	1,860,710
1974 Total	828,433	300,931	320,065	113,976	(g)	301,032	2,453	68	182	NA	Ö	1,867,140
1975 Total	852,786	289,095	299,778	172,505	(g)	300,047	3,246	18	174	NA	0	1,917,649
1976 Total	944,391	319,988	294,624	191,104	(⁹)	283,707	3,616	84	182	NA	0	2,037,696
1977 Total	985,219	358,179	305,505	250,883	(g)	220,475	3,582	308	173	NA	0	2,124,323
1978 Total 1979 Total	975,742 1,075,037	365,060 303,525	305,391	276,403	(g)	280,419 279,783	2,978 3,889	197 300	140 198	NA NA	0	2,206,331 2,247,372
1980 Total	1,161,562	245,994	329,485 346,240	255,155 251,116	(g)	276,021	5,073	275	158	NA NA	0	2,286,439
1981 Total	1,203,203	206,421	345,777	272,674	(g)	260,684	5,686	245	123	NA	0	2,294,812
1982 Total	1,192,004	146,797	305,260	282,773	(g)	309,213	4,843	196	125	NA	Ŏ	2,241,211
1983 Total	1,259,424	144,499	274,098	293,677	(g)	332,130	6,075	216	163	3	0	2,310,285
1984 Total	1,341,681	119,808	297,394	327,634	(g)	321,150	7,741	461	425	12	0	2,416,304
1985 Total	1,402,128	100,202	291,946	383,691	(g)	281,149	9,325	743	640	16	0	2,469,841
1986 Total	1,385,831	136,585	248,508	414,038	(g)	290,844	10,308	492	685	18	0	2,487,310
1987 Total	1,463,781	118,493	272,621	455,270	(g)	249,695	10,775	783	694	14	0	2,572,127
1988 Total 1989 Total	1,540,653 1,553,661	148,900	252,801 266,598	526,973	(g)	222,940 265,063	10,300	936 972	738 993	10	0 3	2,704,250 2,784,304
1990 Total	1,559,606	158,318 117,017	264,089	529,355 576,862	-3,508	283,434	9,342 8,581	810	1,257	(s) (s)	2	2,808,151
1991 Total	1,551,167	111,463	264,172	612,565	-4,541	280,061	8,087	732	1,314	(s)	3	2,825,023
1992 Total	1,575,895	88,916	263,872	618,776	-4,177	243,736	8,104	816	1,276	(s)	3	2,797,219
1993 Total	1,639,151	99,539	258,915	610,291	-4,036	269,098	7,571	890	1,100	(s)	4	2,882,525
1994 Total	1,635,493	91,039	291,115	640,440	-3,378	247,071	6,941	765	1,224	(s)	3	2,910,712
1995 Total	1,652,914	60,844	307,306	673,402	-2,725	296,378	4,745	633	1,016	11	4	2,994,529
1996 Total	1,737,453	67,346	262,730	674,729	-3,088	331,058	5,234	788	1,179	10	3	3,077,442
1997 Total	1,787,806	77,753	283,625	628,644	-4,041	341,273	5,469	739	1,244	6	3	3,122,522
1998 January	156,658	6,390	16,352	57,889	-44	27,527	491	78	93	(s)	(s)	265,435
February	136,465	5,686	12,879	50,999	125	28,652	390	50	94	(s)	(s)	235,340
March	144,487	8,682	18,787	53,711	-15	30,268	487	58	111	(s)	(s)	256,575
April	132,282	6,817	18,479	47,503	-437	27,326	320	58	109	(s)	(s)	232,457
May	145,357	9,534	27,238	51,496	-727	31,708 30,892	288 354	62 32	120	(s)	(s)	265,077
June July	157,403 172,895	12,140 13,611	35,055 42,186	55,732 61,499	-675 -666	27,375	448	32 61	97 111	(s) 1	(s) (s)	291,029 317,521
August	172,348	13,042	42,837	60,369	-703	23,985	483	64	111	(s)	(s)	312,538
September	155,068	10,539	36,120	57,206	-272	19,893	474	63	107	(s)	(s)	279,198
October	144,436	7,339	23,927	57,429	-501	18,038	523	70	118	(s)	(s)	251,380
November	137,915	7,401	17,187	57,372	-528	19,123	466	55	97	(s)	(s)	239,089
December	152,166	8,977	18,175	62,497	4	24,058	451	68	136	(s)	(s)	266,532
Total	1,807,480	110,158	309,222	673,702	-4,441	308,844	5,176	719	1,305	3	3	3,212,171
1999 January	155,033	9,746	17,200	65,399	-548	27,679	414	70	99	2	(s)	275,093
February	133,065	7,700	14,482	57,235	-356	26,899	352	49	105	2	(s)	239,532
March	141,907	8,238	19,785	58,578	-377	30,061	397	39	107	2	(s)	258,737
April	133,566	6,947	24,328	48,315	-462	25,624	429	57	117	2	(s)	238,923
May	138,729	7,249	25,684	55,809	-672	27,224	14	75 52	124	1	(s)	254,238
June July	151,546 171,686	7,956 11,563	30,659 40,575	62,025 66,519	-558 -595	28,658 27,828	13 13	52 66	119 112	1 2	(s) (s)	280,471 317,770
August	167,063	9,727	40,373	67,842	-746	24,153	13	63	105	2	(s)	308,324
September	148,884	6,113	26,865	60,666	-407	19,623	13	56	103	2	(s)	261,922
October	141,960	5,061	23,250	55,099	-454	18,696	14	46	107	2	(s)	243,781
November	135,784	3,492	16,610	60,285	-434	19,876	13	61	106	2	(s)	235,794
December Total	148,455 1,767,679	3,139 86,929	16,841 296,381	67,265 725,036	-373 -5,982	23,595 299,914	14 1,698	50 684	102 1,307	3 23	(s) 3	259,090 3,173,674
10tai	1,101,013	00,323	230,301	123,030	-3,302	233,314	1,030	004	1,301		3	3,173,074
2000 January	152,517 137 164	5,057 3 184	18,096	66,051 60,053	-504 -430	23,312	14 13	44 59	105 107	2 2	(s)	264,692
February 2-Month Total	137,164 289,681	3,184 8,241	16,123 34,219	126,104	-430 -934	20,636 43,948	13 27	1 02	107 212	3	(s) (s)	236,911 501,603
1999 2-Month Total	288,098	17,446	31,682	122,634	-904	54,577	766	118	203	3		514,625
1998 2-Month Total	293,123	12,076	29,232	108,888	-904 80	56,178	881	129	188	(s)	(s) (s)	500,775

 $^{^{\}rm a}\,$ Fuel oil nos. 1, 2, 4, 5, and 6, crude oil, kerosene, and petroleum coke. $^{\rm b}\,$ Includes supplemental gaseous fuels.

Notes: Totals may not equal sum of components due to independent unding. Geographic coverage is the 50 states and the District of Columbia. Sources: See end of section. rounding.

Pumped storage facility production minus energy used for pumping.

d Wood, wood waste, wood liquors, pitch, wood sludge, peat, railroad ties, and

utility poles.

^e Municipal solid waste, landfill gas, methane, digester gas, waste alcohol, sludge waste, solid byproducts, and tires.

^f Solar thermal and photovoltaic energy.

g Included in conventional hydroelectric power.

NA=Not available. (s)=Less than 500 thousand kilowatthours.

Electricity Net Generation at Nonutility Power Producers Table 7.4

(Million Kilowatthours)

	F	ossil Fuels						Re	newable	Energy			
	Coal ^a	Petro- leum ^b	Natural Gas ^c	Other Gas ^d	Nuclear Electric Power	Hydro- electric Pumped Storage ^e	Conven- tional Hydro- electric Power	Geo- thermal	Wood ^f	Waste ^g	Wind	Solar ^h	Total ⁱ
1989 Total ^j	30.163	5.543	97,343	(k)	47	0	8.602	5,537	26,756	8.965	2.279	621	187.558
1990 Total	30,699	7,031	114,253	/ k \	113	Ö	9,580	7,207	29,603	11,906	3,035	644	216,716
1991 Total	38,773	7,494	128,419	(k)	77	Ö	9,446	7,953	32,433	14,435	3,019	756	246,306
1992 Total	45,189	10,508	154,429	(k)	65	0	9,352	8,318	34,764	16,500	2,887	724	286,148
1993 Total	50,859	12,814	169,502	(k)	76	Ö	11,396	9,454	35,898	17,420	3,022	870	314,399
1994 Total	56,197	14,464	174,813	12.110	52	0	13,095	9.816	37.039	17.860	3,447	799	343.087
1995 Total	57,261	14,416	191,235	13,506	0	0	14,626	9,614	35,763	19,263	3.153	799	363,308
1996 Total	58,257	14,337	193,106	14,169	0	0	16,390	9,892	35,991	19,493	3,366	876	369,552
1997 Total	56,298	15,272	201,816	11,175	0	0	17,673	9.100	33,492	19,341	3.216	866	371,700
1998 Total	66,466	16,775	231,415	8,514	0	0	14,486	9,550	31,070	19,981	2,985	854	405,702
1999 January	7,103	2,456	E 18,244	E 671	0	-6	889	817	3,852	1,836	176	2	36,041
February	5,858	1,932	E 15,931	E 586	0	-1	1,172	672	3,138	1,728	173	5	31,195
March	7,674	2,147	E 17,804	E 655	0	-3	1,384	788	3,462	1,788	235	9	35,943
April	7,299	2,061	E 18,498	E 681	0	-2	1,308	745	3,330	1,916	319	17	36,172
May	7,460	2,438	E 18,582	E 684	0	-4	1,325	1,028	3,370	1,945	527	33	37,387
June	9,952	2,687	E 20,013	E 736	0	-12	818	1,187	3,268	1,889	518	56	41,112
July	11,707	2,932	E 24,996	E 920	^R 285	-11	806	1,219	3,668	1,889	485	55	R 48,950
August	11,661	2,484	E 25,598	E 942	438	-14	770	1,257	3,567	1,852	402	55	49,010
September	10,269	1,966	E 22,848	E 841	363	-17	832	1,205	3,298	1,758	252	44	43,659
October	12,070	1,279	E 23,123	E 851	494	-18	905	1,247	3,522	1,607	171	25	45,277
November	10,581	1,376	E 21,071	E 775	465	-16	796	1,155	3,273	1,793	97	14	41,379
December	15,536	2,186	E 21,703	E 798	R 1,099	-20	971	1,220	3,381	1,817	253	5	R 48,950
Total	117,172	25,944	E 248,411	^E 9,139	^R 3,143	-124	11,975	12,541	41,128	21,818	3,607	320	^R 495,074
2000 January	19,301	3,720	E 21,371	E 786	R 1,780	-19	1,109	1,214	3,438	1,725	296	3	R 54,725
February	18,090	2,870	E 23,863	E 878	1,635	-16	1,376	ΝA	ΝA	ΝA	NA	NA	58,101
2-Month Total	37,390	6,590	E 45,234	E 1,664	3,416	-35	2,485	NA	NA	NA	NA	NA	112,826
1999 2-Month Total	12,961	4,389	E 34,175	E 1,257	0	-7	2,061	1,489	6,990	3,564	349	7	67,236

^a Coal, fine coal, anthracite culm, bituminous gob, lignite waste, tar coal, waste coal, and coke breeze.

b Fuel oil nos. 1, 2, 4, 5, and 6, crude oil, petroleum coke, kerosene, liquid

Notes: Due to restructuring of the electric power sector, the sale of generation assets is resulting in reclassification of plants from electric utility to nonutility plants. Totals may not equal sum of components due to independent rounding.

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

Sources: 1989-1991: Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." 1992 forward: EIA, Electric Power 1992 forward: EIA, Electric Power Monthly, May 2000, Table 58 (and for smaller components 1992-1997: EIA, Form EIA-867, "Annual Nonutility Power Producer Report"; 1998: EIA-860B, "Annual Electric Generator Report-Nonutility"; and 1999 forward: EIA-900, "Monthly Nonutility Power Report").

butane, liquid propane, methanol, liquid byproducts, oil waste, sludge oil, and tar oil.

C Includes waste heat and waste gas.

d Butane, propane, blast furnace gas, coke oven gas, refinery gas, and process

gas.

^e Pumped storage facility production minus energy used for pumping.

f Wood, wood waste, black liquor, red liquor, spent sulfite liquor, pitch, wood sludge, peat, railroad ties, and utility poles.

^g Municipal solid waste, landfill gas, methane, digester gas, liquid acetonitrile waste, tall oil, waste alcohol, medical waste, paper pellets, sludge waste, solid byproducts, tires, agricultural byproducts, closed loop biomass, fish oil, and straw.

Solar thermal and photovoltaic energy.

Data prior to 1999 include hydrogen, sulfur, batteries, chemicals, and purchased steam, which are not separately displayed on this table. Data for 1999 forward exclude these components.

^j Data for 1989-1991 were collected for facilities with capacities of 5 megawatts or more. In 1992, the threshold was lowered to include facilities with capacities of 1 megawatt or more. Estimates of the 1-to-5 megawatt range for 1989-1991 were derived from historical data. The estimation did not include retirements that occurred prior to 1992 and included only the capacity of facilities that came on line before 1992.

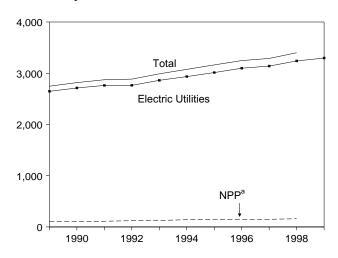
Included in natural gas.

R=Revised. NA=Not available. E=Estimate.

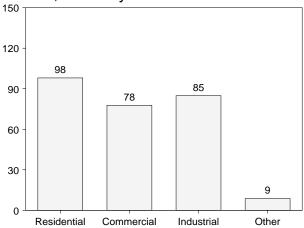
Figure 7.3 **Electricity End Use**

(Billion Kilowatthours)

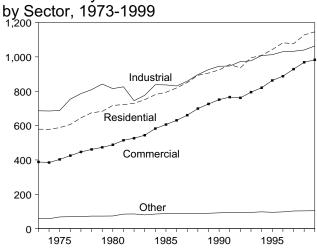
Electricity End Use Overview, 1989-1999



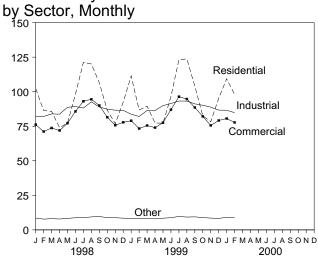
Electric Utility Retail Sales by Sector, February 2000



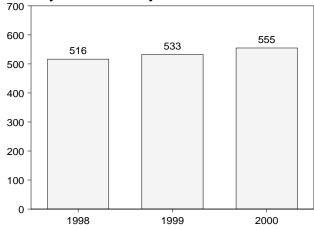
Electric Utility Retail Sales



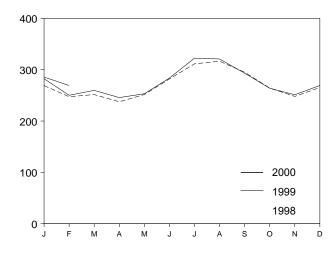
Electric Utility Retail Sales



Electric Utility Retail Sales Total, January and February



Electric Utility Retail Sales Total, Monthly



^aNonutility power plants direct use and sales to end users. Note: Because vertical scales differ, graphs should not be compared. Source: Table 7.5.

Table 7.5 Electricity End Use

(Million Kilowatthours)

		Elect	ric Utility Retail S	Sales		Nonutility Po	wer Producers	
	Residential	Commercial	Industrial	Othera	Total	Direct Use ^b	Sales to End Users	Total
973 Total	579,231	388,266	686,085	59,326	1,712,909	NA	NA	NA
974 Total	578,184	384,826	684,875	58,039	1,705,924	NA	NA	NA
975 Total	588,140	403,049	687,680	68,222	1,747,091	NA	NA	NA
976 Total	606,452	425,094	754,069	69,631	1,855,246	NA	NA	NA
977 Total	645,239	446,514	786,037	70,571	1,948,361	NA	NA	NA
978 Total	674,466	461,163	809,078	73,215	2,017,922	NA	NA	NA
979 Total	682,819	473,307	841,903	73,070	2,071,099	NA	NA	NA
980 Total	717,495	488,155	815,067	73,732	2,094,449	NA	NA	NA
981 Total	722,265	514,338	825,743	84,756	2,147,103	NA	NA	NA
982 Total	729,520	526,397	744,949	85,575	2,086,441	NA	NA	NA
983 Total	750,948	543,788	775,999	80,219	2,150,955	NA	NA	NA
984 Total	780.092	582,621	837,836	85,248	2,285,796	NA	NA	NA
985 Total	793.934	605,989	836,772	87,279	2,323,974	NA NA	NA NA	NA
986 Total	819,088	630,520	830,531	88,615	2,368,753	NA NA	NA NA	NA NA
987 Total	850,410	660,433	858,233	88,196	2,457,272	NA NA	NA NA	NA NA
988 Total	892,866	699,100	896,498	89,598	2,578,062	NA NA	NA NA	NA NA
989 Total	905,525	725,861	925,659	89,765	2,646,809	°82.742	°17.687	2,747,239
	924,019	725,661 751,027	945,522	91,988	2,712,555	°84,367	^c 19,824	2,747,239
990 Total	924,019 955,417	765,664	945,522 946,583	94,339	2,712,555	°84,367 °99,623	°19,824 °11,419	2,816,746
992 Total	935,939	761,271	972,714	93,442	2,763,365	110,988	10,786	2,885,140
993 Total	994,781	794,573	977,164	94,944	2,861,462	111,322	15,569	2,988,353
994 Total	1,008,482	820,269	1,007,981	97,830	2,934,563	123,283	17,626	3,075,472
995 Total	1,042,501	862,685	1,012,693	95,407	3,013,287	133,609	15,548	3,162,443
996 Total	1,082,491	887,425	1,030,356	97,539	3,097,810	134,644	14,284	3,246,738
997 Total	1,075,767	928,440	1,032,653	102,901	3,139,761	130,836	18,147	3,288,744
998 January	102,339	76,163	81,978	8,546	269,026	NA	NA	NA
February	86,374	71,142	82,101	7,771	247,387	NA	NA	NA
March	85,784	73,732	83,934	8,152	251,602	NA	NA	NA
April	74,000	71,918	83,751	7,870	237,539	NA	NA	NA
May	77,317	77,229	88,744	8,317	251,607	NA	NA	NA
June	98,249	85,717	89,234	8,787	281,986	NA	NA	NA
July	121,271	93,083	88,199	8,896	311,449	NA	NA	NA
August	120,066	94,493	92,650	9,373	316,581	NA	NA	NA
September	106,446	90,010	88,893	9,742	295,091	NA	NA	NA
October	86,621	81,465	87,372	8,771	264,230	NA	NA	NA
November	76,823	75,729	86,625	8,831	248,008	NA	NA	NA
December	92.446	77,848	86,558	8,461	265,313	NA	NA	NA
Total	1,127,735	968,528	1,040,038	103,518	3,239,818	134,041	25,777	3,399,637
999 January	111,393	78,978	83,693	8,375	282,440	NA	NA	NA
		73,308	82,068	8,043	250,190	NA NA	NA NA	NA NA
February	86,771			8,043 8,328		NA NA	NA NA	NA NA
March	89,520 77,276	75,522 73,996	86,372	8,328 7,988	259,743 245,732	NA NA	NA NA	NA NA
April	77,376		86,372					NA NA
May	77,201	77,582	89,915	8,457	253,155	NA NA	NA	
June	96,435	87,016	91,453	8,834	283,738	NA NA	NA	NA
July	123,171	96,411	93,253	9,718	322,552	NA	NA	NA
August	123,704	94,663	93,206	9,290	320,863	NA	NA	NA
September	104,035	88,565	91,181	9,422	293,203	NA	NA	NA
October	82,622	82,115	90,215	8,922	263,874	NA	NA	NA
November	78,296	75,548	88,831	8,534	251,209	NA	NA	NA
December	95,178	79,182	86,692	8,268	269,321	NA	NA	NA
Total	1,145,702	982,887	1,063,252	104,178	3,296,019	NA	NA	NA
000 January	109,341	80,554	86,583	9,159	285,637	NA	NA	NA
February	97,986	77,731	84,832	8,717	269,266	NA	NA	NA
2-Month Total	207,327	158,285	171,415	17,875	554,902	NA	NA	NA
999 2-Month Total	198,164	152,286	165,761	16,418	532,630	NA	NA	NA
998 2-Month Total	188,713	147,305	164,079	16,317	516,413	NA	NA	NA

^a Public street and highway lighting, other sales to public authorities, sales to

derived from historical data. The estimation did not include retirements that occurred prior to 1992 and included only the capacity of facilities that came on line

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

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

Sources: See end of section.

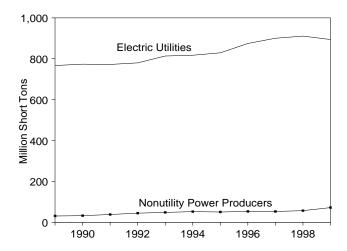
railroads and railways, and interdepartmental sales.

^b Facility use of onsite net electricity generation.

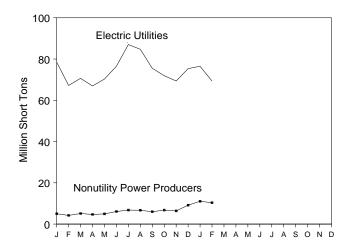
^c Data for 1989-1991 were collected for facilities with capacities of 5 megawatts or more. In 1992, the threshold was lowered to include facilities with capacities of 1 megawatt or more. Estimates of the 1-to-5 megawatt range for 1989-1991 were

Figure 7.4 Consumption of Fossil Fuels To Generate Electricity

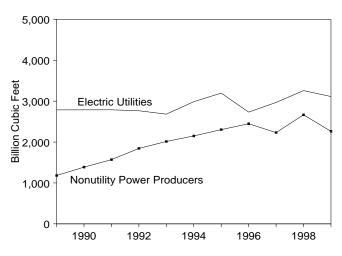
Coal Consumption, 1989-1999



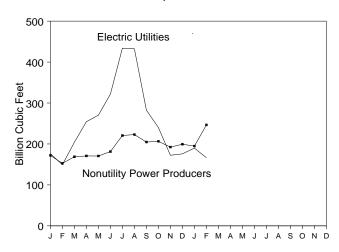
Coal Consumption, 1999 and 2000



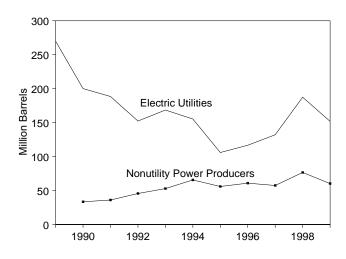
Natural Gas Consumption, 1989-1999



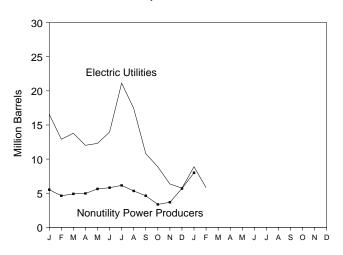
Natural Gas Consumption, 1999 and 2000



Petroleum^a Consumption, 1989-1999



Petroleum Consumption, 1999 and 2000



^aIncludes petroleum coke, converted at 5 barrels per short ton. Note: Because vertical scales differ, graphs should not be compared. Sources: Tables 7.7 and 7.8.

Table 7.6 Consumption of Fossil Fuels To Generate Electricity

			Petroleum		
	Coala	Liquids b	Petroleum Coke	Total ^c	Natural Gas ^d
	Thousand Short Tons	Thousand Barrels	Thousand Short Tons	Thousand Barrels	Million Cubic Feet
989 Total	797,650	295,828	NA	NA	3,968,027
990 Total	805,860	223,932	1,927	233,570	4,174,073
991 Total	810,387	212,768	2,351	224,521	4,358,864
992 Total	824,467	179,211	3.749	197,955	4,610,465
993 Total	861,851	199,414	4,402	221,426	4,696,228
994 Total	869,531	192,893	5,615	220,966	5,136,392
995 Total	879,336	137,181	4,949	161,927	5,500,451
996 Total	927,880	151,718	5,165	177,544	5,179,827
997 Total	953,274	160,740	5.764	189,561	5,199,816
998 Total	967,716	232,889	6,239	264,086	5,924,484
999 January	83,605	20,507	315	22,083	E 348,387
February	71,430	16,290	249	17,533	E 301,903
March	75,766	17,315	274	18,686	E 372,819
April	71,634	15,559	284	16,980	E 425,122
May	75,226	16,455	294	17,927	E 440,955
June	82,611	18,323	288	19,762	E 502,972
July	93,798	25,567	340	27,265	E 654,545
August	91,439	21,139	325	22,765	E 655,333
September	81,506	14,053	274	15,424	E 487,303
October	78,719	10,899	263	12,214	E 446,532
November	75,739	8,635	278	10,025	^E 364,731
December	84,528	9,375	414	11,443	_ ^E 375,267
Total	966,001	194,115	3,599	212,108	E 5,375,868
000 January	87,533	14,952	384	16,870	E 384,599
February	79,688	10,471	NA	NA	^E 412,951
2-Month Total	167,221	25,423	NA	NA	^E 797,550
999 2-Month Total	155,035	36,797	564	39,616	^E 650,290

^a Coal, fine coal, anthracite culm, bituminous gob, lignite waste, tar coal, waste coal, and coke breeze.

NA=Not available. E=Estimate.

Notes: Electric utility data are for fuels consumed to produce electricity only. Nonutility data prior to 1999 are for fuels consumed to produce electricity and useful thermal output; nonutility data for 1999 forward are for fuels consumed to produce electricity only.

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

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

Sources: Tables 7.7 and 7.8.

This table represents the entire U.S. electric power sector. See Table 7.7 for electric utilities only. See Table 7.8 for nonutility power producers only.

b Fuel oil nos. 1, 2, 4, 5, and 6, crude oil, kerosene, liquid butane, liquid propane, methanol, liquid byproducts, oil waste, sludge oil, and tar oil.

C Petroleum coke is converted at 5 barrels per short ton.

d Includes supplemental gaseous fuels.

Table 7.7 Consumption of Fossil Fuels To Generate Electricity at Electric Utilities

		Co	al				Petroleum			
	Anthra- cite ^a	Bituminous Coal ^b	Lignite	Total	Heavy Oil ^c	Light Oil ^d	Total Liquids	Petroleum Coke	Totale	Natural Gas ^f
		Thousand S	Short Tons		Th	nousand Barre	els	Thousand Short Tons	Thousand Barrels	Million Cubic Feet
1973 Total	1,443	376,975	10,794	389,212	⁹ 513,190	h 47,058	560,248	507	562,781	3,660,172
1974 Total	1,498	378,643	11,670	391,811	9 483 ,146	^h 53,128	536,274	625	539,399	3,443,428
1975 Total	1,480	388,523	15,960	405,962	9467,221	h38,907	506,128	70	506,479	3,157,669
1976 Total	1,350	425,205	21,817	448,371	9 514,077	^h 41,843 ^h 48,837	555,920	68 98	556,261	3,080,868
1977 Total 1978 Total	1,425 1,064	451,051 448,763	24,650 31,407	477,126 481,235	⁹ 574,869 ⁹ 588,319	h47,520	623,705 635,839	398	624,193 637,830	3,191,200 3,188,363
1979 Total	1,046	488,129	37,876	527,051	9492,606	h30,691	523,297	268	524,636	3,490,523
1980 Total	951	526,680	41,642	569,274	391,163	29,051	420,214	179	421,110	3,681,595
1981 Total	1,221	550,784	44,792	596,797	329,798	21,313	351,111	139	351,806	3,640,154
1982 Total	1,075	543,346	49,245	593,666	234,434	15,337	249,771	149	250,517	3,225,518
1983 Total	1,036	570,108	54,067	625,211	228,984	16,512	245,497	261	246,804	2,910,767
1984 Total	1,070 1,033	606,339 631,885	56,990 60.923	664,399 693.841	189,289 158,779	15,190 14.635	204,479 173,414	252 231	205,736 174,571	3,111,342 3,044,083
1985 Total 1986 Total	1,033 829	616,134	60,923 68,093	685.056	216.156	14,635	230.482	231 313	232.046	3,044,083 2.602.370
1987 Total	972	647,824	69,098	717,894	184,011	15,367	199,378	348	201,116	2,844,051
1988 Total	1,063	681,048	76,260	758,372	229,327	18,769	248,096	409	250,141	2,635,613
1989 Total	1,049	688,504	77,335	766,888	241,960	25,491	267,451	517	270,038	2,787,012
1990 Total	1,031	694,317	78,201	773,549	181,231	14,823	196,054	819	200,152	2,787,332
1991 Total	994	691,275	79,999	772,268	171,157	13,729	184,886	722	188,494	2,789,014
1992 Total	986 951	698,626 732,736	80,248 79,821	779,860 813,508	135,779 149,287	11,556 13,168	147,335 162,454	999 1,220	152,329 168,556	2,765,608 2,682,440
1993 Total 1994 Total	1,123	732,736	79,021	817,270	134,666	16,338	151,004	875	155,377	2,987,146
1995 Total	978	749,951	78,078	829,007	86,584	15,565	102,150	761	105,956	3,196,507
1996 Total	1,009	795,252	78,421	874,681	96,382	16,892	113,274	681	116,680	2,732,107
1997 Total	1,014	821,823	77,524	900,361	109,989	15,157	125,146	1,400	132,147	2,968,453
1998 January	84	72,384	7,051	79,520	9,014	1,062	10,076	156	10,855	171,149
February	75	63,061	5,960	69,097	8,185	831	9,016	122	9,629	133,757
March	84	65,942	5,791	71,817	12,707	1,215	13,921	125	14,547	194,258
April May	75 83	61,064 66.544	5,335 6.240	66,474 72.867	9,688 13.363	994 2.046	10,682 15,409	141 146	11,388 16.140	190,201 290.368
June	74	72,397	6,545	79.016	16.802	3.183	19.984	167	20.818	378.607
July	70	79,798	7,321	87,189	19,254	3,448	22,702	176	23,581	449,354
August	58	79,823	7,183	87,064	18,754	3,189	21,943	165	22,767	456,960
September	52	71,635	6,391	78,078	14,621	2,670	17,292	156	18,070	381,075
October	74	66,548	6,785	73,407	10,627	1,005	11,632	144	12,352	246,171
November	75 64	63,204	6,173	69,452	10,628	1,019	11,647	141	12,354	177,596
December Total	61 867	69,695 832,094	7,131 77,906	76,887 910,867	12,930 156,573	1,380 22,041	14,310 178,614	130 1,769	14,960 187,461	188,557 3,258,054
1999 January	84	71,649	6,842	78,575	13,563	2,355	15,919	130	16,570	176,375
February	87	61,212	5,921	67,220	11,484	888	12,372	108	12,910	149,319
March	102	65,226	5,314	70,643	12,004	1,092	13,096	137	13,782	204,107
April	93 2	61,603 64.237	5,264	66,961	9,730	1,672	11,403 11.609	123 138	12,019 12.301	254,337
May June	58	64,237 69,642	6,046 6.807	70,285 76,507	10,353 11,302	1,257 1,959	11,609	138	12,301	270,394 321,646
July	78	79,706	7,236	87,020	15,505	4,777	20,282	169	21,125	433,914
August	75	77,452	7,202	84,729	13,528	2,972	16,500	186	17,431	432,405
September	48	68,729	6,744	75,520	8,967	1,260	10,227	115	10,803	282,642
October	59	65,350	6,529	71,938	7,259	1,022	8,281	116	8,861	240,002
November	NA	62,848	6,505	69,353	4,598	1,215	5,813	108	6,353	172,408
December Total	NA 686	68,254 815,909	7,115 77,525	75,369 894,120	4,010 122,303	1,059 21,528	5,068 143,830	138 1,608	5,756 151,868	175,870 3,113,420
2000 January	NA	69,991	6,499	76,490	6,242	1,825	8,067	162	8,875	189,865
February	NA	62,970	6,357	69,327	4,150	1,004	5,154	132	5,813	166,419
2-Month Total	NA	132,961	12,856	145,817	10,392	2,829	13,221	294	14,689	356,284
1999 2-Month Total 1998 2-Month Total	171 160	132,862 135,445	12,763 13,012	145,796 148,616	25,047 17,199	3,244 1,893	28,290 19,092	238 278	29,480 20,484	325,694 304,906

petroleum are used as estimates for light oil consumption.

NA=Not available.

NA=Not available.

Notes: Totals may not equal sum of components due to independent rounding. Geographic coverage is the 50 States and the District of Columbia. Sources: 1973-September 1977: Federal Power Commission, Form FPC-4, "Monthly Power Plant Report." October 1977-1979: Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report." 1980-1988: Energy Information Administration (EIA), Electric Power Monthly, March issues. 1989 forward: EIA, Electric Power Monthly, May 2000, Table 14.

a Includes anthracite silt stored off-site.
b Includes subbituminous coal.
c For 1980 forward, fuel oil nos. 4, 5, and 6, and residual fuel oils.
d For 1980 forward, fuel oil nos. 1 and 2, kerosene, and jet fuel.
e Petroleum coke is converted at 5 barrels per short ton.
f Includes supplemental gaseous fuels.
g For 1973-1979, data for steam plant consumption of petroleum are used as estimates for beavy oil consumption. estimates for heavy oil consumption.

h For 1973-1979, data for gas turbine and internal combustion plant use of

Table 7.8 Consumption of Fossil Fuels To Generate Electricity at Nonutility Power **Producers**

			Petroleum		
	Coala	Liquids ^b	Petroleum Coke	Total ^c	Natural Gas ^d
	Thousand Short Tons	Thousand Barrels	Thousand Short Tons	Thousand Barrels	Million Cubic Feet
989 Total ^e	30,762	20.277	NA	NA	4 404 045
989 Total ^e	30,762 32,311	28,377 27,878	NA 1.108	33,418	1,181,015 1,386,741
990 Total ^e	32,311	27,878 27,882	1,108	33,418 36,027	1,569,850
991 Total	44,607	27,882 31,876	2,750	36,027 45,626	1,369,850
992 Total	48,343	36,960	2,750 3,182	52,870	2,013,788
994 Total	52,261	41,889	3,162 4,740	65,589	2,013,766
995 Total	50,329	35.031	4,740 4.188	55,971	2,149,246
996 Total	53,199	38,444	4,188	60,864	2,447,720
997 Total	52,913	35,594	4,364	57,414	2,231,363
998 Total	56,849	54,275	4,470	76,625	2,666,430
999 January	5.030	4,588	185	5,513	E 172.012
February	4,210	3,918	141	4,623	E 152,584
March	5,123	4,219	137	4,904	E 168,712
April	4.673	4.156	161	4.961	E 170,785
May	4,941	4,846	156	5,626	E 170,561
June	6,104	5,062	149	5,807	E 181,326
July	6,778	5,285	171	6,140	E 220,631
August	6,710	4,639	139	5,334	E 222,928
September	5,986	3,826	159	4,621	E 204,661
October	6,781	2,618	147	3,353	E 206,530
November	6,386	2,822	170	3,672	E 192,323
December	9,159	4,307	276	5,687	E 199,397
Total	71,881	50,285	1,991	60,240	E 2,262,448
000 January	11,043	6,885	222	7,995	^E 194,734
February	10,361	5,317	NA	ŇA	E 246,532
2-Month Total	21,404	12,202	NA	NA	E 441,266
999 2-Month Total	9,240	8,506	326	10,136	^E 324,596

^a Coal, fine coal, anthracite culm, bituminous gob, lignite waste, tar coal, waste coal, and coke breeze.

b Fuel oil nos. 1, 2, 4, 5, and 6, crude oil, kerosene, liquid butane, liquid

NA=Not available. E=Estimate.

Notes: Data prior to 1999 are for fuels consumed to produce both electricity and useful thermal output; data for 1999 forward are for fuels consumed to

produce electricity only. Due to restructuring of the electric power sector, the sale of generation assets is resulting in reclassification of plants from electric utility to nonutility plants. Totals may not equal sum of components due to independent rounding. Geographic coverage is the 50 States and the District of Columbia.

1989: Energy Information Administration (EIA), Form EIA-867, Source: "Annual Nonutility Power Producer Report." 1990 forward: EIA, Electric Power Monthly, May 2000, Table 67 (and for smaller components, 1990-1997: EIA, Form EIA-867, "Annual Nonutility Power Producer Report"; 1998: EIA, Form EIA-860B, "Annual Electric Generator Report-Nonutility"; and 1999 forward: EIA, Form EIA-900, "Monthly Nonutility Power Report").

propane, methanol, liquid byproducts, oil waste, sludge oil, and tar oil.

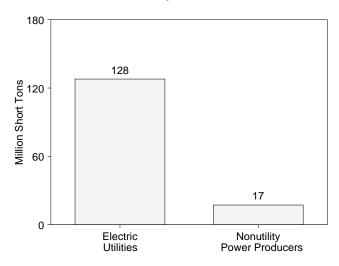
^C Petroleum coke is converted at 5 barrels per short ton.

d Natural gas only.

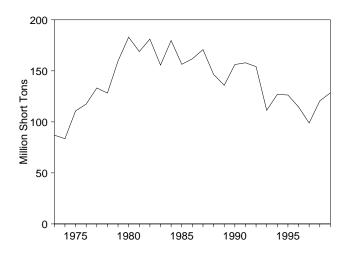
e Data for 1989-1991 were collected for facilities with capacities of 5 megawatts or more. In 1992, the threshold was lowered to include facilities with capacities of 1 megawatt or more.

Figure 7.5 Electric Power Sector Stocks of Coal and Petroleum

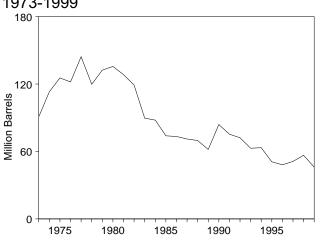
Coal Stocks, February 2000



Coal Stocks at Electric Utilities, 1973-1999

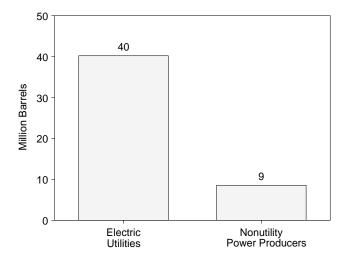


Petroleum^a Stocks at Electric Utilities, 1973-1999

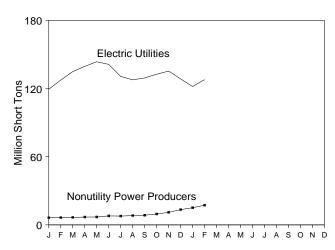


^aIncludes petroleum coke, converted at 5 barrels per short ton. Note: Because vertical scales differ, graphs should not be compared. Sources: Tables 7.9.

Petroleum Stocks, January 2000



Coal Stocks, 1999 and 2000



Petroleum Stocks, 1999 and 2000

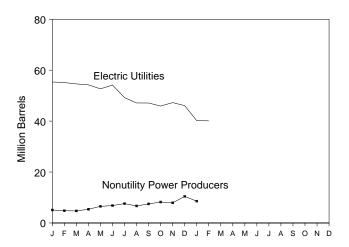


Table 7.9 Electric Power Sector Stocks of Coal and Petroleum

		Coal					Petrol	eum			
		Nonutility	Total Electric		Electric	Utilities		Nonutili	ty Power Pro	ducers	Total Electric
	Electric Utilities	Power Producers	Power Sector	Heavy Oil ^a	Light Oil ^b	Petroleum Coke	Total ^c	Liquids	Petroleum Coke	Total ^c	Power Sector
	The	ousand Short T	ons	Thousar	nd Barrels	Thousand Short Tons	Thousand Barrels	Thousand Barrels	Thousand Short Tons	Thousand Barrels	Thousand Barrels
4072 Total	96 067	NA	NA	^d 79,121	640.005	240	00.776	NA	NA	NA	NIA
1973 Total 1974 Total		NA NA	NA NA	d97,718	^e 10,095 ^e 15,199	312 35	90,776 113,091	NA NA	NA NA	NA NA	NA NA
1975 Total		NA NA	NA NA	d 108,825	e16,432	31	125,413	NA NA	NA	NA	NA NA
1976 Total		NA NA	NA	d 106,993	e14,703	32	121.857	NA	NA	NA	NA
1977 Total		NA NA	NA	d 124,750	e19.281	44	144,252	NA NA	NA	NA	NA NA
1978 Total		NA	NA	d 102,402	e16,386	198	119,778	NA	NA	NA	NA
1979 Total		NA	NA	d111,121	e20,301	183	132,338	NA	NA	NA	NA
1980 Total		NA	NA	105,351	30,023	52	135,635	NA	NA	NA	NA
1981 Total		NA	NA	102,042	26,094	42	128,345	NA	NA	NA	NA
1982 Total	181,132	NA	NA	95,515	23,369	41	119,090	NA	NA	NA	NA
1983 Total	155,598	NA	NA	70,573	18,801	55	89,652	NA	NA	NA	NA
1984 Total		NA	NA	68,503	19,116	50	87,870	NA	NA	NA	NA
1985 Total		NA	NA	57,304	16,386	49	73,933	NA	NA	NA	NA
1986 Total		NA	NA	56,841	16,269	40	73,313	NA	NA	NA	NA
1987 Total		NA	NA	55,069	15,759	51	71,084	NA	NA	NA	NA
1988 Total		NA	NA	54,187	15,099	86	69,714	NA	NA	NA	NA
1989 Total		NA	NA	47,446	13,824	105	61,795	NA	NA	NA	NA
1990 Total		NA	NA	67,030	16,471	94	83,970	NA	NA	NA	NA
1991 Total		NA	NA	58,636	16,357	70	75,343	NA	NA	NA	NA
1992 Total		NA NA	NA	56,135 46.760	15,714	67 89	72,183	NA NA	NA NA	NA	NA
1993 Total 1994 Total		NA NA	NA NA	46,769 46,342	15,674 16,644	69	62,889 63,331	NA NA	NA NA	NA NA	NA NA
1995 Total		NA NA	NA NA	35,102	15,392	65	50,821	NA NA	NA	NA	NA NA
1996 Total		NA NA	NA	32,473	15,216	91	48,146	NA	NA	NA	NA
1997 Total		NA	NA	33,336	15,456	469	51,138	NA	NA	NA	NA
1998 January	100,406	NA	NA	33,871	15,627	403	51,512	NA	NA	NA	NA
February	103,793	NA	NA	33,872	15,953	358	51,615	NA	NA	NA	NA
March	108,101	NA	NA	31,180	15,481	418	48,753	NA	NA	NA	NA
April		NA	NA	35,021	16,029	498	53,542	NA	NA	NA	NA
May		NA	NA	32,911	14,802	501	50,218	NA	NA	NA	NA
June		NA	NA	30,036	14,559	683	48,011	NA	NA	NA	NA
July		NA	NA	31,638	15,220	577	49,743	NA	NA	NA	NA
August		NA	NA	32,605	15,118	623	50,839	NA	NA	NA	NA
September		NA	NA	31,258	14,793	562	48,863	NA	NA	NA	NA
October November		NA NA	NA NA	35,409 37,059	15,881 16,162	588 602	54,231 56,233	NA NA	NA NA	NA NA	NA NA
December		NA	NA NA	37,447	16,343	559	56,586	NA NA	NA	NA	NA NA
1999 January	119,382	6,312	125,694	35,426	17,202	548	55,367	4,727	71	5,083	60,450
February	-,	6,399	133,827	35,246	17,058	568	55,143	4,483	66	4,812	59,955
March		6,578	141,475	35,055	16,841	540	54,594	4,522	43	4,735	59,329
April		6,889	146,384	33,821	17,457	592	54,240	4,652	146	5,380	59,620
May	143,561	6,939	150,500	32,676	17,046	592	52,680	5,710	163	6,525	59,205
June		7,910	149,178	33,447	17,264	690	54,162	5,945	179	6,839	61,002
July		7,732	138,405	30,247	15,812	633	49,225	6,757	169	7,602	56,827
August		8,173	135,806	27,983	16,302	570	47,137	6,046	128	6,685	53,822
September		8,475	137,778	27,839	16,503	553	47,108	6,791	138	7,480	54,588
October		9,566	142,174	26,647	16,736	507	45,919	7,594	125	8,220	54,139
November		11,008	146,363	28,677	16,413	435	47,263	7,336	114	7,908	55,171
December	128,493	13,417	141,911	27,763	16,549	355	46,089	9,721	145	10,448	56,537
2000 January		15,088	136,868	23,605	15,106	296	40,194	7,791	154	8,562	48,756
February	127,858	17,287	145,145	23,999	15,129	195	40,101	11,746	NA	NA	NA

^a Fuel oil nos. 4, 5, and 6, and residual fuel oils.

NA=Not available.

Notes: Stocks are at end of period. Data are for fuels available to produce

electricity; they may include some fuels available to produce useful thermal output at cogeneration plants. Nonutility facilities that are not required to report on Form EIA-900 are not included. Due to restructuring of the electric power sector, the sale of generation assets is resulting in reclassification of plants from electric utility to nonutility plants. Totals may not equal sum of components due to independent rounding. Geographic coverage is the 50 States and the District of Columbia. Sources: See end of section.

b Fuel oil nos. 1 and 2, kerosene, and jet fuel.

^c Petroleum coke is converted at 5 barrels per short ton.

d For 1973-1979, stocks held at steam plants are used as estimates for heavy

oil stocks.

^e For 1973-1979, stocks held at gas turbine and internal combustion plants are used as estimates for light oil stocks.

Sources for Table 7.1

Sources for Imports and Exports of Electricity

1973-September 1977: Unpublished Federal Power Commission data.

October 1977-1980: Unpublished Economic Regulatory Administration (ERA) data.

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 and 1983: DOE, ERA, *Electricity Exchanges Across International Borders*.

1984-1986: DOE, ERA, *Electricity Transactions Across International Borders*.

1987 and 1988: DOE, ERA, Form ERA-781R, "Annual Report of International Electrical Export/Import Data."
1989: DOE, Fossil Energy, Form FE-781R, "Annual Report of International Electrical Export/Import Data."
1990-1998: Mexico's data: DOE, Fossil Energy, Office of Fuels Programs, Form FE-781R, "Annual Report of International Electrical Export/Import Data." Canada's data (metered energy, firm and interruptible): the National Energy Board of Canada.

1999 forward: EIA estimates based on preliminary data from DOE, Fossil Energy, and actual data from the National Energy Board of Canada.

Sources for Table 7.3

1973-September 1977—Federal Power Commission Form FPC-4, "Monthly Power Plant Report."

October 1977-1979—Federal Energy Regulatory Commission (FERC), Form FPC-4, "Monthly Power Plant Report."

1980—Energy Information Administration (EIA), *Electric Power Monthly*, March 1991, Table 4, and (for geothermal energy and other) FERC, Form FPC-4, "Monthly Power Plant Report."

1981—EIA, Electric Power Monthly, March 1992, Table 4, and (for geothermal energy and other) FERC, Form FPC-4, "Monthly Power Plant Report." 1982—EIA, Electric Power Monthly, March 1993, Table 4, and (for geothermal energy and other) EIA,

Form EIA-759, "Monthly Power Plant Report." **1983-1989**—EIA, *Electric Power Monthly*, March 1994, Table 4, and (for small components) EIA, Form EIA-759, "Monthly Power Plant Report." **1990 forward**—EIA, *Electric Power Monthly*, May 2000, Tables 4 and 5, and (for small components) EIA, Form EIA-759, "Monthly Power Plant Report."

Sources for Table 7.5

1973-September 1977—Federal Power Commission (FPC), Form FPC-5, "Monthly Statement of Electric Operating Revenue and Income."

October 1977-February 1980—Federal Energy Regulatory Commission (FERC), Form FPC-5, "Monthly Statement of Electric Operating Revenue and Income." March 1980-1982—FERC, Form FPC-5, "Electric Utility Company Monthly Statement."

1983—Energy Information Administration (EIA), Form EIA-826, "Monthly Electric Utility Sales and Revenue Report with State Distributions" (formerly "Electric Utility Company Monthly Statement").
1984-1989—EIA, Form EIA-861, "Annual Electric

Utility Report. **1990 forward—EIA,** Electric Power Monthly, May 2000, Table 44.

Sources for Table 7.9

Electric Utilities

1973-September 1977—FPC, Form FPC-4, "Monthly Power Plant Report."

October 1977-1979—FERC, Form FPC-4 "Monthly Power Plant Report."

1980-1989—EIA, Electric Power Monthly, March issues.

1990 forward—EIA, *Electric Power Monthly*, May 2000, Table 21.

Nonutility Power Producers

EIA, Electric Power Monthly, May 2000, Table 71.

Section 8. Nuclear Energy

In February 2000, U.S. nuclear generating units produced a total of 62 net terawatthours (billion kilowatthours) of electricity, 8 percent higher than in February 1999. Nuclear units generated at an average capacity factor of 87.7 percent, the same as the capacity factor in February 1999.

Nuclear power supplied 20.9 percent of the total net generation of electricity in February 2000 compared with 21.1 in February 1999.

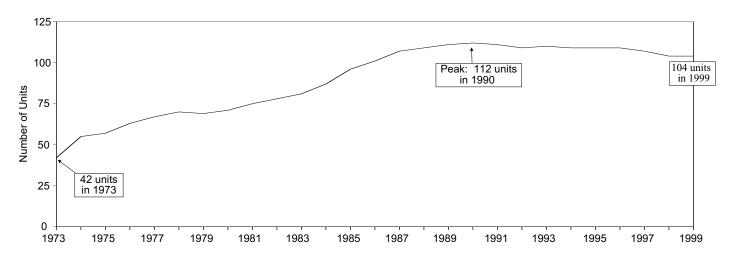
On February 29, 2000, there were 104 operable nuclear generating units in the United States, with a collective

net summer capability of 97.2 million kilowatts of electricity. Of the 104 operable units, 3 units generated no electricity during the month because of maintenance, refueling, or repair outage, and 73 units reported operating at 90 percent of capacity or more. Of these 73 units, 37 operated at 100 percent or greater (based on net summer capability).

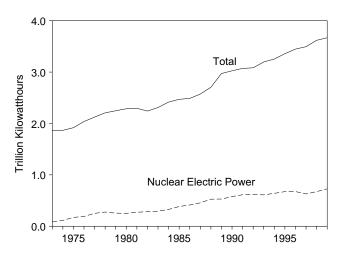
In addition, there were 3 other units with construction permits, although construction for all 3 units has been halted. The design capacity of the 3 units with construction permits was 3.6 million kilowatts.

Figure 8.1 Nuclear Power Plant Operations

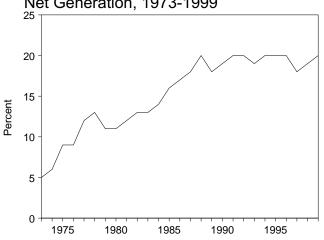
Operable Units, End of Year, 1973-1999



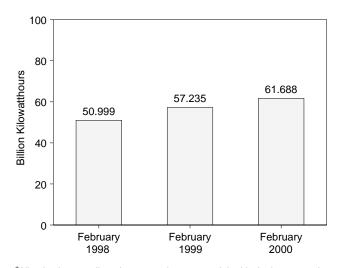
Electricity Net Generation, 1973-1999



Nuclear Share of Electricity Net Generation, 1973-1999

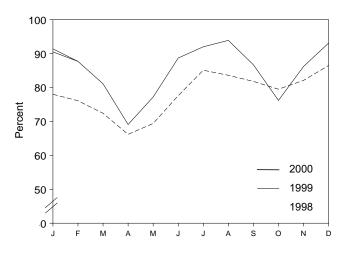


Nuclear Electricity Net Generation



^aAll units that contributed power to the commercial grid whether or not they were owned by an electric utility. See Note 1 at end of section for additional information.

Capacity Factor, Monthly



Note: Because vertical scales differ, graphs should not be compared. Sources: Tables 7.1, 8.1, and 8.2.

Table 8.1 Nuclear Power Plant Operations

	Nuclear Electricity Net Generation	Nuclear Share of Electricity Net Generation	Net Summer Capability of Operable Units ^{a,b}	Capacity Factor ^c
	Million Kilowatthours	Percent	Million Kilowatts	Percent
	Miowatthours	1 Clociti	Miowatto	1 Glociti
973 Year	83,479	4.5	22.683	53.5
974 Year	113,976	6.1	31.867	47.8
975 Year	172,505	9.0	37.267	55.9
976 Year	191,104	9.4	43.822	54.7
77 Year	250.883	11.8	46.303	63.3
78 Year	276,403	12.5	50.824	64.5
79 Year	255,155	11.4	49.747	58.4
80 Year	251,116	11.0	51.810	56.3
981 Year	272,674	11.9	56.042	58.2
82 Year	282,773	12.6	60.035	56.6
83 Year	293,677	12.7	63.009	54.4
84 Year	327,634	13.6	69.652	56.3
85 Year	383,691	15.5	79.397	58.0
86 Year	414,038	16.6	85.241	56.9
87 Year	455,270	17.7	93.583	57.4
88 Year		19.5	94.695	63.5
	526,973			
89 Year	^d 529,402	^d 17.8	^d 98.179	d 62.2
90 Year	576,974	19.1	99.642	66.0
91 Year	612,642	19.9	99.608	70.2
992 Year	618,841	20.1	99.004	70.9
93 Year	610,367	19.1	99.060	70.5
994 Year	640,492	19.7	99.148	73.8
95 Year	673,402	20.1	99.515	77.4
96 Year		19.6	100.784	76.2
	674,729			
997 Year	628,644	18.0	99.716	71.1
998 January	57,889	NA	99.716	78.0
February	50,999	NA	99.716	76.1
March	53,711	NA NA	99.716	72.4
	*			
April	47,503	NA	99.716	66.2
May	51,496	NA	99.716	69.4
June	55,732	NA	99.716	77.6
July	61,499	NA	97.070	85.1
August	60,369	NA	97.070	83.6
September	57,206	NA	97.070	81.8
October	57,429	NA	97.070	79.5
November	57,372	NA NA	97.070	82.1
December	62,497	NA 10.6	97.070	86.5
Year	673,702	18.6	97.070	78.2
99 January	65,399	21.0	97.155	90.5
February	57,235	21.1	97.155	87.7
		19.9		81.1
March	58,578		97.155	
April	48,315	17.6	97.155	69.1
May	55,809	19.1	97.155	77.2
June	62,025	19.3	97.155	88.7
July	R 66,804	18.2	97.155	92.0
August	68,279	19.1	97.155	93.9
September	61,029	20.0	97.155	86.7
October	55,593	19.2	97.155	76.2
November	60,749	21.9	97.155 97.155	86.2
	R 68,364			
December Year	R 728,179	22.2 19.8	97.155 97.155	93.1 85.5
. 301	. 20, 0	13.0	000	00.0
000 January	^R 67,831	21.2	97.155	91.4
February	61,688	20.9	97.155	87.7
2-Month Total	129,519	21.1	97.155	88.8
99 2-Month Total	122,634	21.1	97.155	89.1
98 2-Month Total	108,888	NA	99.716	77.1

R=Revised. NA=Not available.

Notes: The performance data shown in this table are based on a universe of reactor units that differs in some respects from the reactor universe used to profile the nuclear power industry in Table 8.2. See Note 1 at end of section for further discussion. Nuclear electricity net generation totals may not equal sum of components due to independent Geographic coverage is the 50 States and the District of rounding.

Columbia. Sources: See end of section.

b For the definition of "Net Summer Capability," see Note 2(a) at end of

section.

^C For an explanation of the method of calculating the capacity factor,

see Note 2 at end of section.

d Beginning in 1989, includes nonutility facilities.

Table 8.2 Nuclear Generating Units

	Orders ^a	Construction Permits ^b	Low Power Operating Licenses ^c	New Operable Units ^d	Shutdowns ^e	Total Operable Units ^f	Cancellations ⁹	Cumulative Cancellations
973 Year	42	14	12	15	0	42	0	7
974 Year	28	23	14	15	2	55	9	16
975 Year	4	9	3	2	0	57	13	29
976 Year	3	9	7	7	1	63	1	30
977 Year	4	15	4	4	0	67	10	40
978 Year	2	13	3	4	1	70	13	53
979 Year	0	2	0	0	1	69	6	59
980 Year	0	0	5	2	0	71	15	74
981 Year	0	0	3	4	0	75	9	83
982 Year	0	0	6	4	1	78	18	101
983 Year	0	0	3	3	0	81	6	107
984 Year	0	0	7	6	0	87	6	113
985 Year	0	0	7	9	0	96	2	115
986 Year	0	0	7	5	0	101	2	117
987 Year	0	0	6	8	2	107	0	117
988 Year	0	0 0	1	2	0 2	109	3	120
989 Year	0 0	0	3 1	4 2	1	111 112	0 1	120 121
990 Year	0	0	0	0	1	112	0	121
991 Year 992 Year	0	0	0	0	2	109	0	121
993 Year	0	0	1	1	0	110	0	121
994 Year	0	Ö	ò	Ö	1	109	1	122
995 Year	ŏ	Ŏ	1	Ö	ò	109	2	124
996 Year	ŏ	ŏ	ò	1	1	109	ō	124
997 Year	ŏ	Ö	Ŏ	Ö	2	107	Ö	124
998 January	0	0	0	0	2	105	0	124
February	0	0	0	0	0	105	0	124
March	0	0	0	0	0	105	0	124
April	0	0	0	0	0	105	0	124
May	0	0	0	0	0	105	0	124
June	0	0	0	0	0	105	0	124
July	0	0	0	0	1	104	0	124
August	0	0	0	0	0	104	0	124
September	0	0 0	0 0	0 0	0 0	104	0	124
October	0	0	0	0	0	104 104	0	124 124
November December	0	0	0	0	0	104	0	124
Year	0	0	0	0	3	104	0	124
999 January	0	0	0	0	0	104	0	124
February	Ö	Ö	Ö	Ö	Ö	104	Ö	124
March	Ö	Ö	Ö	Ö	Ö	104	Ö	124
April	Ō	0	0	0	0	104	0	124
May	0	0	0	0	0	104	0	124
June	0	0	0	0	0	104	0	124
July	0	0	0	0	0	104	0	124
August	0	0	0	0	0	104	0	124
September	0	0	0	0	0	104	0	124
October	0	0	0	0	0	104	0	124
November	0	0	0	0	0	104	0	124
December	0	0	0	0	0	104	0	124
Year	0	0	0	0	0	104	0	124
2000 January	0	0	0	0	0	104	0	124

a Placement of an order by a utility or government agency for a nuclear

grid whether or not they were owned by an electric utility. See Note 1 at end of section for additional information.

Sources: See end of section.

steam supply system.

b Issuance by regulatory authority of a permit, or equivalent permission, to begin construction. Numbers reflect permits issued in a given year, not extant

begin construction. Numbers reflect permits issued in a given year, not extant permits.

^c Issuance by regulatory authority of license, or equivalent permission, to conduct testing but not to operate at full power.

^d Issuance by regulatory authority of full-power operating license, or equivalent permission. Units generally did not begin immediate operation. See Note 1 at end of section.

 $^{^{\}rm e}$ Ceased operating permanently, irrespective of intent.

[†] Total of units holding full-power licenses, or equivalent permission to operate, at the end of the period. See Note 1 at end of section.

9 Cancellation by utilities of ordered units. Does not include three units

⁽Bellefonte 1 and 2 and Watts Bar 2) where construction has been stopped indefinitely.

Note: This table covers all units that contributed power to the commercial

Nuclear Energy Notes

1. In 1998 EIA undertook a major revision of the data categories in Table 8.2 to make them more relevant to current conditions and trends in the U.S. commercial nuclear electric power industry. To acquire the data for the revised categories it was necessary to develop a reactor unit database employing different sources than those used previously for Table 8.2 and still used for Table 8.1. Because of differences in definitions and tally protocols, the year-by-year tallies of operable reactors in the two databases diverge in some years, although this divergence does not change the overall trends.

The data in Table 8.2 apply to commercial nuclear power units, which means that the units contributed power to the commercial electricity grid whether or not they were owned by an electric utility. A total of 259 units ever ordered was identified. (Many of the orders were placed before 1973 and thus do not appear in the table. Annual data on orders and other characteristics from 1953 forward can be found in EIA's *Annual Energy Review 1998*, Tables 9.1 and 9.2.) Although most orders were placed by electric utilities, several units are or were ordered, owned, and operated wholly or in part by the Federal government, including BONUS (Boiling Nuclear Superheater Power Station), Elk River, Experimental Breeder Reactor 2, Hallam, Hanford N, Piqua, and Shippingport.

A reactor is generally defined as operable in Table 8.2 while it possessed a full-power license from the Nuclear Regulatory Commission or its predecessor the Atomic Energy Commission, or equivalent permission to operate, at the end of the year or month shown. The definition is liberal in that it does not exclude units retaining full-power licenses during long, non-routine shutdowns that for a time rendered them unable to generate electricity. For example:

In 1985 the five then-active Tennessee Valley Authority units (Browns Ferry 1, 2, and 3 and Sequoyah 1 and 2) were shut down under a regulatory forced outage. Browns Ferry 1 remains shut down and has been defueled, while the other units were idle for several years, restarting in 1991, 1995, 1988, and 1988, respectively. All five units are counted as operable during the shutdowns.

Shippingport was shut down from 1974 through 1976 for conversion to a light-water breeder reactor, but is counted as operable from 1957 until its retirement in 1982.

Calvert Cliffs 2 was shut down in 1989 and 1990 for replacement of pressurizer heater sleeves but is counted as operable during those years.

Exceptions to the definition are Shoreham and Three Mile Island 2. Shoreham was granted a full-power license in April 1989, but was shut down two months later and never restarted. In 1991, the license was

changed to Possession Only. Although not operable at the end of the year, Shoreham is treated as operable during 1989 and shut down in 1990, because counting it as operable and shut down in the same year would introduce a statistical discrepancy in the tallies. A major accident closed Three Mile Island 2 in 1979, and although the unit retained its full-power license for several years, it is considered permanently shut down since that year.

- 2. Capacity: Nuclear generating units may have more than one type of net capacity rating, including the following:
- (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 Design Capacity or Net Design Electrical Rating (DER)—The nominal net electrical output of a unit, specified by the utility and used for plant design.

The monthly capacity factors are computed as the actual monthly generation divided by the maximum possible generation for that month. The maximum possible generation is the number of hours in the month multiplied by the net summer capability at the end of the month. That fraction is then multiplied by 100 to obtain a percentage. Annual capacity factors are averages of the monthly values for that year.

Sources for Table 8.1

Nuclear Electricity Net Generation and Nuclear Share of Electricity Net Generation: Tables 7.2 and 7.3. Net Summer Capability of Operable Units: 1973-1982: Compiled from various sources, primarily DOE, Office of Nuclear Reactor Programs, "U.S. Central Station Nuclear Electric Generating Units: Significant Milestones." 1983 forward: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report," and monthly updates as appropriate. Capacity Factor: EIA, Office of Coal, Nuclear, Electric and Alternate Fuels.

Sources for Table 8.2

Orders: Energy Information Administration, Commercial Nuclear Power 1991, Appendix E, September 1991; Nuclear Energy Institute, Historical Profile of U.S. Nuclear Power Development, 1988 edition; U.S. Atomic Energy Commission, 1973 Annual Report to Congress, Volume 2, Regulatory Activities; various utilities. Construction Permits: Nuclear Regulatory Commission, Information Digest, 1997 edition, Appendix A; Nuclear Energy Institute, Historical Profile of U.S. Nuclear Power Development,

1988 edition; various utility, Federal, and contractor officials. Low-Power Operating Licenses: Nuclear Energy Institute, Historical Profile of U.S. Nuclear Power Development, 1988 edition; U.S. Department of Energy, Nuclear Reactors Built, Being Built, and Planned: 1995; various utility, Federal, and contractor officials. New Operable Units: Nuclear Regulatory Commission, Information Digest, 1997 edition, Table 11 and Appendices A and B; various utility, Federal, and contractor officials. Shutdowns: Energy Information Administration, Commercial Nuclear Power 1991, Appendix E; Nuclear Regulatory Commission, Information Digest, 1997 edition,

Appendix B; U.S. Department of Energy, Nuclear Reactors Built, Being Built, and Planned: 1995; Tennessee Valley Authority officials; various Nuclear Regulatory Commission documents. Total Operable Units: Running sum of new operable units minus permanent shutdowns. Cancellations: Energy Information Administration, Commercial Nuclear Power 1991, Appendix E, September 1991; Nuclear Regulatory Commission, Information Digest, 1997 edition, Appendix C; and Nuclear Energy Institute, Historical Profile of U.S. Nuclear Power Development, 1988 edition.

Section 9. Energy Prices

Crude Oil. The average price of domestic crude oil purchased at the wellhead was \$25.46 per barrel in February 2000, 197 percent above the level in February 1999. The refiner acquisition cost of imported crude oil in February 2000 was \$27.39 per barrel, 168 percent higher than the February 1999 level. The refiner acquisition cost of domestic crude oil in February 2000 was \$27.80, 153 percent more than the February 1999 average.

Motor Gasoline. The national city average retail price of unleaded regular gasoline at all types of stations was \$1.54 per gallon in March 2000, 55 percent higher than the price in March 1999. The price of unleaded premium gasoline averaged \$1.72 per gallon in March 2000, 45 percent higher than the price in March 1999.

Residual Fuel Oil. The average price, excluding taxes, of residual fuel oil sold to end users in February 2000 was 57 cents per gallon, 7 percent higher than the previous month's price and 122 percent above the February 1999 price. The average resale price, excluding taxes, of residual fuel oil in February 2000 was 55 cents per gallon, 12 percent above the previous month's price and 153 percent above the price 1 year earlier.

Aviation Fuel. The average price, excluding taxes, of aviation gasoline sold to end users in February 2000 was \$1.24 per gallon, 4 percent higher than the previous month's price and 46 percent higher than the February 1999 price. The average price, excluding taxes, of kerosene-type jet fuel sold to end users in February 2000 was 83 cents per gallon, 3 percent higher than the previous month's average price and 128 percent higher than the February 1999 average price.

No. 2 Distillate Fuel Oil. The February 2000 national average price, excluding taxes, of heating oil sold to residential customers was \$1.42 per gallon, 13 percent higher than the previous month's price and 78 percent higher than the February 1999 price. The average price of No. 2 fuel oil sold to all end users was 95 cents per gallon in February 2000, 10 percent higher than January 2000 and 135 percent higher than February 1999.

Electricity. The average price of electricity sold by electric utilities to all ultimate consumers in the United States in February 2000 was 6.29 cents per kilowatthour, 2 percent lower than the February 1999 mean price. The price of electricity sold to residential consumers in February 2000 averaged 7.68 cents per kilowatthour, 3 percent lower than the February 1999 price. The price of electricity sold to commercial consumers averaged 6.85 cents per kilowatthour in February 2000, 4 percent lower than the February 1999 price. The price of electricity sold to other consumers was 6.26 cents per kilowatthour, 2 percent lower than the February 1999 price. The price of electricity sold to industrial users in February 2000 averaged 4.18 cents per kilowatthour, 3 percent lower than the price 1 year earlier.

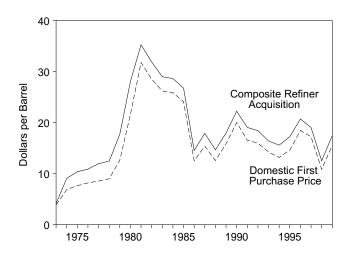
Beginning with January 1986, new series of national average price estimates were based on a statistically derived sample of both publicly and privately owned electric utilities. Previously, average price estimates were derived from selected privately owned electric utilities and were not national averages.

Natural Gas. The estimated average wellhead price of natural gas for January 2000 was \$2.12 per thousand cubic feet, 18 percent higher than the January 1999 price.

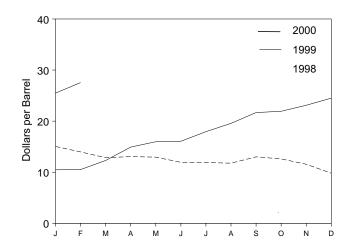
The average price of natural gas delivered to electric utility plants was \$2.63 per thousand cubic feet in December 1999 (latest date for which data are available), 18 percent higher than the December 1998 price. The average price of natural gas used by residential consumers in January 2000 was \$6.17 per thousand cubic feet, 3 percent higher than the January 1999 price. The average price of natural gas used by commercial consumers in January 2000 was \$5.06 per thousand cubic feet, slightly lower than the January 1999 price. The average price of natural gas used by industrial consumers in January 2000 was \$2.99 per thousand cubic feet, 3 percent below the January 1999 price.

Figure 9.1 Petroleum Prices

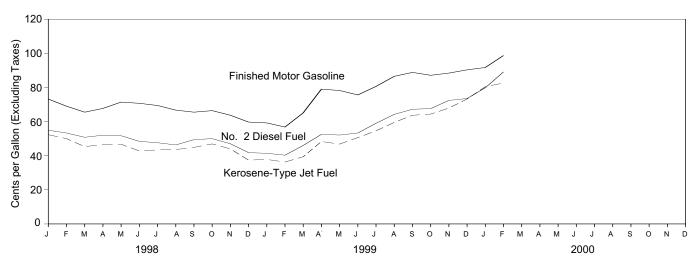
Crude Oil Prices, 1973-1999



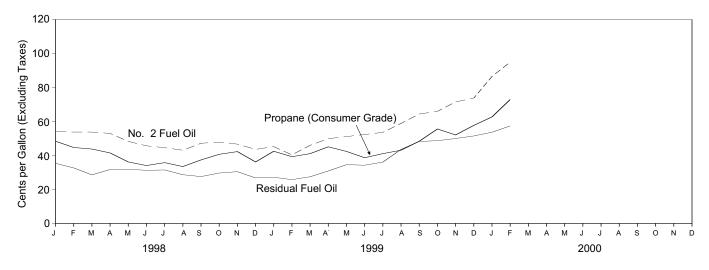
Composite Refiner Acquisition Cost, Monthly



Refiner Prices to End Users: Motor Gasoline, Diesel Fuel, and Jet Fuel, Monthly



Refiner Prices to End Users: No. 2 Fuel Oil, Propane, and Residual Fuel, Monthly



Sources: Tables 9.1, 9.5, and 9.7.

Table 9.1 Crude Oil Price Summary

(Dollars per Barrel)

				Re	efiner Acquisition Co	st ^a
	Domestic First Purchase Price ^b	F.O.B. Cost of Imports ^c	Landed Cost of Imports ^d	Domestic	Imported	Composite
973 Average	3.89	e 5.21	^e 6.41	^E 4.17	E 4.08	^E 4.15
974 Average	6.87	10.91	12.32	7.18	12.52	9.07
975 Average	7.67	11.18	12.70	8.39	13.93	10.38
976 Average	8.19	12.15	13.32	8.84	13.48	10.89
977 Average	8.57	13.24	14.36	9.55	14.53	11.96
978 Average	9.00	13.29	14.35	10.61	14.57	12.46
	12.64	20.07	21.45	14.27	21.67	17.72
979 Average980 Average	21.59	32.37	33.67	24.23	33.89	28.07
•	31.77	35.15	36.47	34.33	37.05	35.24
981 Average		32.02	33.18	34.33 31.22		
982 Average	28.52				33.55	31.87
983 Average	26.19	27.81	28.93	28.87	29.30	28.99
984 Average	25.88	27.60	28.54	28.53	28.88	28.63
985 Average	24.09	25.84	26.67	26.66	26.99	26.75
986 Average	12.51	12.52	13.49	14.82	14.00	14.55
987 Average	15.40	16.69	17.65	17.76	18.13	17.90
988 Average	12.58	13.25	14.08	14.74	14.56	14.67
989 Average	15.86	16.89	17.68	17.87	18.08	17.97
990 Average	20.03	20.37	21.13	22.59	21.76	22.22
991 Average	16.54	16.89	18.02	19.33	18.70	19.06
992 Average	15.99	16.77	17.75	18.63	18.20	18.43
993 Average	14.25	14.71	15.72	16.67	16.14	16.41
994 Average	13.19	14.18	15.18	15.67	15.51	15.59
995 Average	14.62	15.69	16.78	17.33	17.14	17.23
996 Average	18.46	19.32	20.31	20.77	20.64	20.71
997 Average	17.23	16.94	18.11	19.61	18.53	19.04
998 January	13.45	12.78	14.12	15.85	14.33	15.04
February	12.17	11.69	13.08	14.74	13.32	13.98
March	11.15	11.08	12.40	13.48	12.34	12.84
April	11.28	11.17	12.33	13.42	12.81	13.06
May	11.13	11.33	12.26	13.42	12.61	12.95
June	10.00	10.12	11.25	12.38	11.61	11.94
July	10.44	10.37	11.41	12.36	11.55	11.90
August	10.20	10.21	11.32	12.44	11.34	11.77
September	11.29	11.70	12.44	13.35	12.77	13.01
October	11.32	10.99	11.96	13.39	12.11	12.61
November	9.64	9.37	10.47	12.47	10.99	11.56
December	8.03	8.18	9.30	10.48	9.39	9.81
Average	10.87	10.76	11.84	13.18	12.04	12.52
999 January	8.59	9.15	10.16	10.96	10.16	10.47
February	8.58	9.37	10.63	10.97	10.22	10.52
March	10.75	11.85	12.92	12.29	12.31	12.30
April	12.84	14.14	15.06	15.05	14.85	14.92
May	13.84	14.40	15.52	16.59	15.57	15.97
June	14.34	15.10	16.10	16.30	15.91	16.06
July	16.13	17.30	18.13	18.10	17.84	17.94
August	17.58	19.14	19.77	19.57	19.56	19.56
September	20.10	21.04	21.70	21.74	21.64	21.68
October	19.71	20.89	21.78	22.39	21.62	21.93
November	21.35	22.43	23.02	23.07	23.14	23.11
December	22.55	22.43	23.71	24.73	24.35	24.51
Average	15.56	R 16.46	R 17.32	17.82	17.25	17.47
100 January	^R 23.53	^R 24.59	^R 25.44	^R 25.79	^R 25.29	^R 25.49
January	20.00	24.09	26.97	20.19	25.25	27.55

^a See Note 4 at end of section.

Notes: Values for Domestic First Purchase Price and Refiner Acquisition

Cost for the current month and for F.O.B. and Landed Costs of Imports for the current 2 months are preliminary. F.O.B. and landed costs through 1980 reflect the period of reporting; prices since then reflect the period of loading. Annual averages are the averages of the monthly prices, weighted by volume. Geographic coverage is the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, and all U.S. Territories and Possessions. Sources: See end of section.

b See Note 1 at end of section.

^c See Note 2 at end of section.

d See Note 3 at end of section.

^e Based on October, November, and December data only.

R=Revised. E=Estimate.

Table 9.2 F.O.B. Costs of Crude Oil Imports From Selected Countries

(Dollars per Barrel)

			Se	elected Cou	ntries			Persian		
	Angola	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela	Gulf Nations ^a	Total OPEC ^b	Total Non-OPEC
1973 Average ^c	w	w	NA	7.81	3.25	NA	5.39	3.68	5.43	4.80
1974 Average	11.87	W	w	12.44	10.17	NA	10.71	10.60	11.33	9.59
1975 Average	10.97	(d)	11.44	11.82	10.87	NA	11.04	10.88	11.34	10.62
1976 Average	12.02	(d)	12.22	13.08	11.62	W	11.39	11.65	12.23	11.70
1977 Average	13.29	(d)	13.42	14.44	12.38	14.11	12.63	12.56	13.29	12.97
1978 Average	13.32	(d)	13.24	14.05	12.70	13.82	12.38	12.77	13.31	13.23
1979 Average	19.85	(d)	20.27	21.69	17.28	21.70	16.90	18.77	19.88	20.92
1980 Average	33.45	W	31.06	35.93	28.17	34.36	24.81	28.92	32.21	32.85
1981 Average	35.55	(d)	33.01	38.31	32.60	36.06	28.95	33.00	35.17	35.12
1982 Average	31.86	(d)	28.08	35.13	33.73	33.42	23.74	33.55	33.48	30.58
1983 Average	28.14	(d)	25.20	29.81	27.53	29.91	21.48	27.70	28.46	27.20
1984 Average	27.46	(")	26.39	29.51	27.67	28.87	24.23	27.48	27.79	27.45
1985 Average	26.30	(d)	25.33	28.04	22.04	27.64	23.64	23.31	25.67	25.96
1986 Average	13.30	12.34	11.84	14.35	11.36	13.84	10.92	11.35	12.21	12.87
1987 Average	17.27	17.84	16.36	18.47	15.12	18.28	15.08	15.97	16.43	16.99
1988 Average	13.70	13.61	12.18	15.16	12.16	14.80	12.96	12.38	13.43	13.05
1989 Average	17.66 20.23	17.89 20.75	15.96 19.26	18.31 22.46	16.29 20.36	17.89 23.43	16.09 19.55	16.61 18.54	17.06 20.40	16.72 20.32
1990 Average	20.23 18.47	18.49	15.37	20.29	14.62	20.81	14.91	15.22	16.99	20.32 16.77
1991 Average 1992 Average	18.41	18.02	15.26	19.98	15.85	19.61	14.39	16.35	16.87	16.66
1993 Average	16.23	15.87	13.74	17.79	13.77	16.64	12.46	14.21	14.78	14.65
1994 Average	15.40	14.99	13.68	16.32	14.12	15.66	12.21	13.97	14.00	14.34
1995 Average	16.58	16.73	15.64	17.40	W	16.94	13.86	W	15.36	16.02
1996 Average	20.71	21.33	19.14	21.27	19.28	19.43	17.73	19.22	18.94	19.65
1997 Average	18.81	18.85	16.72	19.43	15.16	18.59	15.33	15.24	16.26	17.51
1998 January	14.52	15.36	12.08	15.21	W	W	11.26	W	12.26	13.14
February	13.13	14.27	11.47	13.77	W	W	10.24	W	11.35	12.10
March	12.53	13.10	9.77	13.56	W	W	9.70	W	10.93	11.22
April	12.93	13.48	11.01	13.86	W	W	10.32	7.80	10.58	11.63
May	13.85	13.08	11.25	14.13	7.62	W	9.78	7.86	10.58	11.97
June	11.82	11.85	9.96	11.57	8.25	W	9.16	8.50	9.73	10.44
July	11.14	12.24	10.44	11.77	9.06	W	8.99	8.95	9.76	10.83
August	11.37	12.12	9.87	12.23	9.77	11.13	8.54	9.68	9.69	10.60
September	12.59	13.20	11.13	13.92	W	W	10.52	W	11.35	11.95
October	11.67	13.37	11.05	12.58	10.19	W	9.43	10.19	10.22	11.66
November	10.82	11.29	9.71	10.64	9.07	10.85	6.62	8.76	8.03	10.32
December Average	9.33 12.11	9.58 12.56	7.82 10.49	10.29 12.97	7.69 8.87	W 12.52	6.51 9.31	7.57 9.09	7.52 10.20	8.69 11.21
1999 January	10.75	10.96	8.67	10.78	9.03	(^d)	6.33	8.77	8.20	9.80
February	10.16	10.47	8.52	10.50	11.59	`w′	7.06	11.18	8.93	9.61
March	11.92	13.33	10.92	13.67	13.25	W	10.70	12.97	12.04	11.71
April	15.06	15.95	13.77	16.12	W	(d)	12.53	13.64	13.68	14.51
May	14.88	15.87	14.05	15.46	W	15.39	12.27	15.01	13.93	14.74
June	15.56	16.43	14.42	16.50	W	16.03	13.82	16.46	15.03	15.14
July	19.10	18.27	17.01	18.81	W	16.96	15.80	17.41	16.93	17.56
August	20.31	19.88	18.74	20.69	W	19.79	17.55	19.31	18.82	19.32
September	22.48	23.12	20.52	22.68	20.64	21.97	19.18	20.20	20.29	21.57
October	21.65	22.39	20.08	22.19	22.13	20.65	18.82	21.58	20.55	21.07
November	24.85	24.95	22.03	W	22.19	22.62	19.84	22.11	21.61	22.96
December	24.73	25.89	22.39	W	21.62	24.89	20.21	21.82	21.25	23.50
Average	17.39	17.20	15.89	17.32	^R 17.61	19.14	14.33	^R 17.10	^R 15.87	16.83
2000 January February	26.23 27.57	^R 27.03 29.46	^R 23.31 26.72	W 28.58	^R 27.43 27.58	24.47 W	^R 23.41 24.88	^R 26.51 26.96	^R 24.71 26.16	^R 24.51 26.75

^a Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab

Notes: The Free on Board (F.O.B.) cost at the country of origin excludes all costs related to insurance and transportation. See Note 2 at end of

Values for the current 2 months are preliminary. Prices through 1980 reflect the period of reporting; prices since then reflect published, including prices not weighted by

Cargoes that are purchased on a "netback" basis, or under similar contractual arrangements whereby the actual purchase price is not established at the time the crude oil is acquired for importation into the United States, are not included in the published data until the actual prices have been determined and reported. U.S. geographic coverage is the 50 States and the District of Columbia.

Sources: See end of section.

Emirates.

^b Current members are Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela. Ecuador withdrew at the end of 1992 and Gabon withdrew at the end of 1994.

^c Based on October, November, and December data only.

d No data reported.

R=Revised. NA=Not available. W=Value withheld to avoid disclosure of individual company data.

Table 9.3 Landed Costs of Crude Oil Imports From Selected Countries

(Dollars per Barrel)

				Selected	Countries						
	Angola	Canada	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela	Persian Gulf Nations ^a	Total OPEC ^b	Total Non-OPEC
1973 Average ^c	w	5.33	w	NA	9.08	5.37	NA	5.99	5.91	6.85	5.64
1974 Average	12.48	11.48	W	W	13.16	11.63	NA	11.25	12.21	12.49	11.81
1975 Average	11.81	12.84	(d)	12.61	12.70	12.50	NA	12.36	12.64	12.70	12.70
1976 Average	12.71	13.36	(d)	12.64	13.81	13.06	W	11.89	13.03	13.32	13.35
1977 Average	14.04	14.13	(d)	13.82	15.29	13.69	14.83	13.11	13.85	14.35	14.42
1978 Average	14.07	14.41	(d)	13.56	14.88	13.94	14.53	12.84	14.01	14.34	14.38
1979 Average	21.06	20.22	(d)	20.77	22.97	18.95	22.97	17.65	20.42	21.29	22.10
1980 Average	34.76	30.11	W	31.77	37.15	29.80	35.68	25.92	30.59	33.56	33.99
1981 Average	36.84	32.32	(d)	33.70	39.66	34.20	37.29	29.91	34.61	36.60	36.14
1982 Average	33.08	27.15	(d)	28.63	36.16	34.99	34.25	24.93	34.94	34.81	31.47
1983 Average	29.31	25.63	(d)	25.78	30.85	29.27	30.87	22.94	29.37	29.84	28.08
1984 Average	28.49	26.56	(d)	26.85	30.36	29.20	29.45	25.19	29.07	29.06	28.14
1985 Average	27.39	25.71	(d)	25.63	28.96	24.72	28.36	24.43	25.50	26.86	26.53
1986 Average	14.09	13.43	12.85	12.17	15.29	12.84	14.63	11.52	12.92	13.46	13.52
1987 Average	18.20	17.04	18.43	16.69	19.32	16.81	18.78	15.76	17.47	17.64	17.66
1988 Average	14.48	13.50	14.47	12.58	15.88	13.37	15.82	13.66	13.51	14.18	13.96
1989 Average	18.36	16.81	18.10	16.35	19.19	17.34	18.74	16.78	17.37	17.78	17.54
1990 Average	21.51	20.48	22.34	19.64	23.33	21.82	22.65	20.31	20.55	21.23	20.98
1991 Average	19.90	17.16	19.55	15.89	21.39	17.22	21.37	15.92	17.34	18.08	17.93
1992 Average	19.36	17.04	18.46	15.60	20.78	17.48	20.63	15.13	17.58	17.81	17.67
1993 Average	17.40 16.36	15.27 14.83	16.54 15.80	14.11 14.09	18.73 17.21	15.40 15.11	17.92 16.64	13.39 13.12	15.26 15.00	15.68 15.08	15.78 15.29
1994 Average 1995 Average	17.66	16.65	17.45	16.19	18.25	16.84	17.91	14.81	16.78	16.61	16.95
1996 Average	21.86	19.94	22.02	19.64	21.95	20.49	20.88	18.59	20.45	20.14	20.47
1997 Average	20.24	17.63	19.71	17.30	20.64	17.52	20.64	16.35	17.44	17.73	18.45
1998 January	16.15	13.25	16.39	12.67	16.98	13.41	W	12.26	13.48	13.89	14.30
February	14.57	12.18	15.37	12.11	15.30	13.05	15.63	11.17	13.01	12.93	13.24
March	14.06	11.58	13.84	10.37	14.71	12.31	14.82	10.66	12.40	12.45	12.36
April	14.16	11.58	14.07	11.37	14.67	11.45	15.19	11.23	11.63	12.04	12.58
May	15.16	11.47	13.53	11.48	14.91	10.83	14.52	10.64	10.85	11.75	12.73
June	12.98	10.73	12.45	10.52	13.31	10.66	12.58	9.93	10.64	11.07	11.41
July	12.44	11.28	12.73	10.95	12.88	11.02	W	9.78	10.94	11.06	11.74
August	12.65	11.16	12.84	10.34	13.20	11.29	12.89	9.33	11.22	11.06	11.61
September	13.59	12.75	13.79	11.60	14.60	11.71	13.43	11.12	11.76	12.07	12.83
October	12.87	12.53	13.81	11.58	13.97	10.64	13.14	10.32	11.19	11.34	12.63
November	11.88	10.97	11.81	10.22	12.03	9.81	12.96	7.83	10.04	9.73	11.20
December	10.48	9.90	10.05	8.31	11.21	8.94	10.89	7.63	9.00	8.87	9.77
Average	13.37	11.62	13.26	11.04	14.14	11.16	13.55	10.16	11.18	11.46	12.22
1999 January	11.77	10.66	11.49	9.26	11.45	10.03	11.34	7.77	9.95	9.68	10.67
February	11.33	10.98	11.15	8.96	11.37	12.04	11.47	8.13	11.55	10.73	10.52
March	13.42	12.79	13.83	11.27	13.88	14.16	11.76	11.60	13.76	13.22	12.58
April	16.06	15.21	16.62	14.30	15.72	15.24	15.39	13.76	15.10	14.86	15.29
May	16.25	15.86	16.28	14.54	16.40	16.29	16.24	13.54	15.95	15.38	15.66
June	16.66	15.69	16.69	14.81	16.89	17.27	16.78	14.92	16.89	16.31	15.92
July	20.01	17.81	18.78	17.34	19.16	18.90	18.00	16.96	18.33	18.09	18.18
August	21.26	19.22	20.43	19.10	20.84	19.94	20.12	18.55	19.90	19.72	19.80
September	22.82	21.63	23.10	21.06	23.01	21.40	22.81	20.45	21.19	21.28	22.11
October	22.52	21.94	22.84	20.42	23.30	22.43	22.06	19.95	21.97	21.66	21.89
November	25.64	22.03	24.95	22.36	25.02	22.89	23.64	21.09	22.85	22.69	23.29
December Average	25.53 18.32	23.37 17.61	26.08 18.12	22.76 16.31	26.92 17.88	23.43 R 17.51	25.89 18.36	21.95 15.70	23.53 R 17.38	23.36 R 17.02	24.00 17.61
2000 January	27.49	^R 24.54	^R 27.31	R 23.77	R 26.83	R 26.58	^R 25.86	R 24.34	R 26.20	^R 25.64	^R 25.26
February	28.81	25.97	29.64	26.84	28.50	27.37	W 25.66	25.80	26.20	26.79	27.14

 $^{^{\}rm a}$ Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Notes: See Note 3 at end of section. Values for the current 2 months are preliminary. Prices through 1980 reflect the period of reporting; prices since then reflect the period of loading. Annual averages are averages of

the monthly prices, including prices not published, weighted by volume. Cargoes that are purchased on a "netback" basis, or under similar contractual arrangements whereby the actual purchase price is not established at the time the crude oil is acquired for importation into the United States, are not included in the published data until the actual prices have been determined and reported. U.S. geographic coverage is the 50 States and the District of Columbia.

Sources: October 1973-September 1977: Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report."
October 1977-December 1977: Energy Information Administration (EIA), Form FEA-F701-M-0, "Transfer Pricing Report." 1978 forward: EIA, Petroleum Marketing Monthly, May 2000, Table 25.

b Current members are Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela. Ecuador withdrew at the end of 1992 and Gabon withdrew at the end of 1994.

^c Based on October, November, and December data only.

^d No data reported.

R=Revised. NA=Not available. W=Value withheld to avoid disclosure of individual company data.

Table 9.4 Motor Gasoline Retail Prices, U.S. City Average

	Leaded Regular	Unleaded Regular	Unleaded Premium	All Types ^a
070 4				
973 Average	38.8	NA	NA	NA
974 Average	53.2	NA	NA	NA
975 Average	56.7	NA	NA	NA
976 Average	59.0	61.4	NA	NA
977 Average	62.2	65.6	NA	NA
978 Average	62.6	67.0	NA	65.2
979 Average	85.7	90.3	NA	88.2
980 Average	119.1	124.5	NA	122.1
981 Average ^b	131.1	137.8	^c 147.0	135.3
982 Average	122.2	129.6	141.5	128.1
	115.7	124.1	138.3	122.5
983 Average				
984 Average	112.9	121.2	136.6	119.8
985 Average	111.5	120.2	134.0	119.6
986 Average	85.7	92.7	108.5	93.1
987 Average	89.7	94.8	109.3	95.7
988 Average	89.9	94.6	110.7	96.3
989 Average	99.8	102.1	119.7	106.0
990 Average	114.9	116.4	134.9	121.7
991 Average	NA	114.0	132.1	119.6
•				
992 Average	NA	112.7	131.6	119.0
993 Average	NA	110.8	130.2	117.3
994 Average	NA	111.2	130.5	117.4
995 Average	NA	114.7	133.6	120.5
996 Average	NA	123.1	141.3	128.8
997 Average	NA	123.4	141.6	129.1
998 January	NA	113.1	131.9	118.6
February	NA	108.2	127.1	113.7
March	NA	104.1	122.9	109.7
April	NA	105.2	123.7	110.6
•	NA NA	109.2	127.5	114.6
May				
June	NA	109.4	127.9	114.8
July	NA	107.9	126.8	113.4
August	NA	105.2	124.4	110.8
September	NA	103.3	123.0	109.1
October	NA	104.2	123.6	109.9
November	NA	102.8	122.5	108.6
December	NA	98.6	118.7	104.6
Average	NA NA	105.9	125.0	111.5
999 January	NA	97.2	117.1	103.1
February	NA NA	95.5	115.5	101.4
March	NA	99.1	118.6	104.8
April	NA	117.7	136.7	123.2
May	NA	117.8	137.0	123.3
June	NA	114.8	133.9	120.4
July	NA	118.9	137.8	124.4
August	NA	125.5	144.1	130.9
September	NA	128.0	146.8	133.4
October	NA	127.4	146.4	132.9
November	NA NA	126.4	145.4	131.9
December Average	NA NA	129.8 116.5	148.6 135.7	135.3 122.1
-				
000 January	NA	130.1	148.6	135.6
February	NA	136.9	155.1	142.2
March	NA	154.1	172.3	159.4

NA=Not available.

Notes: See Note 5 at end of section. Geographic coverage for

1973-1977 is 56 urban areas. Geographic coverage for 1978 forward is 85 urban areas.

Sources: Monthly Data: U.S. Department of Labor, Bureau of Labor Statistics, Consumer Prices: Energy. Annual Data: 1973—Platt's Oil Price Handbook and Oilmanac, 1974, 51st Edition. forward—calculated by the Energy Information Administration as the simple averages of monthly data.

^a Also includes types of motor gasoline not shown separately.

^b In September 1981, the Bureau of Labor Statistics changed the weights used in the calculation of average motor gasoline prices. From September 1981 forward, gasohol is included in the average for all types, and unleaded premium is weighted more heavily.

^c Based on September through December data only.

Table 9.5 Refiner Prices of Residual Fuel Oil

	Sulfur Co	Il Fuel Oil ntent Less al to 1 Percent	Sulfur	al Fuel Oil Content an 1 Percent	Ave	erage
	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users
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
981 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 Average	68.5	72.0	63.9	65.9	65.4	68.7
1985 Average	61.0	64.4	56.0	58.2	57.7	61.0
1986 Average	32.8	37.2	28.9	31.7	30.5	34.3
1987 Average	41.2	44.7	36.2	39.6	38.5	42.3
1988 Average	33.3	37.2	27.1	30.0	30.0	33.4
1989 Average	40.7	43.6	33.1	34.4	36.0	38.5
1990 Average	47.2	50.5	37.2	40.0	41.3	44.4
1991 Average	36.4	40.2	29.2	30.6	31.4	34.0
1992 Average	35.1	38.9	28.6	31.2	30.8	33.6
1993 Average	33.7	39.7	25.6	30.3	29.3	33.7
1994 Average	34.5	40.1	28.7	33.0	31.7	35.2
1995 Average	38.3	43.6	33.8	37.7	36.3	39.2
1996 Average	45.6	52.6	38.9	43.3	42.0	45.5
997 Average	41.5	48.8	36.6	40.3	38.7	42.3
_						
1998 January	35.2	44.7	28.9	32.6	31.1	35.4
February	30.7	39.6	26.7	30.6	28.3	32.7
March	29.4	35.6	24.1	26.0	26.4	28.6
April	32.9	35.9	28.7	30.5	30.3	31.8
May	31.9	37.6	28.3	30.1	29.5	31.9
June	29.3	36.1	27.0	29.6	27.9	31.3
July	30.7	35.1	28.7	30.0	29.6	31.5
August	26.9	32.3	26.1	27.4	26.5	28.7
September	29.9	32.4	27.0	26.0	27.9	27.6
October	31.0	33.6	27.0	28.1	28.2	29.7
November	27.3	33.6	25.1	28.9	26.0	30.5
December	24.0	31.9	23.0	24.5	23.3	26.8
Average	29.9	35.4	26.9	28.7	28.0	30.5
1999 January	27.6	32.4	23.5	25.4	25.2	27.2
February	21.9	30.6	21.8	24.0	21.8	25.8
March	27.2	31.4	23.9	26.0	21.0	25.6 27.5
	30.7	32.7	28.8	29.9	29.5	30.9
April May	30.7 34.9	32.7 NA	20.6 29.2	33.2	29.5 32.1	30.9 34.6
	34.9 34.8	38.1	30.3	33.2 32.6	32.1 31.9	34.6 34.3
June	34.6 38.2	36.1 40.5	30.3 33.9	32.6 34.5	31.9 35.6	34.3 36.1
July	36.2 44.5	40.5 46.1	33.9 38.7	34.5 42.9	35.6 42.1	43.6
August						
September	48.1	49.0	42.9	48.2	45.5	48.3
October	47.7	51.1	42.5	47.7	44.3	48.7
November	48.9	55.6	42.6	48.1	46.1	50.0
December	51.5	57.2	43.3	49.1	46.6	51.5
Average	36.9	40.7	31.0	36.3	33.4	37.6
000 January	^R 57.2	64.5	R 44.3	R 49.3	R 49.2	^R 53.7
February	61.1	67.2	48.8	53.7	55.1	57.4

R=Revised. NA=Not available.

Notes: Sales for resale are those made to purchasers other than ultimate consumers. Sales to end users are those made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and commercial consumers. Values for the current month

are preliminary. Prices prior to 1983 are Energy Information Administration (EIA) estimates. See Note 6 at end of section. Geographic coverage is the 50 States and the District of Columbia.

Source: EIA, Petroleum Marketing Monthly, May 2000, Table 19.

Table 9.6 Refiner Prices of Petroleum Products for Resale

	Finished Motor Gasoline ^a	Finished Aviation Gasoline	Kerosene- Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consumer Grade)
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 Average	83.2	116.5	83.0	91.6	82.1	80.3	45.0
•	83.5	113.0	79.4	87.4	77.6	77.2	39.8
1985 Average	53.1	91.2	49.5	60.6	48.6	45.2	29.0
1986 Average	58.9	85.9	53.8		52.7	53.4	25.2
1987 Average				59.2			
1988 Average	57.7	85.0	49.5	54.9	47.3	47.3	24.0
1989 Average	65.4	95.0	58.3	66.9	56.5	56.7	24.7
1990 Average	78.6	106.3	77.3	83.9	69.7	69.4	38.6
1991 Average	69.9	100.1	65.0	72.2	62.2	61.5	34.9
1992 Average	67.7	99.1	60.5	63.2	57.9	59.1	32.8
1993 Average	62.6	96.5	57.7	60.4	54.4	57.0	35.1
1994 Average	59.9	93.3	53.4	61.8	50.6	52.9	32.4
1995 Average	62.6	97.5	53.9	58.0	51.1	53.8	34.4
1996 Average	71.3	105.5	64.6	71.4	63.9	65.9	46.1
1997 Average	70.0	106.5	61.3	65.3	59.0	60.6	41.6
1998 January	57.6	96.2	52.9	52.8	48.9	49.6	35.4
February	55.1	92.1	50.3	51.6	47.7	48.3	33.1
March	52.3	88.4	45.9	47.5	44.9	45.9	31.1
April	54.9	92.8	46.7	46.1	44.9	48.2	30.3
May	57.9	97.3	47.0	45.6	43.3	47.0	29.3
June	55.7	94.1	43.2	43.0	39.9	43.5	26.7
July	54.3	93.4	43.4	41.7	38.8	42.6	25.7
August	50.6	91.6	42.9	40.7	36.9	41.4	25.7
September	50.9	89.8	44.6	45.9	41.8	45.6	26.3
October	52.4	90.7	45.9	46.6	41.2	45.5	27.6
November	47.8	83.6	42.9	44.2	38.9	41.4	27.7
December	42.6	79.8	36.3	38.7	34.6	35.4	25.7
Average	52.6	91.2	45.0	46.5	42.2	44.4	28.8
	44.4	00.0	20.0	40.0	20.2	20.5	00.5
1999 January	44.1	80.9	36.9	42.6	36.3	36.5	26.5
February	42.6	78.9	35.0	38.3	33.0	35.5	26.2
March	51.9	86.8	39.3	43.9	39.7	43.6	26.9
April	62.3	98.8	46.9	48.5	44.5	48.7	28.6
May	61.6	97.8	47.2	45.2	43.7	47.8	29.0
June	61.1	95.0	49.3	46.8	44.2	50.3	29.6
July	68.7	103.0	53.6	53.5	51.4	56.6	34.6
August	73.8	107.6	59.0	59.4	56.3	61.4	38.3
September	75.7	111.9	62.5	65.9	60.9	65.0	41.5
October	72.3	109.8	63.5	64.8	61.3	65.1	43.7
November	75.3	108.3	66.6	73.3	66.1	69.9	42.6
December	76.1	110.4	72.0	76.4	67.6	70.6	41.7
Average	64.3	100.5	53.8	55.3	49.2	54.7	34.3
2000 January	78.6	111.4	^R 79.8	^R 94.3	82.8	77.4	49.2
February	88.2	118.4	83.2	103.1	91.8	85.2	60.3

^a See Note 5 at end of section.

R=Revised.

Notes: Sales for resale are those made to purchasers other than ultimate consumers. Sales to end users are shown in Table 9.7; they are sales made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and residential and commercial

consumers. Values for the current month are preliminary. Prices prior to 1983 are Energy Information Administration (EIA) estimates. See Note 6 at end of section. Geographic coverage is the 50 States and the District of Columbia.

Source: EIA, Petroleum Marketing Monthly, May 2000, Table 4.

Table 9.7 Refiner Prices of Petroleum Products to End Users

	Finished Motor Gasoline ^a	Finished Aviation Gasoline	Kerosene- Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consumer Grade)
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
	95.4	125.5	87.8	96.1	91.6	82.6	70.9
1983 Average	90.7	123.4	84.2	103.6	91.6	82.3	73.7
1984 Average	90.7 91.2	120.1	79.6		84.9	78.9	73.7 71.7
1985 Average				103.0			
1986 Average	62.4	101.1	52.9	79.0	56.0	47.8	74.5
987 Average	66.9	90.7	54.3	77.0	58.1	55.1	70.1
1988 Average	67.3	89.1	51.3	73.8	54.4	50.0	71.4
1989 Average	75.6	99.5	59.2	70.9	58.7	58.5	61.5
1990 Average	88.3	112.0	76.6	92.3	73.4	72.5	74.5
1991 Average	79.7	104.7	65.2	83.8	66.5	64.8	73.0
1992 Average	78.7	102.7	61.0	78.8	62.7	61.9	64.3
1993 Average	75.9	99.0	58.0	75.4	60.2	60.2	67.3
1994 Average	73.8	95.7	53.4	66.0	57.2	55.4	53.0
1995 Average	76.5	100.5	54.0	58.9	56.2	56.0	49.2
1996 Average	84.7	111.6	65.1	74.0	67.3	68.1	60.5
997 Average	83.9	112.8	61.3	74.5	63.6	64.2	55.2
998 January	73.2	104.3	52.3	71.8	54.1	54.9	48.4
February	69.0	100.8	50.0	68.2	53.8	53.3	44.7
March	65.5	98.4	45.3	65.3	53.8	50.8	43.8
April	67.7	99.3	46.6	56.7	53.0	52.0	41.5
May	71.4	101.1	46.7	56.0	48.3	51.7	36.2
June	70.7	99.1	42.8	44.7	45.7	48.4	34.1
July	69.4	98.5	43.4	47.4	44.6	47.6	35.8
August	66.7	95.9	43.6	41.5	43.1	46.3	33.5
September	65.5	94.1	44.9	46.2	47.2	49.4	37.4
October	66.4	95.1	46.9	50.9	47.9	50.0	40.7
November	63.7	93.3	44.0	44.4	46.7	47.0	42.3
December	59.7	88.7	37.4	42.4	43.6	41.8	36.2
	67.3	97.5	45.2	50.1	48.2	49.4	40.5
Average	07.3	91.5	45.2	30.1	40.2	49.4	40.5
1999 January	59.2	87.0	37.8	47.2	45.2	41.4	42.5
February	56.8	85.0	36.3	46.8	40.4	40.3	39.3
March	65.1	89.7	39.4	50.4	46.0	46.0	41.1
April	79.0	101.3	48.3	48.9	49.9	52.5	45.1
May	78.2	103.5	46.8	49.5	NA	52.1	42.4
June	75.6	103.3	50.6	46.3	NA	53.3	38.7
July	80.6	110.0	54.6	58.2	53.6	59.0	41.1
August	86.5	114.8	59.5	62.4	58.9	64.2	43.1
September	88.8	117.7	63.7	68.0	64.4	67.2	48.4
October	87.1	118.4	64.4	75.7	66.0	67.6	55.6
November	88.4	117.4	67.9	81.1	71.5	72.4	52.1
December	90.3	120.7	73.2	86.0	73.8	73.5	57.7
	90.3 78.1	120.7 105.9	73.2 53.9		73.6 54.7	73.5 57.9	45.7
Average			ეა.ყ	56.4	54. <i>1</i>		45.7
000 January	^R 91.7	^R 119.6	80.4	106.6	86.5	^R 79.8	62.7

^a See Note 5 at end of section.

Notes: Sales to end users are those made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and residential and commercial consumers. Sales for resale are shown in Table 9.6; they are sales made to purchasers other than

ultimate consumers. Values for the current month are preliminary. Prices prior to 1983 are Energy Information Administration (EIA) estimates. See Note 6 at end of section. Geographic coverage is the 50 States and the District of Columbia.

Source: EIA, Petroleum Marketing Monthly, May 2000, Table 2.

R=Revised. NA=Not available.

Table 9.8a No. 2 Distillate Prices to Residences: Northeastern States

	Maine	New Hampshire	Vermont	Massachusetts	Rhode Island	Connecticut	New York	New Jersey	Pennsylvania
1978 Average	48.6	50.3	50.8	48.8	50.7	50.1	50.1	49.6	48.8
1979 Average	68.8	72.5	72.5	70.9	72.8	72.0	71.2	71.0	69.8
1980 Average	96.3	100.4	101.5	97.8	101.1	98.3	98.2	97.9	96.4
1981 Average	120.4	123.7	125.4	121.3	123.8	121.7	123.2	121.5	118.1
1982 Average	115.5	117.4	120.1	117.6	120.1	118.3	120.5	117.4	113.7
1983 Average	102.8	104.1	112.9	109.1	110.5	109.1	112.1	107.9	105.8
1984 Average	103.9	108.4	111.9	111.6	111.4	112.1	115.5	111.0	107.9
1985 Average	99.7	102.4	107.7	107.0	106.7	108.0	111.3	105.9	102.3
1986 Average	74.4	75.9	86.6	82.1	82.8	89.0	91.1	90.2	81.4
1987 Average	74.7	76.5	81.1	80.6	82.5	83.4	85.2	84.3	76.9
1988 Average	77.7	78.2	82.6	82.1	83.6	85.3	86.3	84.8	77.8
1989 Average	89.4	89.3	90.5	92.6	93.9	92.9	95.8	91.8	85.1
1990 Average	98.9	102.8	107.0	108.4	108.6	109.8	112.5	108.7	102.6
1991 Average	96.0	91.6	101.9	103.0	99.9	106.2	111.3	104.0	99.7
1992 Average	87.1	85.6	92.1	92.5	91.2	94.7	102.8	93.9	89.0
1993 Average	82.6	82.8	90.4	89.7	89.3	91.9	100.1	92.4	86.3
1994 Average	81.8	79.2	87.6	87.0	88.5	89.0	96.6	89.5	85.7
1995 Average	78.7	77.9	85.3	84.4	87.4	86.4	95.5	88.8	82.6
1996 Average	97.2	94.0	96.9	97.6	98.6	98.6	106.3	102.4	95.3
1997 Average	94.2	94.2	98.7	96.0	98.9	96.3	106.5	103.3	95.0
1998 January	88.0	86.6	92.5	88.8	93.3	90.7	101.4	96.5	89.2
February	85.1	86.7	91.6	87.7	92.6	90.1	101.0	95.8	88.5
March	82.3	84.1	92.1	86.7	90.1	88.0	98.3	92.9	86.2
April	81.6	81.3	89.1	83.5	88.9	85.8	97.1	91.7	84.0
May	80.3	79.4	86.7	81.9	87.2	83.2	95.0	89.6	82.1
June	78.6	75.6	84.3	78.5	84.4	78.1	92.2	83.9	75.7
July	76.0	70.5	81.4	76.2	83.3	74.4	89.0	79.0	70.1
August	74.3	68.5	80.9	74.0	78.6	71.4	83.7	77.1	69.9
September	74.4	70.8	80.5	74.2	78.8	72.4	85.2	80.3	71.7
October	74.1	71.1	82.4	75.3	81.7	75.5	88.0	82.3	74.1
November	73.3	72.3	82.0	74.7	80.4	77.0	89.3	83.5	76.6
December	70.9	71.4	81.7	74.3	79.9	77.1	88.5	82.6	76.0
Average	78.8	78.8	87.3	81.8	86.8	83.1	94.8	89.2	81.4
1999 January	72.0	70.8	80.5	75.3	79.9	78.6	90.3	83.3	77.8
February	71.6	70.4	79.7	74.7	79.4	77.3	89.5	83.1	77.3
March	74.2	70.4	79.5	76.1	79.3	77.9	90.5	83.3	77.3
April	79.2	70.2	80.2	76.9	79.2	80.0	94.2	88.6	75.8
May	79.2	69.1	79.6	78.1	78.8	77.3	95.5	87.0	75.3
June	77.4	68.5	78.3	76.6	78.2	75.1	96.1	84.4	73.8
July	79.8	69.7	79.9	77.5	79.0	78.0	95.1	85.1	73.4
August	83.0	74.5	82.2	80.3	81.2	79.8	NA	88.3	74.6
September	88.9	82.0	88.0	86.1	90.6	85.2	98.7	95.1	81.7
October	91.5	87.9	92.2	91.0	93.1	90.9	105.6	101.0	86.5
November	97.2	92.0	95.6	96.5	96.8	95.8	110.7	105.7	91.8
December	100.4	99.0	99.5	100.0	101.8	101.0	114.6	111.9	95.9
Average	81.3	77.0	85.4	83.4	85.8	85.4	96.8	91.1	81.9
2000 January	^R 127.1	R 120.9	117.0	123.7	^R 118.7	^R 124.6	142.0	^R 134.8	^R 117.6
February	140.5	140.3	133.0	139.0	132.1	141.3	164.0	154.8	133.0

R=Revised.

Notes: States are grouped in Tables 9.8a, 9.8b, and 9.8c by geographic region of the country. Values for the current month are preliminary.

Prices prior to 1983 are Energy Information Administration (EIA) estimates. See Note 6 at end of section.

Source: EIA, *Petroleum Marketing Monthly*, May 2000, Table 18.

Table 9.8b No. 2 Distillate Prices to Residences: Selected South Atlantic and Midwestern States

	Delaware	District of Columbia	Maryland	Virginia	West Virginia	Ohio	Michigan	Indiana	Illinois	Wisconsin	Minnesota
1978 Average	47.8	50.7	49.2	49.1	46.2	47.4	47.9	48.5	46.5	44.7	47.8
1979 Average	68.2	74.2	70.1	70.4	65.1	68.6	70.9	72.7	68.8	67.3	72.4
1980 Average	95.4	102.6	97.9	98.5	92.2	91.9	97.8	99.6	95.8	91.5	99.9
1981 Average	117.3	127.4	121.4	120.5	115.0	113.2	118.3	118.5	114.9	109.1	118.4
1982 Average	111.3	124.5	117.1	117.7	109.3	110.2	113.9	114.3	110.9	107.8	115.1
1983 Average	106.0	117.0	110.3	108.7	101.0	101.3	106.4	100.7	100.4	101.2	103.1
1984 Average	109.6	118.7	113.5	110.5	102.1	102.1	105.0	103.1	100.1	101.0	104.1
1985 Average	104.6	114.3	108.8	106.3	98.0	99.7	102.1	99.1	97.5	98.3	101.9
1986 Average	85.0 79.3	93.1 91.8	91.4 86.6	86.6 79.5	74.6	77.7 74.7	81.0 77.5	74.8 75.4	NA 79.8	75.6	79.2 74.6
1987 Average	79.3 80.1	91.6	87.0	79.5 80.5	76.4 74.2	74.7 74.7	77.5 77.5	75.4 75.4	79.6 77.6	75.1 73.9	74.6 73.5
1988 Average	88.2	98.6	93.8	87.0	83.0	74.7 81.6	85.3	75.4 83.2	80.9	73.9 81.1	73.5 82.4
1989 Average 1990 Average	105.8	107.8	111.9	110.6	99.1	98.1	100.9	99.3	96.1	94.2	101.4
1991 Average	99.7	112.2	108.4	101.1	93.4	91.0	94.2	91.8	92.7	89.5	91.1
1992 Average	92.3	105.7	100.4	92.8	86.4	83.6	87.2	81.2	87.7	81.6	82.6
1993 Average	89.9	104.5	98.1	89.3	85.6	84.0	87.2	81.0	84.4	82.3	83.2
1994 Average	89.4	100.0	95.0	85.3	80.9	81.2	86.3	81.2	78.4	81.1	80.6
1995 Average	87.0	101.0	93.6	84.4	81.5	80.8	86.0	81.6	78.5	81.2	80.1
1996 Average	98.4	117.8	106.3	95.2	96.0	92.1	97.7	91.2	89.3	89.9	90.9
1997 Average	98.4	117.4	105.7	94.8	96.2	91.3	94.2	86.5	87.0	93.3	89.9
1998 January	92.4	111.0	100.4	92.1	91.1	82.2	85.9	79.9	80.4	85.4	81.5
February	91.9	110.0	98.8	91.4	88.9	80.9	84.2	78.9	79.7	83.6	78.1
March	90.6	104.9	96.8	89.6	88.5	79.5	83.3	77.9	77.2	83.0	77.2
April	88.5	100.3	93.1	88.4	86.8	79.5	81.8	77.0	74.4	81.6	77.8
May	82.3	NA	89.0	83.8	82.1	78.8	81.5	73.2	70.0	80.5	72.6
June	79.8	89.8	85.8	82.4	79.8	75.1	79.3	72.1	63.6	78.8	68.8
July	74.1	84.0	81.2	81.4	73.3	72.7	76.5	69.7	70.7	77.8	69.4
August	74.5	85.6	79.4	79.0	72.6	70.1	74.5	71.0	NA	75.5	68.2
September	73.0	84.6	81.7	80.1	72.6	72.3	75.9	72.5	66.2	74.9	70.5
October	76.4	W	80.3	80.3	76.9	74.4	77.3	73.0	69.8	76.8	70.7
November	82.4	W	82.1	81.2	76.8	73.4	77.9	71.9	70.8	76.6	70.3
December	80.9	W	80.3	79.9	73.8	71.6	77.9	69.3	66.6	74.6	67.9
Average	85.8	102.2	90.2	85.6	81.8	76.7	80.4	74.8	73.5	80.1	73.8
1999 January	82.1	W	85.7	81.2	74.6	72.8	76.2	71.4	68.6	75.0	68.0
February	80.4 82.9	W	86.1	81.2	71.4	72.1	76.5	70.9	66.0	73.9	67.0
March	82.9 88.8	W	86.9 86.9	81.6 85.0	78.4 71.9	76.6 76.5	77.5 81.5	73.8 76.0	67.9 63.7	76.4 77.8	69.6 73.5
April	oo.o NA	W	84.5	84.2	71.9 71.2	76.5 76.1	NA	76.0 72.9	60.5	77.8 77.3	73.5 72.5
May June	77.0	W	81.8	83.2	66.2	77.4	NA NA	74.0	57.9	77.3 76.4	72.5 72.4
July	76.3	W	84.4	84.1	69.5	77. 4 78.9	NA NA	74.0 76.3	62.8	79.8	74.0
,	78.1	W	85.9	84.8	75.7	80.3	NA	84.5	80.5	86.9	81.6
August September	85.0	W	92.4	88.8	79.5	86.9	NA	91.7	85.6	91.5	85.4
October	90.3	W	95.7	93.1	NA	89.9	NA	90.9	89.0	95.3	90.1
November	97.0	W	102.2	99.3	NA	96.2	NA	96.8	92.4	99.0	94.0
December	104.2	W	102.2	103.7	NA	97.6	NA	99.3	95.5	101.0	99.1
Average	88.4	101.1	90.7	87.1	78.8	81.8	88.4	79.3	71.5	84.7	77.5
2000 January	R 124.2	W	^R 123.6	^R 121.1	NA	^R 110.5	NA	^R 109.5	100.3	^R 105.6	^R 101.9
February	137.3	W	141.5	132.5	NA	119.5	NA	116.1	109.3	111.7	109.9

R=Revised. NA=Not available. W=Value withheld to avoid disclosure of

individual company data.

Notes: States are g States are grouped in Tables 9.8a, 9.8b, and 9.8c by geographic Values for the current month are preliminary. region of the country.

Prices prior to 1983 are Energy Information Administration (EIA) estimates. See Note 6 at end of section.

Source: EIA, Petroleum Marketing Monthly, May 2000, Table 18.

Table 9.8c No. 2 Distillate Prices to Residences: Selected Western States and U.S. Average

	Idaho	Washington	Oregon	Alaska	U.S. Average
978 Average	43.6	48.6	45.8	53.2	49.0
979 Average	62.1	69.7	68.0	68.2	70.4
980 Average	91.6	100.8	97.3	97.8	97.4
981 Average	110.4	116.5	111.4	118.0	119.4
982 Average	110.4	117.6	111.6	117.4	116.0
983 Average	101.8	109.0	103.6	108.8	107.8
984 Average	98.5	103.6	99.3	106.9	107.3
985 Average	97.2	101.1	97.1	108.3	105.3
986 Average	73.8	77.5	70.4	94.9	83.6
987 Average	68.8	77.5 79.5	70.4 72.5	86.5	80.3
	68.8	79.5 78.5	72.5 70.9	86.9	81.3
988 Average		76.5 87.4	70.9 80.2	96.4	90.0
989 Average	77.8 97.4	87.4 102.9	80.2 97.0	96.4 110.1	90.0 106.3
990 Average					
991 Average	95.1	101.6	93.3	105.0	101.9
992 Average	85.7	94.0	87.6	94.1	93.4
993 Average	86.2	99.9	91.8	96.1	91.1
994 Average	78.9	95.0	88.7	86.5	88.4
995 Average	83.9	96.2	89.4	83.4	86.7
996 Average	93.3	108.0	98.9	90.9	98.9
997 Average	95.3	113.9	103.1	97.3	98.4
998 January	84.9	104.6	93.6	NA	92.5
February	80.8	100.8	89.3	87.4	91.6
March	78.6	98.9	85.8	86.5	89.6
April	79.6	98.8	86.2	86.8	87.7
May	78.1	97.3	85.2	86.2	84.9
June	74.9	89.9	82.2	85.8	81.2
July	72.2	86.5	82.2	81.8	77.7
August	79.6	87.7	84.4	82.5	75.5
September	78.4	90.2	83.7	83.4	73.3 77.0
October	78.8	94.9	84.1	84.4	77.0 78.6
November	76.6 76.4	94.9 97.1	82.4	82.7	79.9
	70. 4 71.1	95.0	82.4 81.9	82.6	79.9 78.9
December	71.1 78.4				76.9 85.2
Average	70.4	97.8	86.1	85.2	65.2
999 January	68.5	93.0	81.8	80.6	80.4
February	67.9	93.5	79.9	81.2	79.8
March	71.0	101.6	87.3	84.7	80.9
April	NA	111.4	97.5	NA	82.9
May	76.0	107.3	95.3	96.0	82.1
June	75.6	110.3	104.8	97.3	80.8
July	NA	110.2	103.4	99.2	81.6
August	81.5	108.3	102.9	NA	83.5
September	89.7	111.1	100.6	103.9	90.1
October	87.5	113.7	102.2	108.6	94.8
November	89.7	116.6	104.8	111.6	100.0
December	92.7	118.5	104.0	117.1	104.5
Average	76.3	106.3	93.6	96.3	87.6
000 January	^R 93.7	^R 127.0	^R 115.6	123.5	^R 125.8
February	98.9	133.4	124.2	126.8	142.4
i c olualy	90.9	133.4	124.2	120.0	144.4

R=Revised. NA=Not available.

Notes: States are grouped in Tables 9.8a, 9.8b, and 9.8c by geographic region of the country. Values for the current month are preliminary.

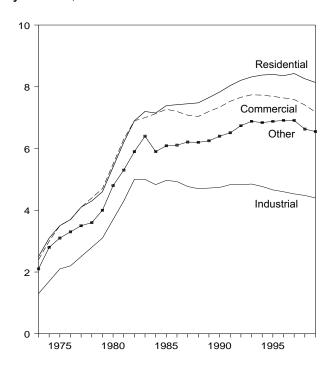
Prices prior to 1983 are Energy Information Administration (EIA) estimates. See Note 6 at end of section.

Source: EIA, Petroleum Marketing Monthly, May 2000, Table 18.

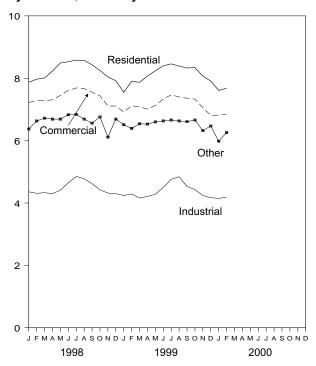
Figure 9.2 Retail Prices of Electricity Sold by Electric Utilities

(Cents per Kilowatthour)

By Sector, 1973-1999



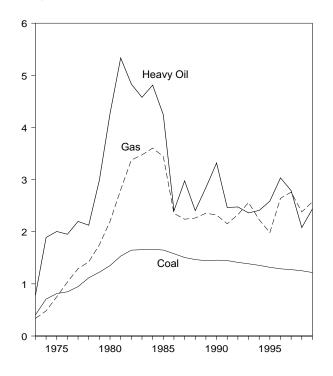
By Sector, Monthly



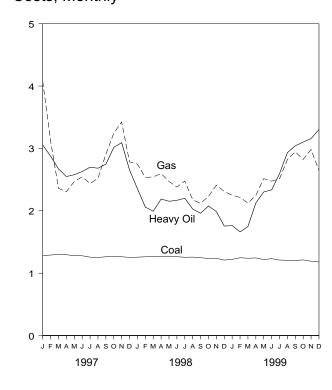
Source: Table 9.9.

Figure 9.3 Cost of Fossil-Fuel Receipts at Steam-Electric Utility Plants (Dollars per Million Btu)

Costs, 1973-1999



Costs, Monthly



Source: Table 9.10.

Table 9.9 Retail Prices of Electricity Sold by Electric Utilities

(Cents per Kilowatthour)

	Residential	Commercial	Industrial	Other	Total
973 Average	2.5	2.4	1.3	2.1	2.0
973 Average					
974 Average	3.1	3.0	1.7	2.8	2.5
975 Average	3.5	3.5	2.1	3.1	2.9
976 Average	3.7	3.7	2.2	3.3	3.1
977 Average	4.1	4.1	2.5	3.5	3.4
978 Average	4.3	4.4	2.8	3.6	3.7
979 Average	4.6	4.7	3.1	4.0	4.0
980 Average	5.4	5.5	3.7	4.8	4.7
981 Average	6.2	6.3	4.3	5.3	5.5
982 Average	6.9	6.9	5.0	5.9	6.1
983 Average	7.2	7.0	5.0	6.4	6.3
984 Average	7.15	7.13	4.83	5.90	6.25
985 Average	7.39	7.27	4.97	6.09	6.44
986 Average	7.42	7.20	4.93	6.11	6.44
987 Average	7.45	7.08	4.77	6.21	6.37
_	7.48	7.04	4.70	6.20	6.35
988 Average					
989 Average	7.65	7.20	4.72	6.25	6.45
990 Average	7.83	7.34	4.74	6.40	6.57
991 Average	8.04	7.53	4.83	6.51	6.75
992 Average	8.21	7.66	4.83	6.74	6.82
993 Average	8.32	7.74	4.85	6.88	6.93
994 Average	8.38	7.73	4.77	6.84	6.91
•	8.40	7.69	4.66	6.88	6.89
1995 Average					
996 Average	8.36	7.64	4.60	6.91	6.86
997 Average	8.43	7.59	4.53	6.91	6.85
998 January	7.87	7.22	4.36	6.37	6.57
February	7.97	7.29	4.31	6.63	6.52
March	8.01	7.28	4.33	6.72	6.53
April	8.23	7.31	4.30	6.69	6.51
	8.49	7.45	4.41	6.69	6.67
May					
June	8.53	7.61	4.65	6.83	6.97
July	8.58	7.69	4.85	6.84	7.21
August	8.57	7.67	4.78	6.69	7.14
September	8.43	7.55	4.62	6.56	6.95
October	8.25	7.44	4.42	6.76	6.69
November	8.04	7.11	4.32	6.11	6.39
	7.92	7.11	4.30	6.69	6.46
December					
Average	8.26	7.41	4.48	6.63	6.74
999 January	7.55	6.92	4.24	6.51	6.37
February	7.90	7.12	4.29	6.39	6.44
March	7.87	7.08	4.16	6.54	6.36
April	8.07	7.01	4.21	6.53	6.34
May	8.24	7.13	4.28	6.60	6.44
June	8.40	7.33	4.50	6.63	6.76
July	8.46	7.47	4.76	6.66	7.04
August	8.39	7.40	4.84	6.63	7.02
September	8.33	7.36	4.53	6.61	6.80
October	8.34	7.33	4.43	6.66	6.64
November	8.07	7.06	4.24	6.32	6.35
December	7.91	6.81	4.17	6.47	6.34
Average	8.14	7.18	4.40	6.55	6.60
000 January	7.61	6.82	4.15	5.98	6.29
February	7.68	6.85	4.18	6.26	6.29
2-Month Average	7.65	6.83	4.17	6.12	6.29
999 2-Month Average	7.70	7.02	4.27	6.45	6.40
998 2-Month Average	7.70	7.25	4.34	6.49	6.54
JJU Z-WUHUH AVELAYE	1.34	1.20	4.34	U.¥3	0.34

Notes: Prices are calculated by dividing revenue by sales. Revenue may not correspond to sales for a particular month because of electric utility billing and accounting procedures. That lack of correspondence could result in uncharacteristic increases or decreases in the monthly prices. See Note 7

at end of section. Geographic coverage is the 50 States and the District of Columbia.

Sources: See end of section.

Table 9.10 Quantity and Cost of Fossil-Fuel Receipts at Steam-Electric Utility Plants

	-				-				
	Ce	oal		Petro	oleum		Gas	s a	All Fossil Fuels ^b
			Heav	y Oil ^b	Tot	t al ^{b,c}			
	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Cost
	(thousand short tons)	(cents per million Btu)	(thousand barrels)	(cents per million Btu)	(thousand barrels)	(cents per million Btu)	(million cubic feet)	(cents per million Btu)	(cents per million Btu)
1973 Year	374,842	40.5	512,650	78.5	535,859	80.0	3,382,677	33.8	47.6
1974 Year 1975 Year	384,868 431,527	70.9 81.4	479,166 457,582	189.0 200.5	515,217 510,352	191.0 202.3	3,225,203 3,034,808	48.2 75.2	91.4 104.4
1976 Year	454,858	84.8	495,363	195.2	549,973	199.0	2,962,811	103.4	111.9
1977 Year	490,415	94.7	563,685	219.8	635,556	224.9	3,106,403	129.1	129.7
1978 Year 1979 Year	476,169	111.6 122.4	546,197	212.5 298.8	616,040	219.1 307.2	3,140,654	142.2 174.9	141.1 163.9
1980 Year	556,558 593,995	135.1	479,705 394,159	426.7	515,695 419,140	435.1	3,368,976 3,588,814	219.9	192.8
1981 Year	579,374	153.2	327,477	533.4	345,544	542.5	3,573,558	280.5	225.6
1982 Year	601,427	164.7	228,200	483.2	239,111	492.2	3,161,348	337.6	224.9
1983 Year	592,728	165.6	211,705	457.8	219,652	462.8	2,732,248	347.4	220.6
1984 Year 1985 Year	684,111 666,743	166.4 164.8	193,832 156,410	481.2 424.4	202,372 164,947	486.3 431.7	2,878,808 2,808,921	360.3 344.4	219.1 209.4
1986 Year	686,964	157.9	220,585	240.1	228,522	243.7	2,387,622	235.1	175.0
1987 Year	721,298	150.6	187,300	297.6	194,578	301.1	2,605,191	224.0	170.6
1988 Year	727,775	146.6	230,234	240.5	236,924	243.9	2,362,721	226.3	164.3
1989 Year 1990 Year	753,217 786,627	144.5 145.5	237,668 202,281	284.6 331.9	246,422 209,350	289.3 338.4	2,472,506 2,490,979	235.5 232.1	167.5 168.9
1991 Year	769,923	144.7	163,106	246.5	169,625	254.8	2,630,818	215.3	160.3
1992 Year	775,963	141.2	138,537	247.5	144,390	255.1	2,637,678	232.8	159.0
1993 Year	769,152	138.5	141,719	236.2	147,902	243.3	2,574,523	256.0	159.5
1994 Year 1995 Year	831,929	135.5 131.8	135,184	240.9 258.6	142,940	248.8 267.9	2,863,904 3,023,327	223.0 198.4	152.6 145.3
1996 Year	826,860 862,701	128.9	78,216 98,926	303.4	84,292 106,629	315.7	2,604,663	264.1	151.9
1997 January February	71,929 69,229	128.0 129.1	8,817 8,959	305.7 287.5	9,658 9,346	321.0 295.3	133,720 134,664	407.7 311.8	157.7 150.6
March	72,369	130.0	6,796	267.1	7,157	276.2	185,340	236.0	145.5
April	69,815	129.6	6,379	254.9	6,730	264.8	184,908	230.5	144.3
May	74,929	128.0	6,476	257.9	6,966	271.2	225,841	247.0	146.6
June	70,479	127.9	9,253	262.9	10,010	274.4	278,304	254.3	153.2
July August	74,065 76,352	125.7 125.2	10,818 11,049	269.9 268.3	11,689 11,618	280.4 275.5	373,646 360,018	243.7 252.2	154.6 154.0
September	75,091	126.3	8,880	274.7	9,332	281.3	313,132	290.5	158.3
October	75,593	126.4	10,161	301.6	10,715	309.1	219,342	324.3	157.0
November	72,558	126.4	12,218	309.3	12,818	315.4	168,754	342.4	156.4
December Year	78,179 880,588	125.2 127.3	11,101 110,906	265.4 278.8	11,750 117,789	273.3 288.0	187,065 2,764,734	278.4 276.0	146.9 152.2
1998 January	79,212	125.7	9,569	235.5	10,105	242.4	165,869	275.0	143.3
February March	70,353 75,678	126.2 126.6	8,736 10,676	206.0 199.3	9,255 11,133	214.0 204.6	124,584 181,034	253.4 254.4	139.2 142.5
April	74,848	126.6	11,749	218.9	12,289	225.0	186,127	259.8	144.7
May	75,980	126.3	11,554	215.3	12,185	221.5	252,869	247.1	146.7
June	76,605	126.4	13,350	216.8	14,164	222.6	331,124	238.0	149.6
July August	79,676 82,057	125.5 125.8	21,016 19,262	220.1 202.9	21,877 20,107	223.9 207.2	389,405 389,961	247.7 217.8	154.5 147.2
September	78,854	124.8	12,919	196.0	13,602	202.1	331,911	211.9	142.6
October	79,399	123.5	14,952	207.8	15,683	213.7	230,952	223.1	140.1
November	77,087	123.8	10,569	198.8	11,192	205.1	164,341	241.0	137.8
December Year	79,700 929,448	121.0 125.2	12,500 156,852	175.5 207.9	13,599 165,191	183.5 213.6	174,780 2,922,957	231.0 238.1	134.3 143.8
1999 January	76,331	122.1	13,215	176.3	14,019	181.9	163,125	225.0	134.6
February	73,938 76,743	124.7	10,013	166.2	10,417	171.5	138,303	221.5	134.4
March April	76,743 71,909	124.0 124.4	10,153 10,647	174.8 212.4	10,621 11,099	180.2 217.6	187,476 229,057	212.3 224.7	135.3 141.3
May	74,551	121.8	10,701	230.2	11,289	236.0	253,543	251.6	144.3
June	73,220	123.2	11,176	233.5	11,956	240.5	278,464	247.5	146.9
July	76,454	121.1	13,051	259.4	14,014	269.4	366,546	251.3	152.0
August September	81,345 76,772	120.6 120.3	12,129 9,557	293.3 304.2	13,203 10,126	303.7 312.0	379,860 262,342	282.1 294.5	157.3 151.4
October	77,114	121.3	8,052	310.2	8,636	320.9	220,823	282.4	146.7
November	74,028	119.2	7,449	315.8	8,038	329.0	164,874	298.2	142.7
December	74,353	118.0	6,030	330.4	6,931	353.9	164,761	264.7	138.4
Year	906,758	121.7	122,174	244.0	130,349	253.3	2,809,173	257.3	144.2

bunker oil, and liquefied petroleum gas.

Yearly costs are averages of monthly values, weighted by Btu. See Note 8 at end of section. Geographic coverage is quantities in Btu. the 50 States and the District of Columbia.

Sources: See end of section.

An update to Table 9.10 was not available for inclusion this month.

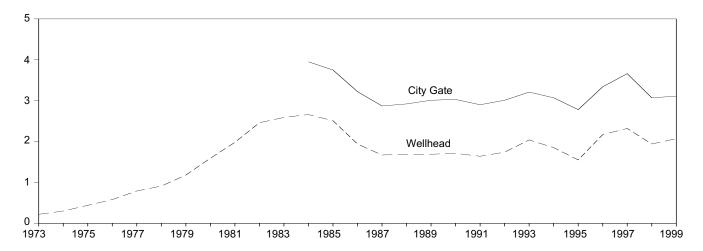
 $^{^{\}rm a}$ Includes supplemental gaseous fuels. $^{\rm b}$ Heavy oil includes fuel oil nos. 4, 5, and 6, and topped crude oil. $\,$ The weighted averages for petroleum and all fossil fuels include both heavy and light oil (fuel oil nos. 1 and 2, kerosene, and jet fuel) prices. Data do not include petroleum coke.

^c Data for 1973-1982 do not include small quantities of rerefined motor oil,

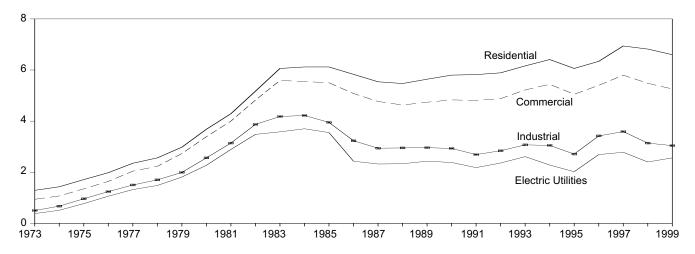
Figure 9.4 Natural Gas Prices

(Dollars per Thousand Cubic Feet)

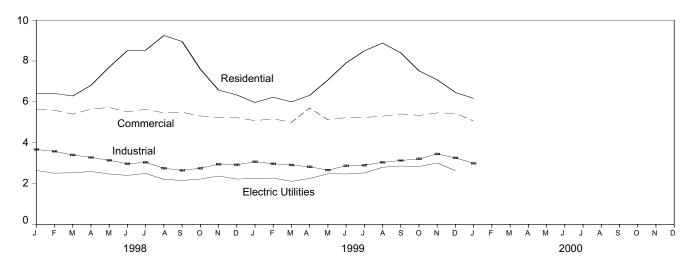
Selected Prices, 1973-1999



Delivered to Consumers, 1973-1999



Delivered to Consumers, Monthly



Note: Because vertical scales differ, graphs should not be compared. Source: Table 9.11.

Table 9.11 Natural Gas Prices

(Prices: Dollars per Thousand Cubic Feet; Share of Volume Delivered: Percentage)

					Delivered to Co	onsumers ^{a,b}		
				Com	mercial	Ind	ustrial	
	Wellhead	City Gate	Residential	Price	Share of Total Volume Delivered	Price	Share of Total Volume Delivered	Electric Utilities ^c
1973 Average	0.22	NA	1.29	0.94	NA	0.50	NA	0.38
1974 Average	.30	NA	1.43	1.07	NA	.67	NA	.51
1975 Average	.44	NA	1.71	1.35	NA	.96	NA	.77
1976 Average	.58	NA	1.98	1.64	NA	1.24	NA	1.06
1977 Average	.79	NA	2.35	2.04	NA	1.50	NA	1.32
1978 Average	.91	NA	2.56	2.23	NA	1.70	NA	1.48
1979 Average	1.18	NA	2.98	2.73	NA	1.99	NA	1.81
1980 Average	1.59	NA	3.68	3.39	NA	2.56	NA	2.27
1981 Average	1.98	NA	4.29	4.00	NA	3.14	NA 05.4	2.89
1982 Average	2.46 2.59	NA NA	5.17	4.82 5.59	NA NA	3.87 4.18	85.1	3.48 3.58
1983 Average	2.59 2.66	3.95	6.06 6.12	5.55	NA NA	4.16	80.7 74.7	3.70
1984 Average 1985 Average	2.51	3.75	6.12	5.50	NA NA	3.95	68.8	3.75
1986 Average	1.94	3.22	5.83	5.08	NA NA	3.23	59.8	2.43
1987 Average	1.67	2.87	5.54	4.77	93.1	2.94	47.4	2.32
1988 Average	1.69	2.92	5.47	4.63	90.8	2.95	42.6	2.33
1989 Average	1.69	3.01	5.64	4.74	89.1	2.96	36.9	2.43
1990 Average	1.71	3.03	5.80	4.83	86.6	2.93	35.2	2.38
1991 Average	1.64	2.90	5.82	4.81	85.1	2.69	32.7	2.18
1992 Average	1.74	3.01	5.89	4.88	83.2	2.84	30.3	2.36
1993 Average	2.04	3.21	6.16	5.22	83.9	3.07	29.7	2.61
1994 Average	1.85	3.07	6.41	5.44	79.3	3.05	25.5	2.28
1995 Average	1.55	2.78	6.06	5.05	76.7	2.71	24.5	2.02
1996 Average	2.17	3.34	6.34	5.40	77.6	3.42	19.4	2.69
1997 Average	2.32	3.66	6.94	5.80	70.8	3.59	18.1	2.78
1998 January	1.95	3.08	6.41	5.65	73.2	3.67	16.8	2.64
February	1.95	3.08	6.41	5.59	72.9	3.58	16.7	2.51
March	2.05	3.06	6.29	5.40	73.6	3.40	17.3	2.53
April	2.15	3.23	6.81	5.64	67.7	3.28	15.8	2.59
May	2.04	3.12	7.70	5.73	62.6	3.14	14.9	2.47
June	1.90 2.08	2.98 3.31	8.51 8.53	5.51 5.64	62.9 56.0	2.97 3.04	15.1	2.40 2.50
July	2.06 1.81	3.31 3.01	9.25	5.46	56.0 53.3	3.0 4 2.75	13.1 13.8	2.50
August September	1.69	2.78	9.25 8.96	5.49	55.3 57.0	2.75	14.2	2.15
October	1.85	2.76	7.60	5.31	57.0 59.2	2.75	14.8	2.13
November	1.93	2.99	6.58	5.22	64.5	2.95	15.7	2.37
December	1.94	3.10	6.34	5.23	68.3	2.92	17.2	2.22
Average	1.94	3.07	6.82	5.48	67.0	3.14	16.1	2.40
1999 January	1.80	2.84	5.97	5.08	72.7	3.07	15.4	2.25
February	1.73	2.94	6.23	5.17	68.8	2.97	15.5	2.27
March	1.70	2.67	6.00	5.00	67.9	2.91	16.0	2.11
April	1.81	2.91	6.32	5.70	64.4	2.82	15.8	2.25
May	2.10	3.25	7.07	5.12	61.1	2.66	17.1	2.48
June	2.10	3.18	7.91	5.23	58.9	2.87	16.9	2.47
July	2.07	3.11	8.50	5.24	56.7	2.90	17.6	2.52
August	2.34	3.37	8.88	5.30	53.6	3.04	18.0	2.80
September	2.42	3.50	8.40	5.41	57.9	3.13	17.1	2.86
October	2.31	3.50	7.52	5.34	60.7	3.21	17.3	2.83
November	2.44	3.75	7.08	5.46	63.8	3.45	17.7	3.01
December	2.03 E 2.07	3.22	6.46	5.44 5.26	66.9	3.26	18.7	2.63
Average	E 2.07	3.11	6.60	5.26	65.1	3.04	16.9	2.56
2000 January	E 2.12	2.74	6.17	5.06	71.9	2.99	19.3	NA

^a Includes supplemental gaseous fuels.

Notes: Prices shown on this page are intended to include all taxes. See

Note 9 at end of section. Wellhead annual and year-to-date prices are simple averages of the monthly prices; all other annual and year-to-date prices are volume-weighted averages of the monthly prices. Geographic coverage is the 50 States and the District of Columbia.

Sources: See end of section.

b See Note 9 at end of section.

^c See Note 8 at end of section. NA=Not available. E=Estimate.

Energy Prices Notes

- 1. The average domestic first purchase price represents the average price at which all domestic crude oil is purchased. Prior to February 1976, the price represented an estimate of the average of posted prices; beginning with February 1976, the price represents an average of actual first purchase prices. The data series was previously called "Actual Domestic Wellhead Price."
- 2. F.O.B. 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 April 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 Energy Information Administration (EIA) Form EIA-14, "Refiners' Monthly Cost Report." Those costs were previously published from data collected on Economic Regulatory Administration (ERA) Form ERA-49, "Domestic Crude Oil Entitlements Program Refiners Monthly Report." Form ERA-49 was discontinued with the decontrol of crude oil on January 28, 1981. Crude oil purchases and costs are defined for Form EIA-14 in accordance with conventions used for Form ERA-49. The respondents for the two forms are also 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 when comparing the data collected on the two forms.

The refiner acquisition cost of crude oil is the average price paid by refiners for crude oil booked into their refineries in accordance with accounting procedures generally accepted and consistently and historically applied by the refiners concerned. Domestic crude oil is that oil produced in the United States or from the outer continental shelf as defined in 43 USC Section 1331. Imported crude oil is either that oil reported on Form ERA-51, "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 Form ERA-49 excluded unfinished oils but included the Strategic Petroleum Reserve (SPR). Crude oil costs and volumes reported on Federal Energy Administration (FEA) Form FEA-P110-M-1, "Refiners' Monthly Cost Allocation

Report," included unfinished oils but excluded SPR. Imported averages derived from Form ERA-49 exclude oil purchased for SPR, whereas the composite averages derived from Form ERA-49 include SPR. None of the prices derived from Form EIA-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 of 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. From 1974-1977, prices were collected in 56 urban areas. From 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 prices of finished motor gasoline for resale and to end users are determined by the EIA 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 Form FEA-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) and residential and commercial consumers.

6. 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 series were generated for annual data 1978-1982 and for monthly data 1981 and 1982 by estimating the prices that would have been published had Form EIA-782 survey and system been in operation at that time. This form of estimation was performed after detailed adjustment was made 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 sales among resellers. However, sales to bulk consumers, such as 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 sales to the bulk consumers such as agriculture, industry, and electric utilities. 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 EIA.

- 7. Preliminary monthly data are based on submissions from over 250 publicly and privately owned electric utilities reporting on Form EIA-826, "Monthly Electric Utility Sales and Revenue Report with State Distributions." These utilities are statistically chosen as a cutoff sample from more than 3,000 electric utilities that report annually on Form EIA-861, "Annual Electric Utility Report." Preliminary annual values are the sum of the monthly revenues divided by the sum of the monthly sales. When final Form EIA-861 annual data become available each year, their ratios to the preliminary Form EIA-826 values are used to derive adjusted final monthly values. Prior to January 1986, only privately owned electric utilities were included in the monthly survey and the sample was chosen using stratification techniques through December 1992.
- 8. Data for 1973-1982 cover all electric generating plants at which the generator nameplate capacity of all steam-electric units combined totaled 25 megawatts or greater. From 1974-1982, peaking units were included the data and counted towards 25-megawatt-or-greater total. Data for 1983-1990 cover all electric generating plants at which the generator nameplate capacity of all steam-electric units combined totaled 50 megawatts or greater. Data for 1991 forward cover all electric generating plants at which the generator nameplate capacity of all steam-electric units and combined-cycle units together totaled 50 megawatts or greater.
- 9. Natural gas prices are intended to include all taxes. Instructions on the data collection forms specifically direct that all Federal, State, and local taxes, surcharges, and/or adjustments billed to consumers are to be included. However, sales and other taxes itemized on more than 3,000 consumers' bills are sometimes excluded by the reporting utilities. Delivered-to-consumers prices for 1987 forward represent natural gas delivered and sold to residential, commercial, industrial, and electric utility consumers. They do not include the price of natural gas delivered to industrial and commercial consumers on behalf of third parties. Volumes of natural gas delivered on behalf of third parties are included in the consumption data shown in Table 4.4. Additional information is available in the EIA Natural Gas Monthly, Appendix C.

Sources for Table 9.1

Domestic First Purchase Price

1973-1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook*, "Crude Petroleum and Petroleum Products" chapter.

1977: Federal Energy Administration (FEA), based on

Form FEA-P124, "Domestic Crude Oil Purchaser's Monthly Report."

1978 forward: Energy Information Administration (EIA), Petroleum Marketing Monthly, May 2000, Table 1.

F.O.B. and Landed Cost of Imports

December 1973-September 1977: Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report."

October-December 1977: EIA, Form FEA-F701-M-0, "Transfer Pricing Report."

1978 forward: EIA, *Petroleum Marketing Monthly*, May 2000, Table 1.

Refiner Acquisition Cost

1973: EIA estimates. The domestic price was derived by adding estimated transportation costs to the reported domestic first purchase price. The imported price was derived by adding an estimated ocean transport cost to the average "Free Alongside Ship" value published by the U.S. Bureau of the Census.

1974-1976: DOI, BOM, *Minerals Yearbook*, "Crude Petroleum and Petroleum Products" chapter.

1977: January-September, FEA, based on Form FEA-P110-M-1, "Refiners' Monthly Cost Allocation Report." October-December, EIA, based on Form FEA-P110-M-1, "Refiners' Monthly Cost Allocation Report."

1978 forward: EIA, *Petroleum Marketing Monthly*, May 2000, Table 1.

Sources for Table 9.2

October 1973-September 1977: Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report."

October 1977-December 1977: Energy Information Administration (EIA), Form FEA-F701-M-0, "Transfer Pricing Report."

1978 forward: EIA, *Petroleum Marketing Monthly*, May 2000, Table 24.

Sources for Table 9.9

1973-September 1977: Federal Power Commission (FPC), Form FPC-5, "Monthly Statement of Electric Operating Revenues and Income."

October 1977-February 1980: Federal Energy Regulatory Commission (FERC), Form FPC-5, "Monthly Statement of Electric Operating Revenues and Income."

March 1980-1982: FERC, Form FERC-5, "Electric Utility Company Monthly Statement."

1983: Energy Information Administration (EIA), Form EIA-826, "Electric Utility Company Monthly Statement." **1984-1989:** EIA, Form EIA-861, "Annual Electric Utility Report."

1990 forward: EIA, *Electric Power Monthly*, May 2000, Table 52.

Sources for Table 9.10

1973-June 1977: Federal Power Commission, Form FPC-423, "Monthly Report on Cost and Quality of Fuels for Electric Utility Plants."

June 1977-December 1977: Federal Energy Regulatory Commission, Form FERC-423, "Monthly Report on Cost and Quality of Fuels for Electric Utility Plants." 1978 and 1979: Energy Information Administration (EIA), Form FERC-423, "Monthly Report on Cost and Quality of Fuels for Electric Utility Plants."

1980-1989: EIA, Electric Power Monthly, April

1990 forward: EIA, *Electric Power Monthly*, May 2000, Table 26.

Sources for Table 9.11

Prices, 1973-1993

Wellhead: Energy Information Administration (EIA), Natural Gas Annual 1998, Volume 1, Table 98. City Gate, 1984-1987: EIA, Natural Gas Monthly, March 1990, Table 4. 1988-1992: EIA, Natural Gas Monthly, March 1995, Table 4. 1993: EIA, Natural Gas Monthly, March 2000, Table 4.

Delivered to Consumers, 1973-1993: EIA, *Natural Gas Annual 1998.* Table 101.

Prices, 1994 forward

EIA, Natural Gas Monthly, April 2000, Table 4.

Share of Total Volume Delivered, Annual

Calculated from EIA, *Natural Gas Annual, Volume 1*, report series, Table 1, "Summary Statistics for Natural Gas in the United States," as total amount of natural gas delivered to the sector's consumers minus the amount delivered for the account of others (to derive the amount on system) divided by the total amount delivered to the sector.

Share of Total Volume Delivered, Monthly

EIA, table titled, "Percentage of Total Deliveries Represented by Onsystem Sales, by State," in the *Natural Gas Monthly* issues as follows:

April 1988-March 1989	-	Table (C-1
April 1989-December 1991	-	Table	33
January 1992-February 1993	-	Table	32
March 1993-October 1995	-	Table	28
November 1995-December 1997	-	Table	24
January 1998-Present	_	Table	25

Section 10. International Energy

Crude Oil Production. World crude oil production during February 2000 was 67 million barrels per day, up 0.7 million barrels per day from the level in the previous month.

Organization of Petroleum Exporting Countries (OPEC) production during February 2000 averaged 28 million barrels per day, up 0.6 million barrels per day from the level during the previous month. During February 2000, production increased in Iraq by 380 thousand barrels per day; in both Iran and Venezuela by 60 thousand barrels per day; Kuwait by 53 thousand barrels per day; in both Nigeria and Libya by 50 thousand barrels per day; Qatar by 10 thousand barrels per day; the United Arab Emirates by 5 thousand barrels per day, and Saudi Arabia by 2 thousand barrels per day. Production decreased in Indonesia by 30 thousand barrels per day and remained unchanged in Algeria.

Among the non-OPEC nations, production during February 2000 increased in Norway by 189 thousand barrels per day; the United States by 56 thousand barrels per day; China by 30 thousand barrels per day; Canada by 12 thousand barrels per day; and Russia by 9 thousand barrels per day. Production decreased in Mexico by 135 thousand barrels per day and the United Kingdom by 17 thousand barrels per day. Production remained unchanged in Egypt.

Petroleum Consumption. In December 1999, consumption in all Organization for Economic Cooperation and Development (OECD) countries was 46.0 million barrels per day, 3 percent higher than the December 1998 rate. Comparing December rates in 1999 and 1998, consumption was higher in 1999 in the United States and Japan (both +6 percent) and Canada (+2 percent). The December 1999 consumption rate was lower in the United Kingdom (-8 percent), Italy (-6 percent), Germany (-2 percent), and France (less than -1 percent), compared with the rate 1 year earlier.

Petroleum Stocks. For all OECD countries, petroleum stocks at the end of December 1999 totaled 3.5 billion barrels, 7 percent lower than the ending stock level in December 1998. Stocks were higher in France (+1 percent). Stock levels were lower in Germany (-11 percent), the United States (-10 percent), the United Kingdom, Italy, and Japan (all -3 percent), and Canada (-1 percent), compared with levels 1 year earlier.

Nuclear Electricity Generation. Based on *Nucleonics Week*² information for February 2000, all reporting countries with nuclear capacity generated 211.1 gross terawatthours (one terawatthour equals 1 billion kilowatthours) of nuclear-generated electricity.

As of February 29, 2000, there were 435 operable nuclear generating units in the world.

¹ Percentage changes are based on unrounded data.

² A copyrighted publication of The McGraw-Hill Publishing Companies, Inc. Used with permission.

Table 10.1a World Oil Production: OPEC Members

(Thousand Barrels per Day)

										United		
	Algeria	Indonesia	Iran	Iraq	Kuwait ^a	Libya	Nigeria	Qatar	Saudi Arabia ^a	Arab Emirates	Venezuela	OPEC ^b
1072 Averen	4.007	4 220	E 004	2.040	2.020	2.475	2.054	F70	7 500	4 522	2.200	20.620
1973 Average 1974 Average	1,097 1,009	1,339 1,375	5,861 6,022	2,018 1,971	3,020 2,546	2,175 1,521	2,054 2,255	570 518	7,596 8,480	1,533 1,679	3,366 2,976	30,629 30,351
1975 Average	983	1,307	5,350	2,262	2,084	1,480	1,783	438	7,075	1,664	2,346	26,771
1976 Average	1,075	1,504	5,883	2,415	2,145	1,933	2,067	497	8,577	1,936	2,294	30,327
1977 Average	1,152	1,686	5,663	2,348	1,969	2,063	2,085	445	9,245	1,999	2,238	30,893
1978 Average	1,231	1,635	5,242	2,563	2,131	1,983	1,897	487	8,301	1,831	2,165	29,464
1979 Average	1,224	1,591	3,168	3,477	2,500	2,092	2,302	508	9,532	1,831	2,356	30,581
1980 Average	1,106	1,577	1,662	2,514	1,656	1,787	2,055	472	9,900	1,709	2,168	26,606
1981 Average	1,002	1,605	1,380	1,000	1,125	1,140	1,433	405	9,815	1,474	2,102	22,481
1982 Average	987	1,339	2,214	1,012	823	1,150	1,295	330	6,483	1,250	1,895	18,778
1983 Average	968 1,014	1,343 1,412	2,440 2,174	1,005 1,209	1,064 1,157	1,105 1,087	1,241 1,388	295 394	5,086 4,663	1,149 1,146	1,801 1,798	17,497 17,442
1984 Average 1985 Average	1,014	1,325	2,174	1,433	1,023	1,057	1,495	394 301	3,388	1,140	1,796	16,181
1986 Average	945	1,390	2,230	1,690	1,419	1,039	1,467	308	4,870	1,330	1,787	18,275
1987 Average	1.048	1,343	2,298	2.079	1,585	972	1,341	293	4.265	1,541	1,752	18,517
1988 Average	1,040	1,342	2,240	2,685	1,492	1,175	1,450	346	5,086	1,565	1,903	20,324
1989 Average	1,095	1,409	2,810	2,897	1,783	1,150	1,716	380	5,064	1,860	1,907	22,071
1990 Average	1,175	1,462	3,088	2,040	1,175	1,375	1,810	406	6,410	2,117	2,137	23,195
1991 Average	1,230	1,592	3,312	305	190	1,483	1,892	395	8,115	2,386	2,375	23,275
1992 Average	1,214	1,504	3,429	425	1,058	1,433	1,943	423	8,332	2,266	2,371	24,398
1993 Average	1,162	1,511	3,540	512	1,852	1,361	1,960	413	8,198	2,159	2,450	25,119
1994 Average	1,180	1,510	3,618	553	2,025	1,378	1,931	415	8,120	2,193	2,588	25,510
1995 Average	1,202	1,503 1,547	3,643 3,686	560 579	2,057 2,062	1,390 1,401	1,993 2,001	442 510	8,231 8,218	2,233	2,750 2,938	26,004
1996 Average 1997 Average	1,242 1,277	1,547	3,664	1,155	2,062	1,446	2,332	649	8,562	2,278 2,316	2,936 3,315	26,461 28,320
1998 January	1.290	1,520	3,635	1,261	2,215	R 1.463	2,218	715	8,765	2,435	3.440	R 28.957
February	1,290	1,520	3,635	1,703	2,210	R 1,463	2,263	735	8,760	2,435	3,410	R 29,424
March	1,290	1,520	3,635	1,825	2,210	R 1,463	2,380	735	8,460	2,480	3,410	R 29,408
April	1,270	1,520	3,835	1,985	2,115	^R 1,412	2,238	705	8,585	2,420	3,240	R 29,325
May	1,250	1,520	3,635	2,245	2,105	R 1,372	2,230	705	8,625	2,330	3,240	R 29,257
June	1,240	1,490	3,835	1,920	2,105	R 1,372	2,210	705	8,325	2,300	3,210	R 28,712
July	1,230	1,490	3,585	2,355	2,075	R 1,372	2,160	685	8,275	2,280	3,070	^R 28,577 ^R 28,297
August September	1,220 1,220	1,510 1,510	3,435 3,685	2,555 2,555	2,025 1,972	^R 1,352 ^R 1,347	2,010 2,010	675 665	8,225 8,173	2,300 2,300	2,990 2,940	R 28,377
October	1,220	1,540	3,485	2,555	1,972	R 1.347	1.960	670	8.220	2,300	2,940	R 28.247
November	1,220	1,540	3,635	2,505	2,020	R 1,362	2,060	675	8,170	2,290	3,040	R 28,517
December	1,220	1,540	3,585	2,305	2,010	R 1,362	2,110	680	8,110	2,290	3,040	R 28,252
Average	1,246	1,518	3,634	2,150	2,085	R 1,390	2,153	696	8,389	2,345	3,167	R 28,774
1999 January	1,230	1,540	3,665	2,515	1,995	1,360	2,080	695	8,065	2,240	3,020	28,405
February	1,240	1,520	3,925	2,655	2,005	1,360	2,010	695	8,165	2,330	3,000	28,905
March	1,250	1,530	3,795	2,430	2,020	1,360	2,160	775	8,220	2,235	2,960	28,735
April	1,210	1,530	3,485	2,655	1,785	1,320	2,160	705	7,665	2,180	2,800	27,495
May	1,190	1,530	3,435	2,705	1,815	1,300	2,190	685 655	7,665	2,130	2,780	27,425
June	1,180 1,180	1,510 1,490	3,415 3,515	2,355 2,805	1,830 1,830	1,290 1,290	2,150 2,130	655 685	7,610 7,610	2,110 2,130	2,760 2,760	26,865 27,425
July August	1,180	1,490	3,515	2,805	1,830	1,290	2,130	685	7,610	2,130	2,760	27,425 27,645
September	1,190	1,480	3,485	2,855	1,885	1,300	2,140	685	7,710	2,140	2,760	27,643
October	1,190	1,480	3,535	2,670	1,925	1,310	2,170	685	7,845	2,145	2,760	27,715
November	1,190	1,480	3,485	2,205	1,905	1,320	2,160	685	7,865	2,105	2,780	27,180
December	1,190	1,480	3,435	1,405	1,922	1,330	2,050	695	7,863	2,155	2,780	26,305
Average	1,202	1,504	3,557	2,508	1,898	1,319	2,130	694	7,833	2,169	2,826	27,641
2000 January	1,190	R 1,460	3,465	2,215	1,962	1,330	2,010	695	7,863	2,245	2,780	R 27,215
February 2-Mo. Avg.	1,190 1,190	1,430 1,446	3,525 3,494	2,595 2,399	2,015 1,988	1,380 1,354	2,060 2,034	705 700	7,865 7,864	2,250 2,247	2,840 2,809	27,855 27,524
_	•	ŕ	,	•	•	•	•		•		-	-
1999 2-Mo. Avg 1998 2-Mo. Avg	1,235 1,290	1,531 1,520	3,788 3,635	2,581 1,471	2,000 2,213	1,360 1,463	2,047 2,239	695 724	8,112 8,763	2,283 2,435	3,011 3,426	28,642 29,178

^a Includes about one-half of the production in the Kuwait-Saudi Arabia Neutral Zone from 1973 through July 1990 and in June 1991. Kuwaiti Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. In February 2000, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 630 thousand barrels per day.

Sources: See end of section.

per day.

^b Current members of OPEC are Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

Ecuador and Gabon, which withdrew from OPEC membership at the end of 1992 and 1994, respectively, are excluded from all OPEC totals. R=Revised.

Notes: Crude oil includes lease condensate but excludes natural gas plant liquids. 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.

Table 10.1b World Oil Production: Persian Gulf Nations, Non-OPEC, and World

(Thousand Barrels per Day)

	D				Select	ed Non-Ol	PEC Produc	ers				
	Persian Gulf Nations ^a	Canada	China	Egypt	Mexico	Norway	Former U.S.S.R.	Russia	United Kingdom	United States	Total Non- OPEC	World
1973 Average	20,668	1,798	1,090	165	465	32	8,324	NA	2	9,208	25,050	55,679
1974 Average	21,282	1,551	1,315	150	571	35	8,912	NA	2	8,774	25,366	55,716
1975 Average	18,934	1,430	1,490	235	705	189	9,523	NA	12	8,375	26,058	52,828
1976 Average	21,514	1,314	1,670	330	831	279	10,060	NA	245	8,132	27,018	57,344 50,707
1977 Average 1978 Average	21,725 20,606	1,321 1,316	1,874 2,082	415 485	981 1,209	280 356	10,603 11,105	NA NA	768 1,082	8,245 8,707	28,814 30,694	59,707 60,158
1979 Average	21,066	1,500	2,002	525	1,461	403	11,105	NA NA	1,568	8,552	32,094	62,674
1980 Average	17,961	1,435	2,114	595	1,936	528	11,706	NA	1,622	8,597	32,994	59,600
1981 Average	15,245	1,285	2,012	598	2,313	501	11,850	NA	1,811	8,572	33,595	56,076
1982 Average	12,156	1,271	2,045	670	2,748	520	11,912	NA	2,065	8,649	34,703	53,481
1983 Average	11,081	1,356	2,120	727	2,689	614	11,972	NA	2,291	8,688	35,759	53,256
1984 Average	10,784	1,438	2,296	822	2,780	697	11,861	NA	2,480	8,879	37,047	54,489
1985 Average	9,630	1,471	2,505	887	2,745	788	11,585	NA	2,530	8,971	37,801	53,982
1986 Average	11,696	1,474	2,620	813	2,435	870	11,895	NA	2,539	8,680	37,952	56,227
1987 Average	12,103	1,535	2,690	896	2,548	1,022	12,050	NA	2,406	8,349	38,149	56,666
1988 Average	13,457	1,616	2,730	848	2,512	1,158	12,053	NA	2,232	8,140	38,413	58,737
1989 Average1990 Average	14,837 15,278	1,560 1,553	2,757 2,774	865 873	2,520 2,553	1,554 1,704	11,715 10,975	NA NA	1,802 1,820	7,613 7,355	37,792 37,371	59,863 60,566
1991 Average	14,741	1,548	2,835	874	2,680	1,704	9,992	NA	1,797	7,333 7,417	36,932	60,207
1992 Average	15,970	1,605	2,845	881	2,669	2,229	-	7,632	1,825	7,171	35,815	60,213
1993 Average	16,715	1,679	2,890	890	2,673	2,350	_	6,730	1,915	6,847	35,117	60,236
1994 Average	16,964	1,746	2,939	896	2,685	2,521	_	6,135	2,375	6,662	35,481	60,991
1995 Average	17,208	1,805	2,990	920	2,618	2,768	-	5,995	2,489	6,560	36,331	62,335
1996 Average	17,367	1,837	3,131	922	2,855	3,104	-	5,850	2,568	6,465	37,250	63,711
1997 Average	18,470	1,922	3,200	856	3,023	3,143	_	5,920	2,518	6,452	38,100	66,420
1998 January	R 19,064	1,912	3,240	R 828	3,085	3,293	_	R 5,894	2,597	6,541	R 38,699	R 67,656
February March	N 19,516	1,944 1,952	3,155	^R 828 ^R 828	3,140 3,160	3,230 3,123	_	^R 5,912 ^R 5,877	2,583 2,600	6,476 6,408	^R 38,597 ^R 38,490	^R 68,020 ^R 67,897
April	R 10 683	1,932	3,170 3,140	R 828	3,140	3,160	_	R 5,792	2,600	6,483	R 38,437	R 67,762
May	R 19 683	1,943	3,210	R 838	3,149	2,917	_	R 5,707	2,499	6,347	R 37,963	R 67,220
June	R 19.228	1,932	3,260	R 838	3,050	3,140	_	R 5,843	2,495	6,267	R 38,241	R 66,953
July	^R 19,293	2,045	3,200	R 847	3,120	3,120	_	R 5,839	2,525	6,194	R 38,245	R 66,822
August	R 19.253	2,016	3,180	^R 838	3,055	2,440	_	R 5,826	2,536	6,203	R 37,510	R 65,807
September	R 19.388	2,064	3,216	R 838	2,906	2,863	_	^R 5,852	2,690	5,789	R 37,527	R 65,904
October	^R 19,228	2,024	3,150	R 838	2,792	2,920	_	R 5,894	2,718	6,143	R 37,778	R 66,025
November	K 19,333	1,989	3,240	R 828	3,147	2,978	_	R 5,860	2,720	6,140	R 38,353	R 66,870
December	19,018 R 40 227	1,962	3,215	^R 828 ^R 834	3,107	3,045	-	R 5,954	2,821	6,043	R 38,445	R 66,697
Average	19,337	1,981	3,198	·· 034	3,070	3,017	-	^R 5,854	2,616	6,252	R 38,188	^R 66,962
1999 January	19,210	1,892	3,230	860	3,144	3,002	-	E 5,962	2,721	E 5,954	R 38,264	R 66,669
February	19,810	1,878	3,235	860	3,020	3,004	-	E 5,897	2,728	E 5,984	R 38,116	R 67,021
March	19,510	1,835	3,215	870	3,053	2,975	-	E 6,024	2,708	E 6,048	R 38,107	R 66,842
April	18,510 18,470	1,832 1,882	3,190 3,190	870 860	2,893 2,926	2,953 2,948	_	E 6,021 E 6,036	2,746 2,597	E 5,977 E 5,985	^R 37,826 ^R 37,724	^R 65,321 ^R 65,149
May June	18,010	1,936	3,190	850	2,820	2,946	_	E 6,026	2,397	E 5,880	R 37,724	R 64,106
July	18,610	1,959	3,190	840	2,920	3,094	_	E 6,148	2,429	E 5,873	R 38,158	R 65,583
August	18,820	1,906	3,170	840	2,848	2,868	_	E 6,139	2,699	E 5,912	R 37,870	^R 65,515
September	18,825	1,857	3,145	850	2,861	2,864	_	E 6.141	2,670	E 5,820	R 37,769	R 65,439
October	18,840	1,892	3,177	840	2,766	3,070	_	E 6,153	2,762	E 5,878	R 38,150	R 65.865
November	18,285	2,006	3,245	840	2,852	3,300	-	E 6,153	2,782	^E 5,895	^R 38,678	^R 65,858
December	17,510	2,002	3,225	840	2,793	3,404	-	E 6,230 E 6,079	2,697	E 5,899	^R 38,745	^R 65,050 ^R 65,696
Average	18,695	1,907	3,206	852	2,906	3,018	_		2,684	E 5,925	R 38,055	_
2000 January	18,480 18.990	R 1,979	3,250	840	3,032	R 3,233	_	E 6,239 E 6,248	R 2,721	E 5,833	R 38,835	R 66,050
February 2-Mo. Avg	18,990 18,727	1,991 1,985	3,280 3,265	840 840	2,897 2,967	3,422 3,324	_	E 6,248	2,704 2,713	5,889 5,860	38,935 38,883	66,790 66,407
_												
1999 2-Mo. Avg 1998 2-Mo. Avg	19,495 19,278	1,885 1,927	3,232 3,200	860 828	3,085 3,111	3,003 3,263	_	5,931 5,903	2,724 2,590	^E 5,968 6,510	38,194 38,650	66,836 67,829

^a The Persian Gulf Nations are Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. Production from the Neutral Zone between Kuwait and Saudi Arabia is included in "Persian Gulf Nations."

R=Revised. NA=Not available. – =Not applicable. E=Estimate.

Notes: Crude oil includes lease condensate but excludes natural gas plant liquids. Monthly data are often preliminary figures and may not

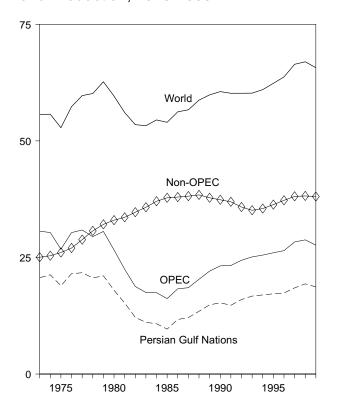
average to the annual totals because of rounding or because updates to the preliminary monthly data are not available. Data for countries may not sum to World totals due to independent rounding. U.S. geographic coverage is the 50 States and the District of Columbia.

Sources: See end of section.

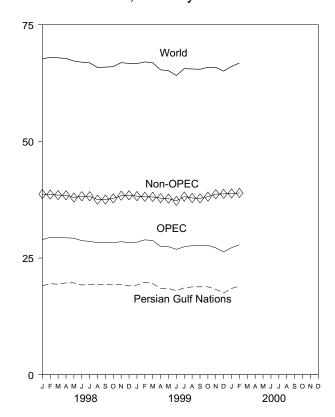
Figure 10.1 Crude Oil Production

(Million Barrels per Day)

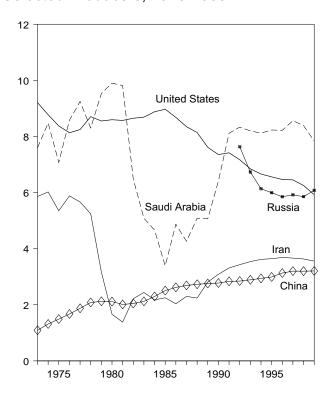
World Production, 1973-1999



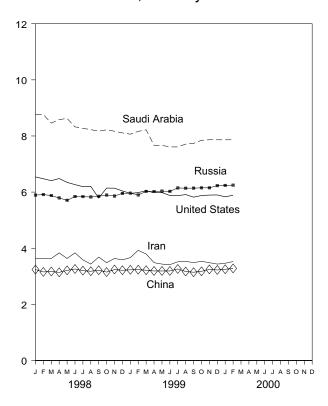
World Production, Monthly



Selected Producers, 1973-1999



Selected Producers, Monthly

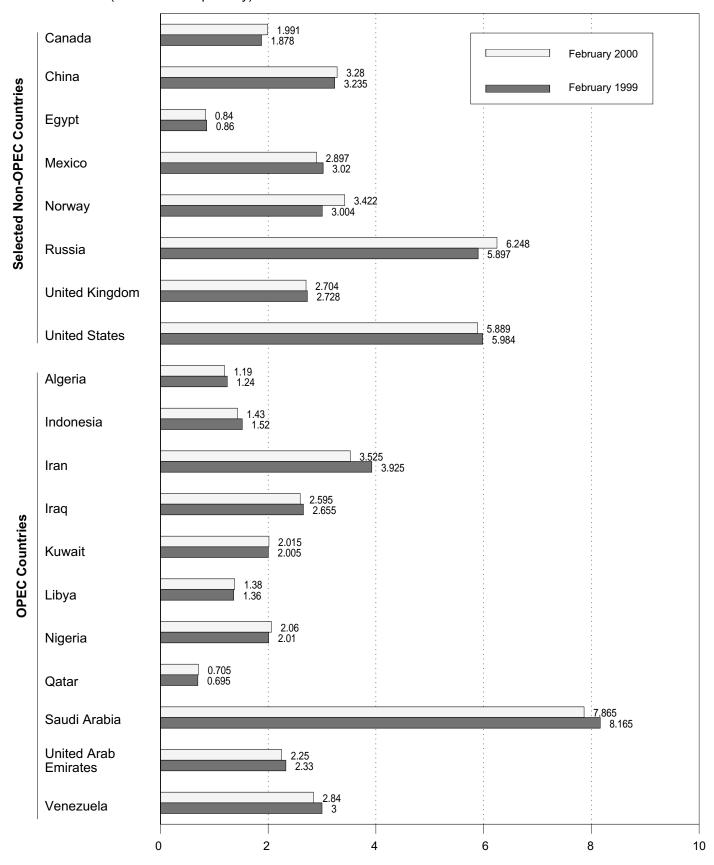


Note: OPEC is the Organization of Petroleum Exporting Countries. Sources: Tables 10.1a and 10.1b.

138

Figure 10.2 Crude Oil Production by Selected Country

(Million Barrels per Day)

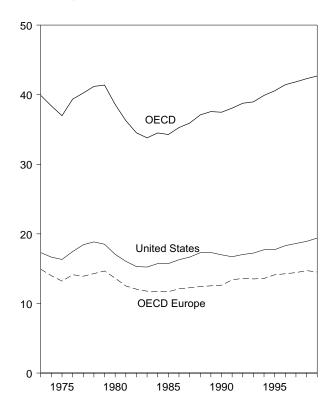


Note: OPEC is the Organization of Petroleum Exporting Countries. Sources: Tables 10.1a and 10.1b.

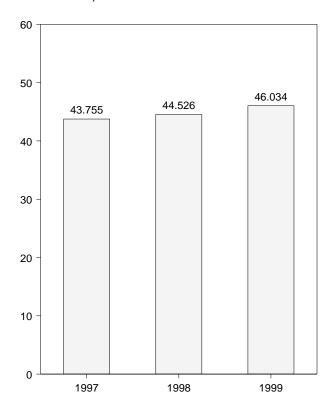
Figure 10.3 Petroleum Consumption in OECD Countries

(Million Barrels per Day)

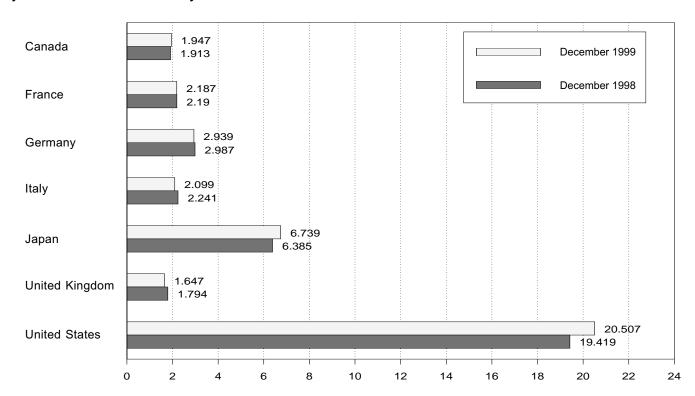
Overview, 1973-1999



OECD Total, December



By Selected OECD Country



Note: OECD is the Organization for Economic Cooperation and Development. Source: Table 10.2.

Table 10.2 Petroleum Consumption in OECD Countries

(Thousand Barrels per Day)

						United	United	OECD	Other	
	Canada	France	Germanya	Italy	Japan	Kingdom	States	Europeb	OECDc	OECD d
								· ·		
1072 Average	1,729	2,601	3,055	2,068	4,949	2,341	17,308	14,925	988	39,900
1973 Average	1,779	,	2,748	2,004	,	2,341	16,653	,		38,379
1974 Average	1,779	2,447 2,252	2,748 2,650	1,855	4,864 4,621	1,911	16,322	13,988 13,217	1,095 1,041	36,980
1975 Average	1,779	2,232	2,877	1,971	4,837	1,892	17,461	14,124	1,119	39,358
1976 Average	1,850		2,865	1,897	4,880	,	, -		•	40,237
1977 Average		2,294	,	,	,	1,905	18,431	13,916	1,160	,
1978 Average	1,902	2,408	2,927	1,952 2,039	4,945 5.050	1,938	18,847	14,290	1,204	41,187
1979 Average	1,971 1,873	2,463 2,256	3,003 2,707	1,934	5,050 4,960	1,971 1,725	18,513 17,056	14,667 13,634	1,178 1,072	41,379 38,595
1980 Average	1,768	2,230	2,707 2,449	1,874	4,848	1,725	16,058	12,515	1,072	36,269
1981 Average	,	1,880	2,372	,	,	,	15,296		•	34,517
1982 Average	1,578 1,448	1,835	2,324	1,781 1,750	4,582 4,395	1,590 1,531	15,290	12,053 11,765	1,008 954	33,793
1983 Average	1,440	1,754	2,324 2,322	1,750	4,595 4,576	1,849	15,726	11,736	989	34,500
1984 Average	1,504	1,775	2,322	1,717	4,384	1,634	15,726	11,681	976	34,271
1985 Average	1,504	1,772	2,498	1,717	4,439	1,649	16,281	12,102	951	35,279
1986 Average 1987 Average	1,548	1,789	2,424	1,855	4,484	1,603	16,665	12,255	959	35,911
	1,693	1,797	2,422	1,836	4,752	1,697	17,283	12,427	939	37,093
1988 Average	1,733	1,797	2,422	1,930	4,732	1,738	17,203	12,531	998	37,093 37,570
1989 Average	1,733	1,818	2,382	,	,	,	,	,		
1990 Average	,	1,935		1,872 1,863	5,140 5,284	1,752 1,801	16,988	12,629	1,027 1,056	37,475 29.067
1991 Average	1,622	1,935	2,828 2,843	1,937	5,264 5,446	1,803	16,714 17,033	13,391 13,605	1,030	38,067 38,768
1992 Average	1,643	,			,	,			•	
1993 Average	1,688	1,875	2,900	1,852	5,401 5,674	1,815	17,237	13,523	1,118	38,967
1994 Average	1,727	1,833	2,879	1,841	5,674	1,837	17,718	13,597	1,174	39,890
1995 Average	1,755	1,896	2,875	2,048	5,711	1,845	17,725	14,120	1,243	40,553
1996 Average	1,797	1,935	2,911	2,058	5,867	1,845	18,309	14,269	1,192	41,433
1997 January	1,836	2,170	2,904	2,028	6,294	1,850	18,554	14.689	R 1,217	R 42,591
February	1,857	2,142	2,652	2,115	6,756	1,933	18,398	14,618	R 1,233	R 42,861
March	1,755	1,801	2,692	1,919	6,149	1,754	17,863	13,606	R 1,230	R 40,603
April	1,724	1,916	3,219	1,990	5,306	1,804	18,559	14,690	R 1,264	R 41,543
May	1,811	1,712	2,760	1,888	5,080	1,712	18,293	13,524	R 1,204	R 39,912
June	1,882	1,878	3,123	1,938	5,135	1,781	18,617	14,382	R 1,180	R 41,196
July	1,983	2,077	3,074	2,020	5,450	1,757	19,107	14,734	R 1,232	R 42,505
August	1,920	1,795	2,745	1,798	5,404	1,710	18,565	13,530	R 1,198	R 40,616
September	1,872	1,999	3,163	2,171	5,422	1,821	18,562	15,003	R 1,238	R 42,097
October	1,934	2,144	2,869	2,207	5,414	1,845	19,071	15,095	R 1,223	R 42,737
November	1,832	1,731	2,882	2,174	5,732	1,805	18,578	14,393	R 1.235	R 41,770
December	1,876	2,107	2,761	2,299	6,453	1,836	19,250	14,972	R 1,203	R 43,755
Average	1,857	1,955	2,903	2,045	5,711	1,799	18,620	14,433	R 1,221	R 41,843
	,	,	,	,-	-,	,	,,,	,	•	,-
1998 January	1,852	2,060	2,742	2,041	6,111	1,786	18,362	14,305	^R 1,186	^R 41,815
February	1,819	2,169	2,960	2,160	6,467	1,834	18,316	15,193	^R 1,280	R 43,076
March	1,832	2,008	3,161	2,121	5,906	1,857	18,685	15,179	^R 1,364	^R 42,965
April	1,796	1,998	2,848	2,027	5,087	1,708	19,044	14,282	^R 1,203	^R 41,412
May	1,735	1,815	2,603	1,900	4,807	1,687	18,375	13,481	^R 1,275	^R 39,675
June	1,888	2,031	2,937	2,102	5,017	1,784	19,182	14,795	^R 1,299	^R 42,181
July	1,953	2,107	3,028	2,106	5,320	1,768	19,466	14,881	^R 1,256	^R 42,877
August	1,908	1,858	2,844	1,886	5,286	1,759	19,347	14,019	R 1,267	^R 41,827
September	1,935	2,075	3,027	2,044	5,102	1,789	18,895	14,910	^R 1,213	^R 42,055
October	1,931	2,010	2,873	2,032	5,094	1,801	19,188	14,746	^R 1,333	R 42,293
November	1,904	2,084	2,995	2,219	5,617	1,848	18,673	15,359	^R 1,360	^R 42,913
December	1,913	2,190	2,987	2,241	6,385	1,794	19,419	15,548	^R 1,261	R 44,526
Average	1,873	2,032	2,916	2,072	5,512	1,784	18,917	14,720	R 1,275	R 42,297
4000	P 4 004	P 0 000	P.o. ==4		P = 004	4 000	40.050	44405	D 4 4 4=	P 44 000
1999 January	R 1,821	R 2,022	R 2,571	2,077	R 5,881	1,688	18,850	14,165	R 1,147	R 41,863
February	R 1,922	R 2,218	R 3,182	2,139	R 6,463	1,881	19,240	R 15,720	R 1,282	R 44,627
March	R 1,874	R 2,123	R 3,559	2,023	R 6,186	1,856	19,489	R 15,961	R 1,437	R 44,946
April	R 1,780	R 2,004	R 2,441	1,903	5,319	R 1,702	18,861	R 13,946	R 1,338	R 41,243
May	R 1,793	R 1,726	R 2,481	1,779	4,782	R 1,633	18,142	R 13,188	R 1,274	R 39,179
June	R 1,885	R 2,003	R 2,697	1,956	4,963	R 1,697	19,738	R 14,286	R 1,392	R 42,264
July	R 1,894	R 1,991	R 2,597	1,951	5,086	1,688	19,503	R 13,991	R 1,263	R 41,737
August	R 1,954	R 1,882	R 2,745	1,797	5,272	1,690	19,883	R 13,780	R 1,390	R 42,279
September	R 1,929	R 1,982	R 2,887	2,063	5,355	1,717	19,537	R 14,480	R 1,260	R 42,561
October	1,803	2,013	R 2,935	1,974	5,083	R 1,627	19,860	R 14,355	R 1,392	R 42,494
November	1,936	R 2,150	R 2,978	R 2,067	R 5,726	R 1,709	19,027	^R 15,162	R 1,306	R 43,157
December	1,947	2,187	2,939	2,099	6,739	1,647	20,507	15,328	1,513	46,034
Average	1,878	2,023	2,832	1,984	5,566	1,710	19,389	14,521	1,333	42,687

^a Through December 1990, the data for Germany are for the former West Germany only. Beginning with January 1991, the data for Germany are for

consists of Canada, Japan, the United States, "OECD Europe" and "Other OECD."

R=Revised.

Notes: Data through 1993 are final. Subsequent data are preliminary. Totals may not equal sum of components due to independent rounding. U.S. geographic coverage is the 50 States and the District of Columbia.

United States: Table 3.1a. Sources: 1973-1979—International Energy Agency (IEA), Annual Oil and Gas Statistics of OECD Countries. 1980 forward—IEA, quarterly and monthly computer tapes supporting Quarterly Oil Statistics and Energy Balances.

the unified Germany, i.e., the former East Germany and West Germany.

^b "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

^C "Other OECD" consists of Australia, New Zealand, and the U.S.

Territories.

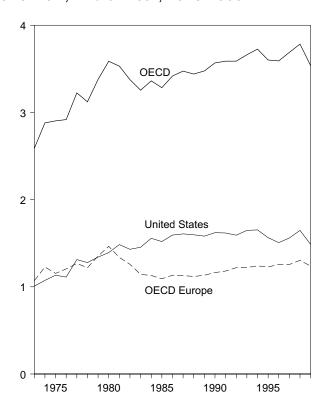
^d The Organization for Economic Cooperation and Development (OECD)

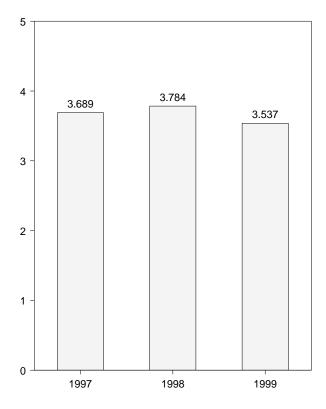
Figure 10.4 Petroleum Stocks in OECD Countries

(Billion Barrels)

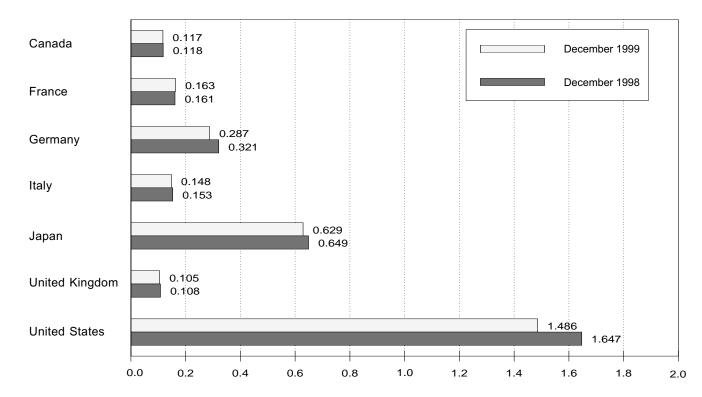
Overview, End of Year, 1973-1999

OECD Stocks, End of Month, December





By Selected Country, End of Month



Notes: • OECD is the Organization for Economic Cooperation and Development. • Because vertical scales differ, graphs should not be compared. Source: Table 10.3.

Table 10.3 Petroleum Stocks in OECD Countries

(Million Barrels)

	Canada	France	Germany ^a	Italy	Japan	United Kingdom	United States	OECD Europe ^b	Other OECD ^C	OECD ^d
4070 \	440	004	404	450	000	450	4.000	4.070		0.500
1973 Year	140	201	181	152	303	156	1,008	1,070	67	2,588
1974 Year	145	249	213	167	370	191	1,074	1,227	64	2,880
1975 Year	174	225	187	143	375	165	1,133	1,154	67	2,903
1976 Year	153	234	208	143	380	165	1,112	1,205	68	2,918
1977 Year	167	239	225	161	409	148	1,312	1,268	68	3,224
1978 Year	144	201	238	154	413	157	1,278	1,219	68	3,122
1979 Year	150	226	272	163	460	169	1,341	1,353	75	3,379
1980 Year	164	243	319	170	495	168	1,392	1,464	72	3,587
1981 Year	161	214	297	167	482	143	1,484	1,337	67	3.531
1982 Year	136	193	272	179	484	125	1,430	1,258	68	3,376
1983 Year	121	153	249	149	470	118	1,454	1,142	68	3,255
1984 Year	128	152	239	159	479	112	1.556	1.130	69	3,362
1985 Year	113	139	233	157	494	123	1,519	1,092	66	3,284
	111	127	252	155	509	124	1,513	1,133	72	3,204
1986 Year										
1987 Year	126	127	259	169	540	121	1,607	1,130	71	3,474
1988 Year	116	140	266	155	538	112	1,597	1,118	71	3,440
1989 Year	114	138	271	164	577	118	1,581	1,133	71	3,476
1990 Year	121	140	265	172	590	112	1,621	1,163	73	3,568
1991 Year	119	153	288	160	606	119	1,617	1,181	65	3,588
1992 Year	107	146	310	174	603	113	1.592	1,219	67	3.588
1993 Year	105	158	309	163	618	118	1,647	1,221	69	3,661
1994 Year	119	158	312	164	645	115	1,653	1,240	69	3,726
1995 Year	109	159	301	162	630	107	1,563	1,228	71	3,601
1996 Year	103	158	300	152	651	108	1,507	1,256	74	3,591
1997 January	106	156	306	158	650	107	1,501	1,280	80	3,617
February	103	159	309	156	642	105	1,482	1,270	75	3,573
March	107	160	312	160	650	109	1,512	1,273	76	3,617
April	110	159	301	151	665	108	1,518	1,248	80	3,620
May	106	163	311	150	664	108	1,561	1,248	81	3,660
June	107	153	299	151	662	111	1.575	1,230	83	3.657
July	109	153	303	150	670	112	1,559	1,230	81	3.649
August	113	158	302	151	669	108	1,570	1,253	80	3,685
September	108	157	291	144	682	106	1.592	1.227	77	3.687
	111	152	289	144	693	106	1,598	1,231	83	3,716
October			291	150	699		1,600	1,251	76	
November December	111 115	163 164	291 298	147	685	106 105	1,600 1,560	1,251 1,256	76 74	3,736 3.689
								•		,
1998 January	118	163	298	154	673	111	1,570	1,277	75	3,712
February	117	161	290	155	664	108	1,569	1,272	72	3,694
March	123	155	285	146	655	109	1,587	1,245	74	3,684
April	120	163	292	161	658	106	1,614	1,274	76	3,742
May	118	171	306	168	667	111	1,652	1,337	79	3,853
June	116	164	308	164	658	109	1,651	1,312	82	3,819
July	115	164	313	157	660	109	1.661	1.302	76	3.814
August	118	168	319	161	672	106	1.669	1,322	77	3.859
September	120	170	317	158	676	107	1,652	1,325	79	3,853
October	121	170	321	162	676	109	1.649	1.346	70	3.862
November	122	161	320	157	675	99	1,672	1,314	70 71	3.853
December	118	161	320 321	153	649	108	1,647	1,304	66	3,784
								•		,
1999 January February	118 118	181 175	329 320	154 146	645 633	111 109	1,639 1,625	1,364 1,323	72 74	3,838 3,773
March	124	179	306	149	634	109	1,608	1,323	71	3,746
	124	179	316	153	636	110		1,333	7 1 75	3,740 3,781
April							1,615		75 74	
May	121	182	317	154	637	107	1,661	1,342		3,835
June	R 118	177	310	R 146	638	102	1,636	R 1,305	73	R 3,771
July	R 118	174	313	145	645	103	1,639	R 1,311	76	R 3,790
August	_ 114	178	_ 307	_ 151	661	109	1,618	^R 1,325	78	R 3,796
September	^R 115	173	R 300	^R 150	652	106	1,608	^R 1.289	77	R 3,741
October	117	169	295	151	658	106	1,579	R 1.288	73	R 3.716
November	118	169	R 290	150	659	104	1.563	R 1,257	76	R 3,672
December	117	163	287	148	629	105	1,486	1,237	68	3,537
D000111001	• • • •	100	201	140	023	100	1,400	1,201	00	0,001

^a Through December 1990, the data for Germany are for the former West

R=Revised.

Notes: Stocks are at end of period. Petroleum stocks include crude oil (including strategic reserves), unfinished oils, natural gas plant liquids, and refined products. Petroleum stocks include all nonmilitary petroleum held for

storage, regardless of ownership, within each country in bulk terminals, refinery tanks, pipeline tankage, intercoastal tankers, tankers in port, and inland ship bunkers. Data exclude oil held in pipelines (except for those in the United States), rail and truck cars, sea-going ships' bunkers, service stations, retail stores, and tankers at sea. In the United States in January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys, thereby affecting subsequent stocks reported. New-basis end-of-year U.S. stocks, in million barrels, would have been 1,121 in 1974, 1425 in 1980, and 1,461 in 1982. Data through 1995 are final 1,425 in 1980, and 1,461 in 1982. Subsequent data are preliminary. components due to independent rounding. Data through 1995 are final.

Totals may not equal sum of U.S. geographic coverage is the 50 States and the District of Columbia.

Sources: United States: Table 3.1a. All Other Data: International Energy Agency, quarterly and monthly computer tapes supporting *Quarterly Oil Statistics and Energy Balances*.

Germany only. Beginning with January 1991, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

b "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom

Kingdom.

^c "Other OECD" consists of Australia, New Zealand, and the U.S.

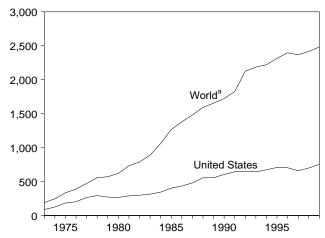
Territories.

d The Organization for Economic Cooperation and Development (OECD) consists of Canada, Japan, the United States, "OECD Europe" and "Other

Figure 10.5 Nuclear Electricity Gross Generation

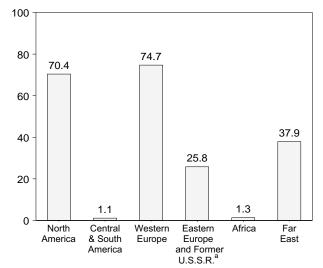
(Billion Kilowatthours)

U.S. and World, 1973-1999



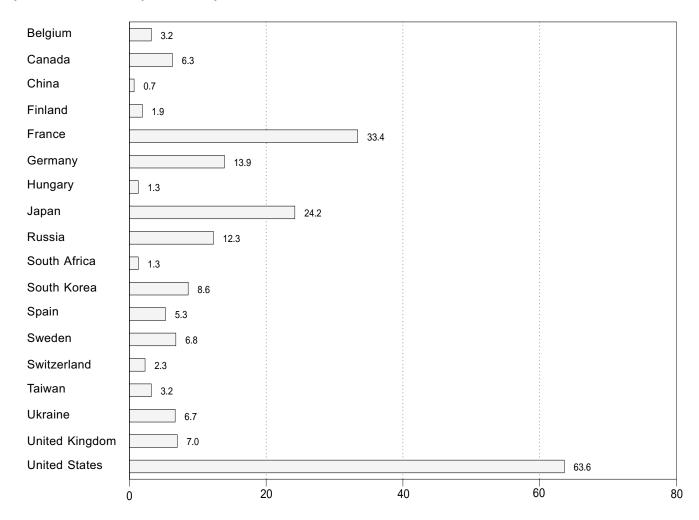
^aEastern Europe and the Former U.S.S.R. are included beginning in 1992.

By Region, February 2000



^aDoes not include Kazakhstan. See Table 10.4e.

By Selected Country, February 2000



Note: Because vertical scales differ, graphs should not be compared. Sources: Tables 10.4a-10.4e.

Table 10.4a Nuclear Electricity Gross Generation: Regions and World

	North America	Central and South America	Western Europe ^a	Eastern Europe and Former U.S.S.R.a	Africa	Far East ^a	World ^{a,b}
	America	South America	Europes	0.3.3.K.s	Airica	Fai ⊑ast	VVOITU
1973 Total	103.1	_	73.9	NA	_	12.3	189.3
1974 Total	139.7	1.0	83.9	NA	_	21.4	246.0
1975 Total	195.5	2.5	111.7	NA	_	24.4	334.1
1976 Total	219.8	2.6	126.2	NA	_	40.3	388.9
1977 Total	290.8	1.6	148.1	NA	_	31.5	472.0
1978 Total	325.4	2.9	166.9	NA	_	60.6	555.9
1979 Total	309.0	2.7	184.3	NA	_	74.7	570.7
1980 Total	305.8	2.3	214.2	NA	_	97.4	619.8
981 Total	331.8	2.8	293.4	NA	_	102.9	730.9
982 Total	341.2	1.9	321.8	NA	_	123.6	788.5
983 Total	366.6	3.6	377.2	NA	_	140.1	887.5
984 Total	397.6	6.6	485.4	NA	4.2	167.7	1,061.5
985 Total	465.6	9.1	582.8	NA	5.9	202.0	1,265.4
986 Total	508.8	5.8	631.5	NA	9.3	223.6	1,378.9
987 Total	560.1	6.2	648.3	NA	6.6	259.5	1,480.7
988 Total	639.7	5.5	688.1	NA	11.1	248.5	1,592.8
989 Total	640.2	6.6	732.2	NA	11.7	263.4	1,654.1
990 Total	681.3	9.4	738.6	NA NA	8.9	284.3	1,722.5
991 Total	733.4	9.2	769.7	NA NA	9.7	303.3	1,825.2
1992 Total	735.2	8.8	787.8	^E 267.5	9.9	315.2	b E 2,124.5
993 Total	744.6	8.1	820.9	E 259.0	7.7	E 345.2	E 2,185.6
1994 Total	787.3	8.2	820.2	E 227.8	10.3	E 366.7	E 2.220.4
995 Total	816.1	9.6	E 835.7	E 234.9	11.9	E 407.0	E 2,315.1
996 Total	806.4	9.8	E 879.5	E 261.6	12.5	E 426.4	E 2,396.3
997 Total	E 752.8	11.1	E 886.5	E 247.1	13.3	E 456.2	E 2,367.0
998 January	E 66.1	1.0	E 84.2	E 24.0	1.3	E 38.4	E 214.9
February	E 60.2	.9	E 77.1	E 23.3	1.2	E 31.8	E 194.6
March	E 63.8	1.1	E 79.6	E 24.6	1.4	E 39.3	E 209.8
April	E 56.0	1.1	E 72.2	E 21.1	1.2	E 40.1	E 191.7
May	E 59.4	1.0	E 69.7	E 18.9	.7	E 40.2	E 189.8
June	E 63.9	1.0	E 66.5	E 17.3	1.2	E 38.6	E 188.4
July	E 71.1	.8	E 65.4	E 16.8	1.4	E 43.5	E 199.0
August	E 70.2	.7	E 62.5	E 18.4	1.2	E 44.4	E 197.5
September	E 65.7	1.1	E 69.2	E 17.5	.9	E 39.3	E 193.6
October	E 65.4	.9	E 75.2	E 19.8	1.4	E 39.0	E 201.6
November	E 66.7	.3	E 78.2	E 21.5	1.2	E 39.6	E 207.5
December	E 72.7	.9	E 84.4	E 25.8	1.1	E 43.0	E 227.9
	E 781.0		E 884.2	E 248.9		E 477.2	E 2,416.4
Total	- 761.0	10.8	- 004.2		14.3	-411.2	
999 January	^E 74.4	^E 1.2	^E 84.7	^E 27.4	.9	^E 40.7	E 229.3
February	^E 66.2	1.1	^E 75.0	E 24.8	.8	E 35.7	^E 203.5
March	^E 69.0	1.1	^E 79.0	_ 26.8	_ 1.4	_ 40.6	^E 218.0
April	^E 59.9	1.1	E 71.8	E 22.6	E 1.4	E 39.2	^E 195.9
May	E 63.2	.8	66.5	E 20.2	1.2	E 37.7	E 189.7
June	E 68.6	.7	E 67.1	^E 18.7	1.3	E 36.2	^E 192.6
July	E 74.5	E .7	E 66.3	E 19.2	1.3	E 41.3	E 203.3
August	E 76.9	.8	E 66.6	^E 19.2	1.2	E 43.3	E 208.0
September	E 70.9	.7	E 68.1	E 19.5	.9	E 40.1	E 200.3
October	E 66.1	.8	E 74.1	E 19.8	.7	E 40.6	E 202.1
November	E 69.6	1.0	E 77.1	E 21.6	1.2	E 41.4	E 212.0
December	E 78.0	1.1	E 81.7	E 24.6	1.3	E 41.1	E 228.0
Total	E 837.3	E 11.1	E 878.1	E 264.7	E 13.5	E 478.0	E 2,482.6
000 January	E 77.7	1.2	E 80.0	E 27.3	1.3	E 40.8	E 228.3
February	E 70.4	1.1	E 74.7	E 25.8	1.3	E 37.9	E 211.1
2-Month Total	E 148.1	2.2	E 154.7	E 53.1	2.6	E 78.7	E 439.5
999 2-Month Total	E 140.6	2.2	^E 159.7	^E 52.3	1.6	E 76.4	E 432.7
1998 2-Month Total	E 126.4	1.9	E 161.3	E 47.2	2.5	E 70.2	E 409.5

^a Sum of available data only.

Notes: Net figures are generally less than gross figures by about 5 percent, the difference being the energy consumed by the generating plants

themselves. Monthly data may not sum to annual totals due to independent rounding and because precommercial generation is included in some annual totals but not in the monthly data. Data for regions may not sum to totals due to independent rounding.

Source: Based on data from *Nucleonics Week*, a copyrighted publication of The McGraw-Hill Publishing Companies, Inc. Used with permission.

b There is a discontinuity in this time series between 1991 and 1992; beginning in 1992, includes data for Eastern Europe and the Former U.S.S.R.

NA=Not available. -=Not applicable. E=Estimate.

Table 10.4b Nuclear Electricity Gross Generation: North, Central, and South America (Billion Kilowatthours)

1973 Total 1974 Total 1975 Total 1975 Total 1976 Total 1977 Total 1977 Total 1978 Total 1979 Total 1980 Total 1981 Total 1982 Total 1983 Total 1984 Total 1985 Total 1986 Total 1987 Total 1987 Total 1988 Total 1998 Total 1999 Total 1999 Total 1991 Total 1992 Total 1993 Total 1994 Total 1995 Total 1996 Total 1997 Total 1997 Total 1997 Total 1998 January February March April	Canada 15.3 15.4 13.2 18.0 26.6 33.0 38.4 40.4 43.3 42.6 53.0 53.8 62.9 74.6 80.6 85.6 83.2 75.8	Mexico	87.8 124.3 182.3 201.8 264.2 292.4 270.6 265.4 288.5 298.6 313.6 343.8	Total 103.1 139.7 195.5 219.8 290.8 325.4 309.0 305.8 331.8 334.2	- 1.0 2.5 2.6 1.6 2.9 2.7 2.3 2.8	Brazil	Total - 1.0 2.5 2.6 1.6 2.9 2.7 2.3
974 Total 975 Total 976 Total 977 Total 978 Total 979 Total 979 Total 980 Total 981 Total 982 Total 982 Total 983 Total 984 Total 985 Total 985 Total 986 Total 987 Total 998 Total 999 Total 999 Total 991 Total 991 Total 991 Total 992 Total 993 Total 994 Total 994 Total 995 Total 995 Total 995 Total 995 Total 997 Total 998 January February March 998 January February March 997 Total 998 January 99	15.4 13.2 18.0 26.6 33.0 38.4 40.4 43.3 42.6 53.0 53.8 62.9 74.6 80.6 85.6 83.2	- - - - - - - - - -	124.3 182.3 201.8 264.2 292.4 270.6 265.4 288.5 298.6 313.6	139.7 195.5 219.8 290.8 325.4 309.0 305.8 331.8	2.5 2.6 1.6 2.9 2.7 2.3	<u>-</u>	2.5 2.6 1.6 2.9 2.7
974 Total 975 Total 976 Total 976 Total 977 Total 978 Total 978 Total 980 Total 981 Total 982 Total 983 Total 984 Total 985 Total 985 Total 986 Total 987 Total 987 Total 998 Total 999 Total 991 Total 992 Total 993 Total 991 Total 992 Total 993 Total 994 Total 995 Total 996 Total 997 Total 998 Jotal 9997 Total 998 Jotal 9997 Total 998 Jotal 998 Jotal 998 Jotal 998 Jotal 998 Jotal 998 Jotal	15.4 13.2 18.0 26.6 33.0 38.4 40.4 43.3 42.6 53.0 53.8 62.9 74.6 80.6 85.6 83.2	- - - - - - - - - -	124.3 182.3 201.8 264.2 292.4 270.6 265.4 288.5 298.6 313.6	139.7 195.5 219.8 290.8 325.4 309.0 305.8 331.8	2.5 2.6 1.6 2.9 2.7 2.3	<u>-</u>	2.5 2.6 1.6 2.9 2.7
975 Total 976 Total 977 Total 977 Total 978 Total 979 Total 980 Total 981 Total 982 Total 983 Total 984 Total 985 Total 986 Total 987 Total 987 Total 998 Total 999 Total 999 Total 999 Total 999 Total 991 Total 992 Total 993 Total 994 Total 995 Total 997 Total 997 Total 998 January February March	13.2 18.0 26.6 33.0 38.4 40.4 43.3 42.6 53.0 53.8 62.9 74.6 80.6 85.6 83.2	- - - - - - - -	182.3 201.8 264.2 292.4 270.6 265.4 288.5 298.6 313.6	195.5 219.8 290.8 325.4 309.0 305.8 331.8	2.5 2.6 1.6 2.9 2.7 2.3		2.5 2.6 1.6 2.9 2.7
976 Total 977 Total 978 Total 978 Total 979 Total 980 Total 981 Total 982 Total 983 Total 984 Total 985 Total 986 Total 987 Total 987 Total 988 Total 998 Total 998 Total 999 Total 991 Total 992 Total 993 Total 994 Total 995 Total 997 Total 997 Total 998 Total 998 Jotal 999 Total 997 Total 998 Jotal 999 Total 9997 Total 9997 Total 9998 January February March	18.0 26.6 33.0 38.4 40.4 43.3 42.6 53.0 53.8 62.9 74.6 80.6 85.6 83.2	- - - - - - -	201.8 264.2 292.4 270.6 265.4 288.5 298.6 313.6	219.8 290.8 325.4 309.0 305.8 331.8	2.6 1.6 2.9 2.7 2.3		2.6 1.6 2.9 2.7
977 Total 978 Total 978 Total 979 Total 980 Total 981 Total 982 Total 983 Total 984 Total 985 Total 985 Total 986 Total 997 Total 998 Total 998 Total 999 Total 991 Total 992 Total 993 Total 994 Total 995 Total 997 Total 998 Total 997 Total 998 Total 999 Total	26.6 33.0 38.4 40.4 43.3 42.6 53.0 53.8 62.9 74.6 80.6 85.6 83.2	- - - - - - -	264.2 292.4 270.6 265.4 288.5 298.6 313.6	290.8 325.4 309.0 305.8 331.8	1.6 2.9 2.7 2.3		1.6 2.9 2.7
978 Total 979 Total 979 Total 980 Total 981 Total 982 Total 983 Total 984 Total 985 Total 985 Total 986 Total 997 Total 9990 Total 991 Total 992 Total 993 Total 994 Total 995 Total 997 Total 998 Jotal 997 Total 998 Jotal 998 Jotal 999 Total	33.0 38.4 40.4 43.3 42.6 53.0 53.8 62.9 74.6 80.6 85.6 83.2	- - - - -	292.4 270.6 265.4 288.5 298.6 313.6	325.4 309.0 305.8 331.8	2.9 2.7 2.3	- - -	2.9 2.7
979 Total 980 Total 981 Total 982 Total 983 Total 984 Total 985 Total 985 Total 986 Total 987 Total 998 Total 999 Total 991 Total 992 Total 993 Total 994 Total 995 Total 997 Total 998 Jotal 997 Total 998 Jotal 999 Total	38.4 40.4 43.3 42.6 53.0 53.8 62.9 74.6 80.6 85.6 83.2	- - - - -	270.6 265.4 288.5 298.6 313.6	309.0 305.8 331.8	2.7 2.3	<u>-</u> -	2.7
980 Total 981 Total 982 Total 982 Total 983 Total 984 Total 985 Total 986 Total 987 Total 998 Total 999 Total 991 Total 992 Total 992 Total 994 Total 995 Total 997 Total 998 Total 998 Total 997 Total 998 Total 998 Total 999 Total 999 Total 999 Total 999 Total 999 Total 999 Total	40.4 43.3 42.6 53.0 53.8 62.9 74.6 80.6 85.6 83.2	- - - -	265.4 288.5 298.6 313.6	305.8 331.8	2.3	_	
981 Total 982 Total 983 Total 984 Total 985 Total 986 Total 987 Total 989 Total 999 Total 991 Total 992 Total 993 Total 994 Total 995 Total 996 Total 997 Total 998 Total 997 Total 998 January February March	43.3 42.6 53.0 53.8 62.9 74.6 80.6 85.6 83.2	- - - -	288.5 298.6 313.6	331.8			
982 Total 983 Total 984 Total 985 Total 986 Total 987 Total 987 Total 989 Total 999 Total 991 Total 992 Total 993 Total 994 Total 995 Total 996 Total 997 Total 998 January February March	42.6 53.0 53.8 62.9 74.6 80.6 85.6 83.2		298.6 313.6			_	2.8
983 Total 984 Total 985 Total 985 Total 986 Total 987 Total 988 Total 999 Total 991 Total 992 Total 993 Total 994 Total 995 Total 996 Total 997 Total 998 January February March	53.0 53.8 62.9 74.6 80.6 85.6 83.2		313.6		1.9	0.1	1.9
984 Total 985 Total 986 Total 986 Total 988 Total 988 Total 989 Total 990 Total 991 Total 992 Total 993 Total 994 Total 995 Total 997 Total 998 January February March	53.8 62.9 74.6 80.6 85.6 83.2			366.6	3.4	.2	3.6
985 Total	62.9 74.6 80.6 85.6 83.2	-		397.6	4.5	2.1	6.6
986 Total	74.6 80.6 85.6 83.2		402.7		5.8	3.4	9.1
987 Total	80.6 85.6 83.2	_		465.6			
988 Total	85.6 83.2		434.1	508.8	5.7	.1	5.8
989 Total	83.2	-	479.5	560.1	5.2	1.0	6.2
990 Total		_	554.1	639.7	5.1	.3	5.5
991 Total	75.8	_	557.0	640.2	5.0	1.6	6.6
992 Total		2.1	603.4	681.3	7.4	2.0	9.4
993 Total	86.1	4.2	643.0	733.4	7.7	1.4	9.2
994 Total	81.3	3.9	650.0	735.2	7.1	1.8	8.8
995 Total	97.6	4.9	642.0	744.6	7.7	.4	8.1
996 Total	110.7	4.2	672.4	787.3	8.2	.0	8.2
997 Total	100.4	7.9	707.7	816.1	7.1	2.5	9.6
998 January February March	95.2	7.9	703.3	806.4	7.4	2.4	9.8
February March	84.1	10.4	^E 658.3	^E 752.8	8.0	3.2	11.1
March	6.1	.9	E 59.1	E 66.1	.7	.2	1.0
	5.5	.8	^E 53.9	E 60.2	.7	.2	.9
April	7.2	.9	^E 55.6	E 63.8	.7	.4	1.1
	6.0	.5	^E 49.5	E 56.0	.7	.4	1.1
May	4.7	.8	E 53.9	E 59.4	.7	.3	1.0
June	5.6	.9	^E 57.4	E 63.9	.7	.3	1.0
July	6.6	.9	E 63.6	E 71.1	.5	.3	.8
August	7.3	.9	E 61.9	E 70.2	.4	.3	.7
September	5.7	.9	^E 59.1	E 65.7	.7	.4	1.1
October	E 4.7	.9	E 59.8	E 65.4	.7	.2	.9
November	E 6.2	.6	E 59.9	E 66.7	.3	.0	.3
December	E 7.1	.5	E 65.1	E 72.7	.7	.2	.9
Total	E 72.7	9.5	E 698.7	E 781.0	7.5	3.3	10.8
Total	12.1	3.5	030.7	701.0	7.5	5.5	10.0
999 January	6.3	.9	E 67.2	E 74.4	E .7	.4	E 1.2
February	^E 5.7	.8	E 59.6	E 66.2	.7	.4	1.1
March	7.2	.9	E 60.9	E 69.0	.7	.4	1.1
April	6.1	.9	E 52.9	E 59.9	.7	.3	1.1
May	4.7	.9	E 57.6	E 63.2	.5	.3	.8
June	5.5	.9	E 62.2	E 68.6	.5	.2	.7
July	6.1	1.0	E 67.4	E 74.5	.5 .5	E .2	E .7
August	6.8	.6	E 69.5	E 76.9	.5 .5	.3	.8
September	6.6	.6 .5	E 63.8	E 70.9	.5 .4	.s .3	.o .7
•		.5 .7	E 59.3	E 66.1			
October	6.1		09.3 F 60.7	E 69.6	.5	.3	.8
November	6.1	.9	E 62.7	E 78.0	.7	.3	1.0
December Total	6.7 E 73.9	1.0 10.0	^E 70.3 ^E 753.4	E 837.3	.7 E 7.1	.4 E 4.0	1.1 ^E 11.1
2 000 January	7.1	.7	E 69.9	E 77.7	.7	.4	1.2
February	6.3	.6	E 63.6	= 77.7 E 70.4	. <i>r</i> .7	.4 .4	1.2
2-Month Total	13.4	.6 1.3	E 133.5	E 148.1	./ 1.4	.4 .8	2.2
999 2-Month Total		1.7	E 126.9	^E 140.6	1.4	.8	2.2
998 2-Month Total	12.0	1.7					

⁻⁼Not applicable. E=Estimate.

Notes: Net figures are generally less than gross figures by about 5 percent, the difference being the energy consumed by the generating plants themselves. Monthly data may not sum to annual totals due to independent rounding and because precommercial generation is included in

some annual totals but not in the monthly data. Data for countries may not sum to regional totals due to independent rounding. U.S. geographic coverage is the 50 States and the District of Columbia.

Source: Based on data from *Nucleonics Week*, a copyrighted publication of The McGraw-Hill Publishing Companies, Inc. Used with permission.

Table 10.4c Nuclear Electricity Gross Generation: Western Europe

						West	tern Europe					
	Belgium	Finland	France	G ermany ^a	Italy ^b	Nether- lands	Slovenia	Spain	Sweden	Switzer- land	United Kingdom ^c	Totald
1973 Total	0.0	_	14.7	11.9	3.1	1.1	_	6.5	2.1	6.2	28.2	73.9
1974 Total	.1	-	14.7	12.0	3.4	3.3	-	7.2	2.3	7.0	33.8	83.9
1975 Total	6.8	_	18.3	21.7	3.8	3.3	_	7.5	12.0	7.7	30.5	111.7
1976 Total	10.0	_	15.8	24.5	3.8	3.9	-	7.6	16.0	7.9	36.8	126.2
1977 Total	11.9	2.7	17.9	36.0	3.4	3.7	_	6.5	19.9	8.1	38.1	148.1
1978 Total	12.5	3.3	30.6	35.7	4.5	4.1	_	7.6	23.8	8.3	36.6	166.9
1979 Total	11.4 12.5	6.7 7.0	39.9 61.2	42.2 43.7	2.6 2.2	3.5	-	6.7	21.0 26.7	11.8	38.5 37.2	184.3 214.2
1980 Total 1981 Total	12.5	7.0 14.5	105.2	43.7 53.4	2.2	4.2 3.7	_	5.2 9.4	26.7 37.7	14.3 15.2	37.2 38.9	293.4
1982 Total	15.6	16.5	103.2	63.4	6.8	3.9	_	8.8	38.8	15.2	44.1	321.8
1983 Total	24.1	17.4	144.2	65.8	5.8	3.6	NA	10.7	40.4	15.5	49.6	377.2
1984 Total	27.7	18.5	191.2	92.6	6.9	3.8	NA NA	23.1	51.3	16.3	54.1	485.4
1985 Total	34.5	18.8	224.0	125.8	7.0	3.9	NA	28.0	58.6	22.4	59.7	582.8
1986 Total	38.6	18.8	254.3	118.9	8.7	4.2	NA	37.5	69.9	22.5	58.2	631.5
1987 Total	41.9	19.4	265.5	130.2	.2	3.6	NA	41.2	67.2	23.0	56.2	648.3
1988 Total	43.1	19.3	274.9	145.2	.0	3.7	NA	50.4	69.4	22.7	59.4	688.1
1989 Total	41.2	18.8	302.5	149.6	.0	4.0	NA	56.1	65.6	22.8	71.6	732.2
1990 Total	42.7	18.9	314.1	147.2	.0	3.4	NA	54.3	68.2	23.6	66.1	738.6
1991 Total	42.9	19.2	331.4	147.3	.0	3.3	NA	55.6	76.8	22.9	70.4	769.7
1992 Total	43.5	19.0	337.6	158.8	.0	3.8	4.0	55.8	63.5	23.4	78.5	787.8
1993 Total	41.9	19.6	366.7	153.5	.0	3.9	4.0	56.1	61.4	23.3	90.4	820.9
1994 Total	40.6	19.1	359.1	151.1	.0	4.0	4.6	55.1	72.8	24.2	89.5	820.2
1995 Total	41.4	18.9	377.6	154.3	.0	4.0	4.8	54.5	69.9	24.8	^E 85.5	^E 835.7
1996 Total	43.3	19.5	397.0	161.7	.0	4.2	4.6	59.1	_ 76.2	25.0	^E 88.8	<u></u> 879.5
1997 Total	47.4	20.9	389.3	170.4	.0	3.1	5.4	55.4	E 70.6	25.3	E 98.8	E 886.5
1998 January	4.4	2.0	37.5	15.9	.0	.3	.5	5.1	7.6	2.4	E 8.4	E 84.2
February	4.0	1.8	34.7	14.0	.0	.3	.4	5.1	6.7	2.2	E 8.0	E 77.1
March	3.7	2.0	34.7	14.0	.0	.4	.5	4.6	7.3	2.4	E 10.1	E 79.6
April	3.3	1.9	31.2	14.1	.0	(s)	.3 E 3	4.4	7.2	2.1	E 7.4	E 72.2
May	4.0	1.4	29.9	12.2	.0	.3	.5	4.8	6.9	2.1	E 7.6	E 69.7
June	3.5	1.6	28.7	10.8	.0	.1	.4	5.1 ^E 5.1	5.0	1.7	E 9.5 E 6.9	E 66.5 E 65.4
July	2.9	1.9 1.6	29.4 26.0	12.5 12.9	.0 .0	.3	.5	E 5.1	4.1 3.3	1.9 1.4	E 7.6	E 62.5
August	3.8 4.1	1.6	29.0	12.9	.0	.4 .3	.5 ^E .5	E 5.1	3.3 4.7	2.3	E 9.7	E 69.2
September	3.9	2.0	33.2	14.0	.0	.3 .4	5 .5	E 4.4	E 6.2	2.3	E 8.2	E 75.2
October November	3.9 4.1	2.0	34.2	14.0	.0	.3	.5 .5	E 4.6	7.1	2.4	E 9.0	E 78.2
December	4.5	2.0	36.0	14.6	.0	.4	.5 .5	E 5.0	7.1	2.5	E 11.3	E 84.4
Total	46.1	21.9	384.4	161.0	.0	3.8	E 5.3	E 58.6	E 73.8	25.7	E 103.7	E 884.2
1999 January	4.5	2.1	38.0	15.1	.0	.4	.5	5.4	7.6	2.4	E 8.8	E 84.7
February	4.0	1.9	33.6	13.1	.0	.3	.4	4.1	6.9	2.2	E 8.3	E 75.0
March	4.4	2.1	34.3	14.2	.0	.4	.4	4.2	E 7.5	2.3	9.3	E 79.0
April	3.8	2.0	31.5	14.0	.0	.3	.0	3.7	6.7	2.1	E 7.7	E 71.8
May	4.2	1.6	26.6	12.8	.0	.4	.1	5.1	5.9	2.3	7.6	66.5
June	3.9	1.9	E 26.6	13.4	.0	.3	.4	4.7	E 5.2	2.0	8.8	E 67.1
July	3.8	1.9	30.0	E 13.4	.0	.3	.5	4.9	3.7	1.2	6.5	E 66.3
August	3.8	1.7	29.1	_ 13.5	.0	.3	.5	5.5	4.3	1.1	E 7.0	<u> </u>
September	3.5	1.7	29.5	E 13.5	.0	.1	.5	4.9	4.8	1.9	7.7	^E 68.1
October	_ 4.3	2.1	31.7	E 13.5	.0	.4	.5	5.3	7.0	2.3	7.1	^E 74.1
November	E 4.3	2.0	32.4	15.1	.0	.3	.5	5.5	7.3	2.4	_ 7.3	E 77.1
December Total	4.5 E 49.0	2.1 23.0	34.2 E 377.4	16.2 E 167.8	.0 .0	.4 3.8	.5 4.7	5.6 58.9	7.7 E 74.5	2.5 24.8	E 8.1 E 94.1	E 81.7 E 878.1
2000 January	4.3	2.1	E 34.2 E 33.4	15.8	.0	.4	.5	E 5.6	7.1 6.9	2.5	7.5	E 80.0 E 74.7
February 2-Month Total	3.2 7.5	1.9 4.0	E 67.6	13.9 29.7	.0 .0	.3 .7	.5 .9	5.3 E 10.9	6.8 13.9	2.3 4.8	7.0 14.5	E 154.7
1999 2-Month Total	8.5	4.0	71.6	28.2	.0	.7	.9	9.5	14.5	4.6	E 17.2	E 159.7
1998 2-Month Total	8.4	3.7	72.2	29.9	.0	.7	.9	10.1	14.3	4.6	^E 16.4	E 161.3

^a Through December 1990, the data for Germany are for the former West Germany only. Beginning with January 1991, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.
^b In 1987, Italy's citizens voted for a nuclear power moratorium, which shut

NA=Not available. - =Not applicable. E=Estimate. (s)=Less than 0.05 billion

kilowatthours.

Notes: Net figures are generally less than gross figures by about 5 percent, the difference being the energy consumed by the generating plants themselves.

Monthly data may not sum to annual totals due to independent rounding and because precommercial generation is included in some annual totals but not in the monthly data. Data for countries may not sum to regional totals due to independent rounding.

Source: Based on data from *Nucleonics Week*, a copyrighted publication of

The McGraw-Hill Publishing Companies, Inc. Used with permission.

down their nuclear power plants indefinitely.

^c Monthly data for the United Kingdom are totals for 4- or 5-week reporting periods, not calendar months.

^d Sum of available data only

Table 10.4d Nuclear Electricity Gross Generation: Eastern Europe and Former U.S.S.R.

					Eastern Euro	pe and Form	er U.S.S.R.				
	Armeniaa	Bulgaria	Czech Republic ^b	Hungary	Kazakhstan b	Lithuaniab	Romania	Russia	Slovakia ^b	Ukraine	Total ^c
1973 Total	_	_	_	_	NA	_	_	NA	NA	_	NA
1974 Total	_	NA	_	_	NA	_	_	NA	NA	_	NA
1975 Total	_	NA	-	-	NA	_	-	NA	NA	-	NA
1976 Total	_	NA NA	_	-	NA NA	_	_	NA NA	NA NA	-	NA NA
1977 Total 1978 Total	_	NA NA	_	_	NA NA	_	_	NA NA	NA NA	NA	NA NA
1979 Total	_	NA	_	_	NA	_	_	ŇÁ	NA	NA	NA
1980 Total	_	NA	_	_	NA	_	_	NA	NA	NA	NA
1981 Total	_	NA	_	_	NA	-	_	NA	NA	NA	NA
1982 Total	-	NA	-		NA	-	-	NA	NA	NA	NA
1983 Total	_	NA NA	_	NA NA	NA NA	_	_	NA	NA NA	NA NA	NA NA
1984 Total	_	NA NA	NA	NA NA	NA NA	NA	_	NA NA	NA NA	NA NA	NA NA
1985 Total 1986 Total	_	NA NA	NA NA	NA NA	NA NA	NA NA		NA NA	NA NA	NA NA	NA NA
1987 Total	_	NA	NA	NA	NA	NA		NA	NA	NA	NA
1988 Total	_	NA	NA	NA	NA	NA	_	NA	NA	NA	NA
1989 Total	-	NA	NA	NA	NA	NA	-	NA	NA	NA	NA
1990 Total	_	NA	NA	NA	NA	NA	-	NA	NA	NA	NA
1991 Total 1992 Total	_	NA ^E 12.2	NA ^E 12.9	NA ^E 13.8	NA ^E .5	NA ^E 16.4	_	NA ^E 125.6	NA ^E 11.7	NA ^E 74.6	NA ^E 267.5
1993 Total	_	14.0	E 13.2	13.8	3 E.4	E 12.9	_	120.4	E 11.6	E 72.7	E 259.0
1994 Total	_	14.9	^E 12.7	14.0	E .4	[⊑] 7.0	_	97.7	E 12.7	68.4	E 227.8
1995 Total	_	17.2	^E 12.8	14.0	E .4	^E 9.7	_	98.3	^E 12.0	70.4	E 234.9
1996 Total	NA	_ 18.7	E 13.5	14.2	<u> </u>	E 13.6	E 1.0	108.8	E 11.8	80.0	^E 261.6
1997 Total	1.4	^E 15.5	NA	14.0	^E .3	12.1	3.9	108.1	11.0	80.8	E 247.1
1998 January	.3	1.1	NA	1.3	NA	1.3	.5	11.6	1.1	6.6	E 24.0
February	.3	1.9	NA	1.2	NA	1.2	.4	10.6	.9	6.7	E 23.3
March	.2	2.2	NA	1.1	NA	1.3	.5	11.1	.9	7.2	E 24.6
April May	.1 .1	2.2 2.2	NA NA	.9 1.0	NA NA	1.0 1.1	.4 .0	8.5 8.1	.9 .8	7.1 5.6	E 21.1 E 18.9
June	.1	1.0	NA	1.0	NA	.9	.3	7.4	.8	E 5.0	E 17.3
July	.1	1.0	NA	1.0	NA	.9	.3	6.7	.8	€ 5.0	E 16.8
August	.1	1.6	NA	1.1	NA	.9	.5	5.5	.8	6.8	E 18.4
September	.1	_ 1.0	NA	1.3	NA	.9	.5	5.8	.8	6.0	<u> </u>
October	.0	E 1.6	NA	1.4	NA	1.2	.5	7.5	.9	5.6	E 19.8
November	.0 .0	E 1.6 1.9	NA NA	1.3 1.4	NA NA	1.3 1.4	.5 .5	9.2 11.6	.8 .9	5.5 6.8	E 21.5 E 25.8
December Total	1.6	E 19.2	NA NA	13.9	NA NA	13.5	5.1	103.7	10.3	E 74.0	E 248.9
1999 January	.2	E 1.9	NA	1.3	NA	1.3	.5	12.3	.9	7.7	E 27.4
February	.3	E 1.9 E 1.9	NA NA	1.2 1.1	NA NA	1.1	.5 .5	10.7 11.7	.8	7.2 8.0	E 24.8 E 26.8
March April	.3 3	E 1.9	NA NA	1.1	NA NA	1.0 .5	.5 5	10.2	.9 .8	6.4	E 22.6
May	E 2	E 1.9	1.0	1.1	.0	.6	.5 .5	8.1	.9	5.8	E 20.2
June	E.3	E 1.9	1.0	1.0	.0		.5	7.6	.8	5.2	E 18.7
July	.2	1.9	1.0	1.0	.0	.3 .7	E .5	8.8	.8	4.4	E 19.2
August	.2	E 1.0	.9	1.0	.0	.8	.5	8.9	.8	5.1	E 19.2
September	.1	E 1.0 E 1.0	1.0	1.1	.0	.9	.5	8.7	.9	5.4	E 19.5 E 19.8
October November	.0 .0	E 1.0	1.2 1.3	1.4 E 1.4	.0 .0	1.0 .9	(s) .1	8.7 10.9	1.0 .9	5.6 5.1	E 21.6
December	2	E 1.5	1.2	1.4	.0	.9 .9	.5	11.4	.9 1.1	6.3	E 24.6
Total	E 2.4	E 19.0	13.4	E 14.2	NÄ	9.9	E 5.2	118.0	10.5	72.2	E 264.7
2000 January	.3	E 1.5	E 1.2	E 1.4	.0	.9	.5	13.2	1.1	7.2	E 27.3
February	.3	E 1.5	_ 1.2	1.3	.0	.6	.5	12.3	1.3	6.7	E 25.8
2-Month Total	.5	E 3.1	E 2.5	E 2.7	.0	1.6	1.0	25.4	2.4	13.9	^E 53.1
1999 2-Month Total	.5	3.9	NA	2.5	NA	2.3	1.0	23.0	1.7	14.9	E 52.3
1998 2-Month Total	.5	3.1	NA	2.6	NA	2.5	1.0	22.2	2.0	13.4	E 47.2

a According to EIA's Nuclear Power Generation and Fuel Cycle Report 1996,

themselves. Monthly data may not sum to annual totals due to independent rounding and because precommercial generation is included in some annual totals but not in the monthly data. Data for countries may not sum to regional totals due to independent rounding.

Source: Czech Republic, Kazakhstan, Lithuania, Slovakia, and Eastern European Countries: See footnote b. All Other: Based on data from Nucleonics Week, a copyrighted publication of The McGraw-Hill Publishing Companies, Inc. Used with permission.

^a According to EIA's *Nuclear Power Generation and Fuel Cycle Report 1996*, Armenia has two units; one came on line in November 1995 but no data are available prior to 1997, and the other is projected to come on line in 2001.
^b The total gross generation estimates for Czech Republic, Kazakhstan, Lithuania, and Ślovakia are calculated as 5 percent more than the annual net nuclear generation reported by the International Atomic Energy Agency and published in the Energy Information Administration annual reports—1992 and 1993: *World Nuclear Outlook 1994*, December 1994, Table 1. 1994: *Nuclear Power Generation and Fuel Cycle Report 1996*, Table 1. 1995 and 1996: *Nuclear Power Generation and Fuel Cycle Report 1997*, September 1997, Table D4. 1997 forward: Based on data from *Nucleonics Week*, a copyrighted publication of The McGraw-Hill Publishing Companies, Inc. Used with permission.

^c Sum of available data only.

NA=Not available. -=Not applicable. E=Estimate. (s)=Less than 0.05 billion kilowatthours.

Notes: Net figures are generally less than gross figures by about 5 percent, the difference being the energy consumed by the generating plants themselves. Monthly data may not sum to annual totals due to independent

Table 10.4e Nuclear Electricity Gross Generation: Africa and Far East

	Africa				Far East			
	South Africa ^a	China ^b	India	Japan	Pakistan	South Korea	Taiwan	Total ^c
1973 Total	_	_	2.5	9.4	0.5	_	_	12.3
1974 Total	_	_	1.9	18.9	.6	_	_	21.4
1975 Total	_	_	2.5	21.3	.5	_	_	24.4
1976 Total	_	_	3.2	36.6	.5	_	_	40.3
1977 Total	_	_	2.8	28.2	.3	0.1	0.1	31.5
1978 Total	_	_	2.3	53.1	.2	2.3	2.7	60.6
1979 Total	_	_	3.2	62.0	(s)	3.2	6.3	74.7
1980 Total	_	_	2.9	82.8	.1	3.5	8.2	97.4
1981 Total	_	_	3.1	86.0	.2	2.9	10.7	102.9
1982 Total	_	_	2.2	104.5	.1	3.8	13.1	123.6
1983 Total	_	_	2.9	109.1	.2	9.0	18.9	140.1
1984 Total	4.2	_	4.1	127.2	.3	11.8	24.3	167.7
1985 Total	5.9	_	4.5	152.0	.3	16.5	28.7	202.0
1986 Total	9.3	_	5.1	164.8	.5	26.1	26.9	223.6
1987 Total	6.6	_	5.5	182.8	.3	37.8	33.1	259.5
1988 Total	11.1	_	6.1	173.6	.2	38.7	29.9	248.5
1989 Total	11.7	_	4.0	183.7	.1	47.2	28.3	263.4
1990 Total	8.9	_	6.3	191.9	.4	52.8	32.9	284.3
1991 Total	9.7	_	5.4	205.8	.4	56.3	35.3	303.3
1992 Total	9.9	_	6.3	218.0	.6	56.4	33.8	315.2
1993 Total	7.7	^E 2.6	6.2	243.5	.4	58.1	34.3	E 345.2
1994 Total	10.3	E 14.2	5.0	253.8	.6	58.3	34.8	E 366.7
1995 Total	11.9	E 13.0	8.0	286.1	.0 .5	64.0	35.3	E 407.0
1996 Total	12.5	E 14.3	8.3	293.2	.4	72.5	37.8	E 426.4
1997 Total	13.3	E 11.4	E 11.0	318.0	.4	78.9	E 36.6	E 456.2
1001 10141	10.0			0.0.0	• • • • • • • • • • • • • • • • • • • •	10.0	00.0	400.2
1998 January	1.3	E 1.1	E 1.0	25.2	(s)	7.3	3.7	E 38.4
February	1.2	E .6	E 1.0	21.6	(s)	5.6	3.0	E 31.8
March	1.4	.9	E 1.0	27.3	.0	6.7	3.4	E 39.3
April	1.2	1.3	E 1.0	28.2	.0	6.7	2.9	E 40.1
May	.7	E 1.3	E 8	28.7	(s)	6.5	3.0	E 40.2
June	1.2	1.4	Eβ	26.6	.1	6.4	3.3	E 38.6
July	1.4	E 1.4	Eβ	29.7	.1	7.9	3.7	E 43.5
August	1.2	1.4	E 8	30.4	.1	8.1	3.6	E 44.4
September	.9	1.4	E .9	26.5	.1	7.5	3.0	E 39.3
October	1.4	E 1.3	E .9	25.7	.1	8.4	2.6	E 39.0
November	1.2	E 1.3	1.0	27.1	(s)	7.9	2.3	E 39.6
December	1.1	1.2	1.2	29.9	(s)	8.3	2.4	E 43.0
Total	14.3	E 14.5	E 11.2	326.9	.4	87.3	36.9	E 477.2
1999 January	.9	1.2	1.2	27.4	.0	7.6	3.3	E 40.7
February	.8	E .6	1.0	23.8	.0	7.0	3.3	E 35.7
March	E 1.4	1.0	1.1	27.7	.0	7.9	2.9	40.6
April	1.4	E 1.4	1.0	26.1	.0	7.9	2.7	E 39.2
May	1.2	E 1.5	1.2	24.0	.0	7.8	3.2	E 37.7
June	1.3	E 1.4	1.2	23.1	.0	7.3	3.3	E 36.2
July	1.3	^E 1.4	E 1.2	28.2	.0	7.2	E 3.3	E 41.3
August	1.2	E 1.4	.9	29.1	.0	8.2	3.7	E 43.3
September	.9	E 1.3	1.1	26.5	.0	8.2	3.0	E 40.1
October	.7	E 1.3	.9	26.5	.0	8.7	3.2	E 40.6
November	1.2	E .9	1.2	27.5	(s)	8.7	3.1	E 41.4
December	1.3	E 1.1	1.1	27.6	(s)	8.2	3.1	E 41.1
Total	E 13.5	^E 14.6	E 13.2	317.4	.1	94.6	^E 38.2	^E 478.0
2000 January	1.2	E .9	1.2	OF 6	(0)	0.4	2.6	E 40.8
2000 January	1.3	E.7		25.6	(s)	9.4	3.6	E 37.9
February	1.3	⊑./ E 1.6	1.2	24.2	(s)	8.6 19.1	3.2	E 78.7
2-Month Total	2.6	- 1.6	2.4	49.8	.1	18.1	6.7	- 18.1
1999 2-Month Total	1.6	E 1.8	2.2	51.2	.0	14.5	6.6	^E 76.4
1939 Z-WOILLI TOLAL	2.5	E 1.8	E 1.9	31.2	.0	12.9	0.0	- 76.4 E 70.2

^a South Africa comprises all of Africa's nuclear electricity generation.

NA=Not available. - =Not applicable. E=Estimate. (s)=Less than 0.05 billion kilowatthours.

Notes: Net figures are generally less than gross figures by about 5 percent, the difference being the energy consumed by the generating plants themselves. Monthly data may not sum to annual totals due to independent rounding and because precommercial generation is included in some annual totals but not in the monthly data. Data for countries may not sum to regional totals due to independent rounding.

China: See footnote b. All Other: Based on data from Nucleonics Week, a copyrighted publication of The McGraw-Hill Publishing Companies, Inc. Used with permission.

b The total gross generation estimates for China are calculated as 5 percent more than the annual net nuclear generation reported by the International Atomic Energy Agency (IAEA) and are published in the Energy Information Administration annual reports—1993: World Nuclear Outlook 1994, December 1994, Table 1. 1994: Nuclear Power Generation and Fuel Cycle Report 1996, October 1996, Table 1. 1995 and 1996: Nuclear Power Constitution and Fuel Cycle Report 1996, October 1996, Table 1. 1995 and 1996: Nuclear Power Constitution and Fuel Cycle Report 1996, October 1996, Table 1. 1995 and 1996: Nuclear Power Constitution and Fuel Cycle Report 1996, October 1996, Table 1. 1995 and 1996: Nuclear Power Constitution and Fuel Cycle Report 1996, Page 1997, Fabruary 1997, Table 1. 199 Generation and Fuel Cycle Report 1997, September 1997, Table D4. 1997 forward: Based on data from Nucleonics Week, a copyrighted publication of The McGraw-Hill Publishing Companies, Inc. Used with permission.

^c Sum of available data only.

Sources for Tables 10.1a and 10.1b

United States

Table 3.1a.

Other Countries: Monthly Data

1998-2000: Petroleum Intelligence Weekly, Oil and Gas Journal, and other industry sources.

Other Countries: Annual Data

1973-1979: Energy Information Administration (EIA), International Energy Annual 1981, Table 8.
1980-1998: Office of Energy Markets and End Use, International Energy Database, December 1999.
1999: Average of monthly data.

World: Monthly Data

1998-2000: EIA, International Petroleum Statistics Report, sum of all countries' monthly data.

World: Annual Data

1973-1979: EIA, International Energy Annual 1981, Table 8.

1980-1998: Office of Energy Markets and End Use, International Energy Database, December 1999.

1999: Average of monthly data.

Appendix A. Thermal Conversion Factors

In general, the annual thermal conversion factors presented in Tables A1 through A6 are computed from final annual data. However, if the current year's final data are not available in time for publication, thermal conversion factors for the current year are computed from the best available data and are labeled "preliminary." Usually, the previous year's factor is used as the preliminary value until data become available to calculate the factor appropriate to the year. The source of each factor is described in the section entitled "Thermal Conversion Factor Source Documentation," which follows Table A6 in this appen-

Thermal conversion factors for hydrocarbon mixes (Table A1) are weighted averages of the thermal conversion factors for each hydrocarbon included in the mix. For example, in calculating the thermal conversion factor for a 60-40 butane-propane mixture, the thermal conversion factor for butane is weighted 1.5 times more heavily than the thermal conversion factor for propane.

Table A1. Approximate Heat Content of Petroleum Products (Million Btu per Barrel)

Petroleum Product	Heat Content	Petroleum Product	Heat Content
Asphalt	6.636	Pentanes Plus	4.620
Aviation Gasoline	5.048	Petrochemical Feedstocks	
Butane	4.326	Naphtha Less Than 401° F	5.248
Butane Propane Mixture ^a	4.130	Other Oils Equal to or Greater Than 401° F	5.825
Distillate Fuel Oil	5.825	Still Gas	6.000
Ethane	3.082	Petroleum Coke	6.024
Ethane-Propane Mixture ^b	3.308	Plant Condensate	5.418
Isobutane	3.974	Propane	3.836
Jet Fuel, Kerosene Type	5.670	Residual Fuel Oil	6.287
Jet Fuel, Naphtha Type	5.355	Road Oil	6.636
Kerosene	5.670	Special Naphthas	5.248
Lubricants	6.065	Still Gas	6.000
Motor Gasoline, Conventional	5.253	Unfinished Oils	5.825
Motor Gasoline, Reformulated	5.150	Unfractionated Stream	5.418
Motor Gasoline, Oxygenated	5.150	Waxes	5.537
Natural Gasoline and Isopentane	4.620	Miscellaneous	5.796

Source: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

^a 60 percent butane and 40 percent propane. ^b 70 percent ethane and 30 percent propane.

Table A2. Approximate Heat Content of Crude Oil, Crude Oil and Products, and **Natural Gas Plant Liquids**

(Million Btu per Barrel)

		Crude Oil		Crude Oil a	nd Products	Natural Gas	
	Production	Imports	Exports	Imports	Exports	Plant Liquids Production	
973	5.800	5.817	5.800	5.897	5.752	4.049	
974	5.800	5.827	5.800	5.884	5.774	4.011	
975	5.800	5.821	5.800	5.858	5.748	3.984	
976	5.800	5.808	5.800	5.856	5.745	3.964	
977	5.800	5.810	5.800	5.834	5.797	3.941	
978	5.800	5.802	5.800	5.839	5.808	3.925	
979	5.800	5.810	5.800	5.810	5.832	3.955	
980	5.800	5.812	5.800	5.796	5.820	3.914	
981	5.800	5.818	5.800	5.775	5.821	3.930	
982	5.800	5.826	5.800	5.775	5.820	3.872	
983	5.800	5.825	5.800	5.774	5.800	3.839	
984	5.800	5.823	5.800	5.745	5.850	3.812	
985	5.800	5.832	5.800	5.736	5.814	3.815	
986	5.800	5.903	5.800	5.808	5.832	3.797	
987	5.800	5.901	5.800	5.820	5.858	3.804	
988	5.800	5.900	5.800	5.820	5.840	3.800	
989	5.800	5.906	5.800	5.833	5.857	3.826	
990	5.800	5.934	5.800	5.849	5.833	3.822	
991	5.800	5.948	5.800	5.873	5.823	3.807	
992	5.800	5.953	5.800	5.877	5.777	3.804	
993	5.800	5.954	5.800	5.883	5.779	3.801	
994	5.800	5.950	5.800	5.861	5.779	3.794	
995	5.800	5.924	5.800	5.848	5.747	3.796	
996	5.800	5.935	5.800	5.842	5.741	3.777	
997	5.800	5.954	5.800	5.862	5.729	3.762	
998	5.800	5.953	5.800	5.862	5.715	3.769	
999a	5.800	5.941	5.800	5.850	5.715	3.745	
000a	5.800	5.941	5.800	5.850	5.715 5.715	3.745	

^a Preliminary.

Note: Crude oil includes lease condensate.

Source: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

Table A3. Approximate Heat Content of Petroleum Products, Weighted Averages

(Million Btu per Barrel)

			Consumption					1:	
	Residential and Commercial	Industrial	Transportation	Electric Utilities	Total	Imports	Exports	Liquefied Petroleum Gases Consumption	Motor Gasoline Consumptior
973	5.387	5.568	5.395	6.245	5.515	5.983	5.752	3.746	5.253
974	5.377	5.538	5.394	6.238	5.504	5.959	5.773	3.730	5.253
975	5.358	5.528	5.392	6.250	5.494	5.935	5.747	3.715	5.253
976	5.383	5.538	5.395	6.251	5.504	5.980	5.743	3.711	5.253
977	5.389	5.555	5.400	6.249	5.518	5.908	5.796	3.677	5.253
978	5.382	5.553	5.404	6.251	5.519	5.955	5.814	3.669	5.253
979	5.471	5.418	5.428	6.258	5.494	5.811	5.864	3.680	5.253
980	5.468	5.376	5.440	6.254	5.479	5.748	5.841	3.674	5.253
981	5.409	5.313	5.432	6.258	5.448	5.659	5.837	3.643	5.253
982	5.392	5.263	5.422	6.258	5.415	5.664	5.829	3.615	5.253
983	5.286	5.273	5.415	6.255	5.406	5.677	5.800	3.614	5.253
984	5.384	5.223	5.422	6.251	5.395	5.613	5.867	3.599	5.253
985	5.326	5.221	5.423	6.247	5.387	5.572	5.819	3.603	5.253
986	5.357	5.286	5.427	6.257	5.418	5.624	5.839	3.640	5.253
987	5.316	5.253	5.430	6.249	5.403	5.599	5.860	3.659	5.253
988	5.320	5.248	5.434	6.250	5.410	5.618	5.842	3.652	5.253
989	5.257	5.233	5.440	6.241	5.410	5.641	5.869	3.683	5.253
990	5.208	5.272	5.445	6.247	5.411	5.614	5.838	3.625	5.253
991	5.163	5.192	5.442	6.248	5.384	5.636	5.827	3.614	5.253
992	5.169	5.188	5.445	6.243	5.378	5.623	5.774	3.624	5.253
993	5.148	5.200	5.438	6.241	5.379	5.620	5.777	3.606	5.253
994	5.154	5.170	5.427	6.231	5.361	5.534	5.777	3.635	b5.230
995	5.126	5.139	5.419	6.210	5.341	5.504	5.741	3.623	5.215
996	5.101	5.125	5.421	6.212	5.336	5.489	5.733	3.613	5.216
997	5.076	5.134	5.417	6.220	5.336	5.472	5.720	3.616	5.213
998	5.045	5.154	5.415	6.220	5.349	5.465	5.704	3.614	5.212
999a	5.003	5.098	5.419	6.207	5.328	5.453	5.703	3.616	5.212
000 ^a	5.003	5.098	5.419	6.207	5.328	5.453	5.703	3.616	5.212

 ^a Preliminary.
 ^b Beginning in 1994, the single constant factor is replaced with a quantity-weighted average of motor gasoline's major components. See Table A1.
 Note: Weighted averages of the products included in each category are calculated by using heat content values shown in Table A1.
 Source: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

Table A4. Approximate Heat Content of Natural Gas

(Btu per Cubic Foot)

	Produ	ıction		Consumption			
	Dry	Marketed	Sectors Other Than Electric Utilities	Electric Utilities	Total	Imports	Exports
973	1,021	1,093	1,020	1,024	1,021	1,026	1,023
974	1,024	1.097	1.024	1,022	1.024	1.027	1,016
975	1,021	1,095	1,020	1,026	1,021	1,026	1,014
976	1,020	1,093	1,019	1,023	1,020	1,025	1,013
977	1,021	1,093	1,019	1,029	1,021	1,026	1,013
978	1.019	1,088	1.016	1.034	1.019	1.030	1,013
979	1,021	1,092	1.018	1.035	1.021	1.037	1,013
980	1,026	1,098	1,024	1,035	1,026	1.022	1,013
981	1,027	1.103	1,025	1,035	1,027	1,014	1,011
982	1.028	1.107	1.026	1.036	1.028	1.018	1.011
983	1,031	1,115	1,031	1,030	1,031	1,024	1,010
984	1,031	1,109	1,030	1,035	1,031	1,005	1,010
985	1,032	1,112	1,031	1,038	1,032	1,002	1,011
986	1,030	1,110	1,029	1,034	1,030	997	1,008
987	1,031	1,112	1,031	1,032	1,031	999	1,011
988	1,029	1,109	1,029	1,028	1,029	1,002	1,018
989	1,031	1,107	1,031	1,030	1,031	1,004	1,019
990	1,031	1,105	1,030	1,034	1,031	1,012	1,018
991	1,030	1,108	1,031	1,024	1,030	1,014	1,022
992	1,030	1,110	1,031	1,022	1,030	1,011	1,018
993	1,027	1,106	1,028	1,022	1,027	1,020	1,016
994	1,028	1,105	1,029	1,022	1,028	1,022	1,011
995	1,027	1,106	1,027	1,025	1,027	1,021	1,011
996	1,027	1,109	1,027	1,024	1,027	1,022	1,011
997	1,026	1,107	1,027	1,019	1,026	1,023	1,011
998	1,031	1,110	1,033	1,022	1,031	1,023	1,011
999 ^a	1,031	1,110	1,033	1,022	1,031	1,023	1,011
000a	1,031	1,110	1,033	1,022	1,031	1,023	1,011

^a Preliminary.
Source: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

Table A5. Approximate Heat Content of Coal and Coal Coke

(Million Btu per Short Ton)

		Coal								Coal Coke
				Consu	mption					
		Er	nd-Use Sector	rs	Electric P	ower Sector				
	Production	Da el de miliat	Indu	strial		Other				
		Residential and Commercial	Coke Plants	O ther ^a	Electric Utilities	Other Power Producers ^b	Total	Imports	Exports	Imports and Exports
1973	23.376	22.831	26.780	22.586	22.246	NA	23.057	25.000	26.596	24.800
1974	23.072	22.479	26.778	22.419	21.781	NA	22.677	25.000	26.700	24.800
1975	22.897	22.261	26.782	22.436	21.642	NA	22.506	25.000	26.562	24.800
1976	22.855	22.774	26.781	22.530	21.679	NA	22.498	25.000	26.601	24.800
1977	22.597	22.919	26.787	22.322	21.508	NA	22.265	25.000	26.548	24.800
1978	22.248	22.466	26.789	22.207	21.275	NA	22.017	25.000	26.478	24.800
1979	22.454	22.242	26.788	22.452	21.364	NA	22.100	25.000	26.548	24.800
1980	22.415	22.543	26.790	22.690	21.295	NA	21.947	25.000	26.384	24.800
1981	22.308	22.474	26.794	22.585	21.085	NA	21.713	25.000	26.160	24.800
1982	22.239	22.695	26.797	22.712	21.194	NA	21.674	25.000	26.223	24.800
1983	22.052	22.775	26.798	22.691	21.133	NA	21.576	25.000	26.291	24.800
1984	22.010	22.844	26.799	22.543	21.101	NA	21.573	25.000	26.402	24.800
1985	21.870	22.646	26.798	22.020	20.959	NA	21.366	25.000	26.307	24.800
1986	21.913	22.947	26.798	22.198	21.084	NA	21.462	25.000	26.292	24.800
1987	21.922	23.404	26.799	22.381	21.136	NA	21.517	25.000	26.291	24.800
1988	21.823	23.571	26.799	22.360	20.900	NA	21.328	25.000	26.299	24.800
1989	21.765	23.650	26.800	22.347	20.848	NA	21.272	25.000	26.160	24.800
1990	21.822	23.137	26.799	22.457	20.929	NA	21.331	25.000	26.202	24.800
1991	21.681	23.114	26.799	22.460	20.755	NA	21.146	25.000	26.188	24.800
1992	21.682	23.105	26.799	22.250	20.787	18.928	21.107	25.000	26.161	24.800
1993	21.418	22.994	26.800	22.123	20.639	18.995	20.947	25.000	26.335	24.800
1994	21.394	23.112	26.800	22.068	20.673	19.450	20.978	25.000	26.329	24.800
1995	21.326	23.118	26.800	21.950	20.495	19.417	20.814	25.000	26.180	24.800
1996	21.322	23.011	26.800	22.105	20.525	19.391	20.824	25.000	26.174	24.800
1997	21.296	22.494	26.800	22.172	20.548	19.596	20.835	25.000	26.251	24.800
1998	21.224	22.783	26.800	22.104	20.479	20.143	20.760	25.000	26.243	24.800
1999	21.224	22.783	26.800	22.104	20.479	20.143	20.760	25.000	26.243	24.800
2000 ^c	21.224	22.783	26.800	22.104	20.479	20.143	20.760	25.000	26.243	24.800

a Includes transportation.
 b Nonutility wholesale producers of electricity, and nonutility cogeneration plants that are not included in the end-use sectors.
 c Preliminary.
 Source: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

Table A6. Approximate Heat Rates for Electricity

(Btu per Kilowatthour)

		Electricity Generation	Electricity Generation		
	Fossil-Fueled Steam-Electric Plants ^a	Nuclear Steam-Electric Plants	Geothermal Energy Plants ^b	Electricity Consumption	
973	10.389	10.903	21,674	3.412	
974	10,442	11,161	21,674	3.412	
975	10,406	11,013	21.611	3,412	
976	10,373	11.047	21.611	3,412	
977	10,435	10,769	21,611	3,412	
978	10,361	10,941	21,611	3,412	
979	10,353	10,879	21,545	3,412	
980	10,388	10,908	21,639	3,412	
981	10,453	11,030	21,639	3,412	
982	10,454	11,073	21,629	3,412	
983	10,520	10,905	21,290	3,412	
984	10,440	10,843	21,303	3,412	
985	10,447	10,813	21,263	3,412	
986	10,446	10,799	21,263	3,412	
987	10,419	10,776	21,263	3,412	
988	10,324	10,743	21,096	3,412	
989	10,432	10,724	21,096	3,412	
990	10,402	10,680	21,096	3,412	
991	10,436	10,740	20,997	3,412	
992	10,342	10,678	20,914	3,412	
993	10,309	10,682	20,914	3,412	
994	10,316	10,676	20,914	3,412	
995	10,312	10,658	20,914	3,412	
996	10,340	10,623	20,960	3,412	
997	10,357	10,623	20,960	3,412	
998	10,346	10,623	21,017	3,412	
999	10,346	10,623	21,017	3,412	
000 ^c	10,346	10,623	21,017	3,412	

a 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.

b Used as the thermal conversion factor for geothermal energy consumed at electric utilities.

c Preliminary.

Source: See "Thermal Conversion Factor Source Documentation," which follows this table.

Thermal Conversion Factor Source Documentation

Approximate Heat Content of Petroleum and Natural Gas Plant Liquids

Asphalt. 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. EIA adopted the Bureau of Mines thermal conversion factor of 5.048 million Btu per barrel for "Gasoline, Aviation" as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets* 1947-1985, a 1968 release of historical and projected statistics.

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

Butane-Propane Mixture. 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**.

Crude Oil, Exports. 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. 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 through 1996, by determining the average American Petroleum Institute (API) gravity of crude imported from each foreign country from Form ERA-60 in 1977, or for 1997 and later, by determining the weighted average API gravity from the Form EIA-814, and converting average API gravity to average Btu content by using National Bureau of Standards, Miscellaneous Publication No. 97, *Thermal Properties of Petroleum Products*, 1933.

Crude Oil and Lease Condensate, Production. 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. 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 Crude Oil, Exports and Petroleum Products, Exports.

Crude Oil and Petroleum Products, Imports. 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.

Distillate Fuel Oil. 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. EIA adopted the Bureau of Mines thermal conversion factor of 3.082 million Btu per barrel in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

Ethane-Propane Mixture. 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. EIA adopted the Bureau of Mines thermal conversion factor of 3.974 million Btu per barrel in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

Jet Fuel, Kerosene Type. EIA adopted the Bureau of Mines thermal conversion factor of 5.670 million Btu per barrel for "Jet Fuel, Commercial" as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets* 1947-1985, a 1968 release of historical and projected statistics.

Jet Fuel, Naphtha Type. EIA adopted the Bureau of Mines thermal conversion factor of 5.355 million Btu per barrel for "Jet Fuel, Military" as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.

Kerosene. 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."

Liquefied Petroleum Gases (LPG) Consumption. 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.

Lubricants. 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. 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. EIA adopted the Bureau of Mines thermal conversion factor of 5.253 million Btu per barrel for "Gasoline, Motor Fuel" by the Texas Eastern Transmission Corporation in Appendix V of Competition and Growth in American Energy Markets 1947-1985, a 1968 release of historical and projected statistics. Conversion factors for reformulated and oxygenated motor gasolines are calculated by EIA based on data published in the Environmental Protec-

tion Agency, Office of Mobile Sources, National Vehicle and Fuel Emissions Laboratory report EPA 420-F-95-003 *Fuel Economy Impact Analysis of Reformulated Gasoline*. Both of the factors are currently 5.150 million Btu per barrel.

Natural Gas Plant Liquids, Production. 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.

Natural Gasoline. 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. 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 Less Than 401 Degrees Fahrenheit. Assumed by EIA to be 5.248 million Btu per barrel, equal to the thermal conversion factor for special naphthas. See Special Naphthas.

Petrochemical Feedstocks, Oils Equal to or Greater Than 401 Degrees Fahrenheit. 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 Feedstocks, Still Gas. 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. 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 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.

Petroleum Products, Total Consumption. 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. 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.

Petroleum Products, Consumption by Industrial Users. 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.

Petroleum Products, Consumption by Residential and Commercial Users. 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.

Petroleum Products, Consumption by Transportation Users. 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.

Petroleum Products, Exports. 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. 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.

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

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

Residual Fuel Oil. 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. 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 Naphthas. 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. 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. 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. EIA assumed the thermal conversion factor to be 5.418 million Btu per barrel or equal to that for plant condensate (see **Plant Condensate**)

sate) and first published in the Annual Report to Congress, Volume 2, 1981.

Waxes. 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 Natural Gas

Natural Gas, Total 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 publication. 1980 forward: Calculated annually by EIA by dividing the total heat content of natural gas consumed by the total quantity of natural gas consumed. The heat content and quantity consumed are from Form EIA-176. Published sources are: 1980-1989: EIA, Natural Gas Annual 1992, Volume 2, Table 15. 1990-1992: EIA, Natural Gas Annual 1992, Volume 2, Table 16. 1993 forward: 1992 value used as an estimate.

Natural Gas, Consumption by Electric Utilities. 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 Form FERC-423 and predecessor forms.

Natural Gas, Consumption by Sectors Other Than Electric Utilities. Calculated annually by EIA by dividing the heat content of all natural gas consumed less the heat content of natural gas consumed at electric utilities by the quantity of all natural gas consumed less the quantity of natural gas consumed at electric utilities. Data are from Forms EIA-176, FERC-423, EIA-759, and predecessor forms.

Natural Gas, Exports. 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. 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. Assumed by EIA to be equal to the thermal conversion factor for the consumption of dry natural gas. See Natural Gas Total Consumption.

Natural Gas Production, Marketed (Wet). 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.

Approximate Heat Content of Coal and Coal Coke

Anthracite, Total Consumption. Calculated annually by EIA by dividing the sum of the heat content of anthracite consumed by electric utilities and all other

sectors combined by the total quantity of anthracite consumed.

Anthracite, Consumption by Electric Utilities. 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 Form FERC-423 and predecessor forms.

Anthracite, Consumption by Sectors Other Than Electric Utilities. 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 anthracite consumed by sectors other than electric utilities less the quantity of anthracite stock changes, losses, and "unaccounted for."

Anthracite, Imports and Exports. EIA assumed the anthracite imports and exports to be freshly mined anthracite having an estimated heat content of 25.40 million Btu per short ton.

Anthracite, Production. 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 a heat content of 17.500 million Btu per short ton) by the total quantity of anthracite production.

Bituminous Coal and Lignite, Total Consumption. 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. Estimated by EIA to be 26.800 million Btu per short ton on the basis of an input/output analysis of coal carbonization.

Bituminous Coal and Lignite, Consumption by Electric Utilities. 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 Form FERC-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 by assuming that the bituminous coal and lignite delivered to other industrial users from each coal-producing area (reported on Form EIA-6 and predecessor Bureau of Mines Form 6-1419-O) contained a heat value equal to that of bituminous coal and lignite received at electric utilities from each of the same coal-producing areas (reported on Form FERC-423). The average Btu value of coal by coal-producing area was applied to the volume of deliveries to other industrial users from each coal-producing area, and the sum total of the heat content was divided by the total volume of deliveries.

Coal-producing areas are the Bureau of Mines coal-producing districts for 1974 through 1989 and coal-producing States for 1990 forward.

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 coalproducing area (reported on Form EIA-6 and predecessor Bureau of Mines Form 6-1419-Q) contained a heat value equal to that of bituminous coal and lignite received at electric utilities from each of the same coal-producing areas (reported on Form FERC-423). The average Btu value of coal by coal-producing area was applied to the volume of deliveries to residential and commercial users from each coal-producing area, and the total of the heat value was divided by the total volume of deliveries. Coal-producing areas are the Bureau of Mines coal-producing districts for 1974 through 1989 and coal-producing States for 1990 forward.

Bituminous Coal and Lignite, Exports. 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. EIA estimated the average thermal conversion factor to be 25.000 million Btu per short ton.

Bituminous Coal and Lignite, Production. 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 that of the consumption sector. Producers' stock changes and unaccounted for were assumed to have the same conversion factor as that for consumption by all users.

Coal, Consumption. Calculated annually 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. 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 Sectors Other Than Electric Utilities. Calculated annually by EIA by dividing the sum of the heat content of bituminous coal and lignite and anthracite consumed by sectors other than electric utilities by the sum of their respective tonnages.

Coal, Exports. 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. 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. 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. EIA adopted the Bureau of Mines estimate of 24.800 million Btu per short ton.

Approximate Heat Rates for Electricity

Fossil-Fueled Steam-Electric 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 energy sources. Therefore, EIA uses data from Form EIA-767 to calculate a rate factor that is equal to the prevailing annual average heat rate factor for fossil-fueled steam-electric power plants in the United States. By using that factor, it is possible to evaluate fossil fuel requirements for replacing those sources during periods of interruption such as droughts. The heat content of a kilowatthour of electricity produced, regardless of the generation process, is 3,412 Btu per kilowatthour. 1973-1991: The weighted annual average heat rate for fossil-fueled steam-electric power plants in the United States, as published by EIA in Electric Plant Cost and Power Production Expenses 1991, Table 9. 1992 forward: Unpublished factors calculated on the basis of data from Form EIA-767.

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

Nuclear Steam-Electric Plant Generation. 1973-1991: Calculated annually by EIA by dividing the total heat content consumed in nuclear generating units by the total (net) electricity generated by nuclear generating units. The heat content and electricity generation are reported on Form FERC-1, "Annual Report of Major Electric Utilities, Licenses, and Others;" Form EIA-412, "Annual Report of Public Electric Utilities;" and predecessor forms. The factors, beginning with 1982 data, are published in the following EIA reports—1982: Historical Plant Cost and Annual Production Expenses for Selected Electric Plants 1982, page 215. 1983-1991: Electric Plant Cost and Power Production Expenses 1991, Table 13. 1992 forward: Calculated annually by EIA by dividing the total heat content of the steam leaving the nuclear generating units to generate electricity by the total (net) electricity generated by nuclear generating units. The heat content and electricity generation data are reported in Nuclear Regulatory Commission, Licensed Operating Reactors—Status Summary Report.

Appendix B. Metric and Other Physical Conversion Factors

Data presented in the *Monthly Energy Review* and in other Energy Information Administration publications are expressed predominately in units that historically have been used in the United States, such as British thermal units, barrels, cubic feet, and short tons. However, because U.S. commerce involves other nations, most of which use metric units of measure, the U.S. Government is committed to the transition to the metric system, as stated in the Metric Conversion Act of 1975 (Public Law 94–168), amended by the Omnibus Trade and Competitiveness Act of 1988 (Public Law 100–418), and Executive Order 12770 of July 25, 1991.

The metric conversion factors presented in Table B1 can be used to calculate the metric-unit equivalents of values expressed in U.S. customary units. For example, 500 short tons are the equivalent of 453.6 metric tons (500 short tons x 0.9071847 metric tons/short ton = 453.6 metric tons).

In the metric system of weights and measures, the names of multiples and subdivisions of any unit may be derived by combining the name of the unit with prefixes, such as deka, hecto, and kilo, meaning, respectively, 10, 100, 1,000, and deci, centi, and milli, meaning, respectively, one-tenth, one-hundredth, and one-thousandth. Common metric prefixes can be found in Table B2.

The conversion factors presented in Table B3 can be used to calculate equivalents in various physical units commonly used in energy analyses. For example, 10 barrels are the equivalent of 420 U.S. gallons (10 barrels x 42 gallons/barrel = 420 gallons).

Metric Conversion Factors Table B1.

Type of Unit	U.S. Unit	multiplied by	d Conversion Factor	equals	Metric Unit
Mass	short tons (2,000 lb)	x	0.907 184 7	=	metric tons (t)
	long tons	X	1.016 047	=	metric tons (t)
	pounds (lb)	X	.453 592 37°	=	kilograms (kg)
	pounds uranium oxide (lb U ₃ O ₈)	X	0.384 647 ^b	=	kilograms uranium (kgU)
	ounces, avoirdupois (avdp oz)	Х	28.349 52	=	grams (g)
Volume	barrels of oil (bbl)	Х	0.158 987 3	=	cubic meters (m ³)
	cubic yards (yd³)	Х	0.764 555	=	cubic meters (m ³)
	cubic feet (ft ³)	X	0.028 316 85	=	cubic meters (m ³)
	U.S. gallons (gal)	x	3.785 412	=	liters (L)
	ounces, fluid (fl oz)	x	29.573 53	=	milliliters (mL)
	cubic inches (in³)	Х	16.387 06	=	milliliters (mL)
Length	miles (mi)	X	1.609 344ª	=	kilometers (km)
J	yards (yd)	x	0.914 4ª	=	meters (m)
	feet (ft)	x	0.304 8 ^a	=	meters (m)
	inches (in)	х	2.54 ^b	=	centimeters (cm)
Area	acres	х	0.404 69	=	hectares (ha)
	square miles (mi ²)	X	2.589 988	=	square kilometers (km²)
	square yards (yd²)	X	0.836 127 4	=	square meters (m²)
	square feet (ft ²)	X	0.092 903 04 ^a	=	square meters (m²)
	square inches (in ²)	x	6.451 6 ^b	=	square centimeters (cm ²)
Temperature	degrees Fahrenheit (°F)	х	5/9 (after subtracting 32) ^{a,c}	=	degrees Celsius (°C)
Energy	British thermal units (Btu)	х	1,055.055 852 62 a,d	=	joules (J)
	calories (cal)	Χ	4.186 8ª	=	joules (J)
	Kilowatthours (kWh)	X	3.6 ^a	=	megajoules (MJ)

Sources: • General Services Administration, Federal Standard 376B, *Preferred Metric Units for General Use by the Federal Government* (Washington, DC, January 27, 1993), pp. 9–11, 13, and 16. • National Institute of Standards and Technology, Special Publications 330, 811, and 814. • American National Standards Institute/Institute of Electrical and Electronic Engineers, ANSI/IEEE Std 268–1992, pp. 28 and 29.

^aExact conversion.
^bCalculated by the Energy Information Administration.

[°]To convert degrees Celsius (°C) to degrees Fahrenheit (°F) exactly, multiply by 9/5, then add 32.

dThe Btu used in this table is the International Table Btu adopted by the Fifth International Conference on Properties of Steam, London, 1956. Notes: • Spaces have been inserted after every third digit to the right of the decimal for ease of reading. • Most metric units belong to the International System of Units (SI), and the liter, hectare, and metric ton are accepted for use with the SI units. For more information about the SI units, contact Dr. Barry Taylor at Building 221, Room B610, National Institute of Standards and Technology, Gaithersburg, MD 20899, or on telephone number 301–975–4220.

Table B2. Metric Prefixes

Unit Multiple	Prefix	Symbol	Unit Subdivision	Prefix	Symbol
10 ¹	deka	da	10 ⁻¹	deci	d
10 ²	hecto	h	10 ⁻²	centi	С
10 ³	kilo	k	10 ⁻³	milli	m
10 ⁶	mega	М	10 ⁻⁶	micro	
10 ⁹	giga	G	10 ⁻⁹	nano	n
10 ¹²	tera	Т	10 ⁻¹²	pico	р
10 ¹⁵	peta	Р	10 ⁻¹⁵	femto	f
10 ¹⁸	exa	E	10 ⁻¹⁸	atto	а
10 ²¹	zetta	Z	10 ⁻²¹	zepto	Z
10 ²⁴	yotta	Υ	10 ⁻²⁴	yocto	у

Source: U.S. Department of Commerce, National Institute of Standards and Technology, *The International System of Units (SI)*, NIST Special Publication 330, 1991 Edition (Washington, DC, August 1991), p.10.

Table B3. Other Physical Conversion Factors

Energy Source	Original Unit	multiplied by	Conversion Factor	equals	Final Unit
Petroleum	barrels (bbl)	x	42 ^a	=	U.S. gallons (gal)
Coal	short tons	x	2,000 ^a	=	pounds (lb)
	long tons	X	2,240 ^a	=	pounds (lb)
	metric tons (t)	x	1,000 ^a	=	kilograms (kg)
Wood	cords (cd)	x	1.25 ^b	=	shorts tons
	cords (cd)	x	128 ^a	=	cubic feet (ft ³)

Source: U.S. Department of Commerce, National Institute of Standards and Technology, *Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices,* NIST Handbook 44, 1994 Edition (Washington, DC, October 1993), pp. B-10, C-17 and C-21.

^aExact conversion. ^bCalculated by the Energy Information Administration.

Appendix C. Carbon Dioxide Emission Factors for Coal

Table C1 presents U.S. average carbon dioxide emission factors for coal by sector. The factors measure the emissions produced during the combustion of coal and were derived by the Energy Information Administration (EIA) from 5,426 sample analyses in EIA's Coal Analysis File. The factors are ratios of the carbon dioxide emitted to the heat content of the coal burned, assuming complete combustion. Factors vary according to the rank and geographic origin of the coal. Sectoral factors reflect the rank and origin of the coal consumed in the sector.

Factors differ among sectors and within a sector over time for several reasons:

1. A higher average emission factor in the residential and commercial sector can be attributed to the steady consumption of bituminous coal and anthracite (presumably for home heating).

- 2. Virtually all of the coal consumed by coke plants comes from only a few States in the Appalachian Coal Basin (West Virginia, Virginia, and eastern Kentucky). Hence, the emission factors for this sector have remained fairly constant.
- 3. Other industrial users of coal (not coke plants) increased consumption of low-rank, high-emission western coals, which has contributed to a rise in their average emission factor.
- 4. Electric utilities, which account for most U.S. coal consumption, have shifted over time away from high-rank, low-emission bituminous coal to low-rank, high-emission subbituminous coal and lignite as reflected in a gradually rising weighted-average carbon dioxide emission factor.

Table C1. Average Carbon Dioxide Emission Factors for Coal by Sector (Pounds of Carbon Dioxide per Million Btu)

		Indu	strial			
Year	Residential and Commercial	Coke Plants ^a	Other Coal	Electric Utilities	U.S. Average ^b	
1980	210.6	205.8	205.9	206.7	206.5	
1981	212.0	205.8	205.9	206.9	206.7	
1982	210.4	205.7	206.0	207.0	206.9	
1983	209.2	205.5	205.9	207.1	207.0	
1984	209.5	205.6	206.2	207.1	207.0	
1985	209.3	205.6	206.4	207.3	207.1	
1986	209.2	205.4	206.5	207.3	207.1	
1987	209.4	205.2	206.4	207.3	207.2	
1988	209.1	205.3	206.4	207.6	207.3	
1989	209.7	205.3	206.6	207.5	207.3	
1990	209.5	206.2	206.8	207.6	207.4	
1991	210.2	206.2	206.9	207.7	207.5	
1992	211.2	206.2	207.1	207.7	207.6	
1993	209.9	206.2	207.0	207.8	207.7	
1994	209.8	206.3	207.2	207.9	207.8	
1995	210.2	206.4	207.2	208.1	207.9	
1996	209.5	206.5	207.0	208.1	208.0	
1997	210.2	206.6	207.2	208.2	208.0	

No allowances have been made for carbon retained in non-energy coal chemical byproducts from the carbonization process.

^bWeighted average. The weights used are consumption values by sector.

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

Appendix D. List of Features

The following is a complete list of features that have appeared in the *Monthly Energy Review* since the first issue was published in October 1974. There are several categories of features on the list: "Energy Plugs" are 1-page descriptions of recently released EIA products. "Articles" cover a wide range of energy-related subjects in depth; "Highlights" summarize the most important information presented in the subject Energy

Information Administration (EIA) report; "Energy Previews" provide brief overviews of EIA preliminary energy data on a given topic; "EIA Data News" items present information on recent changes in the scope, design, methodology, and findings of EIA's energy surveys and databases; and "Energy Snapshots" use graphics to set off key data from EIA survey reports.

Feature	Cover Date
2000 Energy Plug: Inventory of Nonutility Electric Power Plants in the United States 1998. Energy Plug: The Changing Structure of the Electric Power Industry 1999: Mergers and Other Corporate Combinations. Energy Plug: International Energy Annual 1998. Energy Plug: Performance Profiles of Major Energy Producers 1998 Energy Plug: OPEC Revenues Fact Sheet Energy Plug: Country Analysis Brief: Iran Energy Plug: International Energy Outlook 2000 Energy Plug: Outlook for Biomass Ethanol Production and Demand.	January 2000 February 2000 February 2000 March 2000 March 2000 April 2000
Energy Plug: Performance Profiles of Major Energy Producers 1997 Energy Plug: State Energy Data Report 1996 Energy Plug: State Electricity Profiles Energy Plug: International Energy Annual 1997. Energy Plug: International Energy Outlook 1999 Energy Plug: Natural Gas 1998: Issues and Trends. Energy Plug: Electric Power Annual 1998, Volume I. Energy Plug: Annual Energy Review 1998. Energy Plug: Energy in the Americas. Energy Plug: State Energy Data Report 1997 Energy Plug: Issues in Midterm Analysis and Forecasting 1999. Energy Plug: Emissions of Greenhouse Gases in the United States 1998 Energy Plug: Annual Energy Outlook 2000 Energy Plug: Energy in Africa.	 February 1999 March 1999 April 1999 April 1999 May 1999 June 1999 July 1999 August 1999 September 1999 September 1999 November 1999 November 1999 December 1999
1998 Energy Plug: Performance Profiles of Major Energy Producers 1996 Energy Plug: International Energy Annual 1996 Energy Plug: Assessment of Summer 1997 Motor Gasoline Price Increase Energy Plug: Deliverability on the Interstate Natural Gas Pipeline System Energy Plug: The Changing Structure of the Electric Power Industry: Selected Issues, 1998 Energy Plug: Annual Energy Review 1997 Energy Plug: State Energy Price and Expenditure Report 1995 Energy Plug: A View of the Forest Products Industry From a Wood Energy Perspective Energy Plug: 25 th Anniversary of the 1973 Oil Embargo: Energy Trends Since the First Major U.S. Energy Crisis Energy Plug: Energy Education Resources: Kindergarten Through 12 th Grade	 February 1998 April 1998 May 1998 June 1998 July 1998 August 1998 August 1998 September 1998

1998 (Continued)	
Energy Plug: Impacts of the Kyoto Protocol on U.S. Energy Markets and Economic Activity	October 1998
Energy Plug: Emissions of Greenhouse Gases in the United States 1997	October 1998
Energy Plug: Wind Energy Developments: Incentives in Selected Countries	November 1998 November 1998
	NOVEMBER 1556
1997	1
Energy Plug: Annual Energy Outlook 1997	January 1997 January 1997
Energy Plug: Performance Profiles of Major Energy Producers 1995	January 1997
Energy Plug: The Effects of Title IV of the Clean Air Act Amendments of 1990 on Electric Utilities: An Update	March 1997
Energy Plug: International Energy Outlook 1997	April 1997
Energy Plug: Restructuring Energy Industries: Lessons From Natural Gas	May 1997 June 1997
Energy Plug: State Energy Price and Expenditure Report 1994	June 1997 June 1997
Energy Plug: Annual Energy Review 1996	July 1997
Energy Plug: Motor Gasoline Assessment 1997	July 1997
Energy Plug: Commercial Buildings Characteristics 1995	July 1997
Energy Plug: Household Vehicles Energy Consumption 1994 Energy Plug: Electricity Prices in a Competitive Environment	August 1997 August 1997
Energy Plug: Petroleum 1996: Issues and Trends	September 1997
Energy Plug: The Intricate Puzzle of Oil and Gas "Reserves Growth"	September 1997
Energy Plug: Emissions of Greenhouse Gases in the United States 1996	October 1997
Energy Plug: Electricity Reform Abroad and U.S. Investment	October 1997 November 1997
Energy Plug: Winter Heating Fuels Assessments	December 1997
Energy Plug: Oil and Gas Resources of the West Siberian Basin, Russia	December 1997
1996	
Energy Plug: Renewable Energy Annual 1995	January 1996
Energy Plug: State Energy Price and Expenditure Report 1993	January 1996
Energy Plug: Annual Energy Outlook 1996	February 1996
Energy Plug: Alternatives to Traditional Transportation Fuels 1994, Volume 1	February 1996 March 1996
Article: Energy Equipment Choices: Fuel Costs and Other Determinants	April 1996
Energy Plug: International Energy Outlook 1996	May 1996
Energy Plug: U.S. Electric Utility Demand-Side Management: Trends and Analysis	May 1996
Energy Plug: Country Analysis Brief: Iraq	June 1996
Energy Plug: Annual Energy Review 1995 Energy Plug: Voluntary Reporting of Greenhouse Gases 1995	July 1996 July 1996
Energy Plug: Residential Lighting: Use and Potential Savings	August 1996
Energy Plug: EIA Electronic Media Meet Customer Needs	August 1996
Energy Plug: Alternatives to Traditional Transportation Fuels, Volume 2: Greenhouse Gas Emissions	September 1996
Energy Plug: State Energy Data Report 1994 Energy Plug: Privatization and the Globalization of Energy Markets	October 1996 October 1996
Energy Plug: Emissions of Greenhouse Gases in the United States 1995	October 1996
Energy Plug: Nuclear Power Generation and Fuel Cycle Report 1996	November 1996
Energy Plug: Country Analysis Brief: Algeria	November 1996
Energy Plug: Denver Clean-City Fleets Survey Energy Plug: Natural Gas 1996: Issues and Trends	November 1996 December 1996
Lifergy Flug. Natural Cas 1990. Issues and Trenus	December 1990
1995	January 4005
Highlights: Manufacturing Consumption of Energy 1991	January 1995 February 1995
EIA Data News: The Response Analysis Survey: Evaluating Manufacturing Energy	1 ebidary 1995
Consumption Survey Methodology	March 1995
Energy Preview: Electric Utility Fleet Survey 1993, Preliminary Estimates: Assessing the	A 'I 4007
Market for Alternative-Fuel Vehicles	April 1995
Article: Measuring Dependence on Imported Oil	April 1995 August 1995
Energy Preview: Household Energy Consumption and Expenditures 1993, Preliminary Estimates	August 1995
Energy Snapshot: Housing Characteristics 1993	September 1995
Highlights: State Energy Data Report 1993, Consumption Estimates	October 1995
Special Communication: Results of the <i>Monthly Energy Review</i> Features Readership Survey	November 1995 November 1995
Energy Preview: Alternative Fuel Providers Fleet Surveys, Preliminary Data	November 1995
Article: Environmental Externalities in Electric Power Markets: Acid Rain, Urban Ozone, and Climate Change	November 1995
Energy Preview: Alternative Fuel Providers Fleet Surveys, Preliminary Data	December 1995

4004	
Energy Preview: Commercial Buildings Energy Consumption Survey, Preliminary Estimates, 1992 Highlights: Household Vehicles Energy Consumption 1991 Highlights: Energy Use and Carbon Emissions: Some International Comparisons Highlights: Commercial Buildings Characteristics 1992 Article: Demand, Supply, and Price Outlook for Reformulated Motor Gasoline 1995 Article: Commercial Nuclear Electric Power in the United States: Problems and Prospects Article: The Impact of Flow Control and Tax Reform on Ownership and Growth in the U.S. Highlights: Reducing Home Heating and Cooling Costs Energy Preview: Commercial Buildings Energy Consumption and Expenditures 1992, Preliminary Estimates Article: Carbon Dioxide Emission Factors for Coal: A Summary Waste-to-Energy Industry. EIA Data News: Data Collection on Alternative-Fuel Vehicles Highlights: Energy End-Use Intensities in Commercial Buildings Article: Change in Method for Estimating Fuel Economy for the Residential Transportation Energy Consumption Survey Article: Comparability of Supply- and Consumption-Derived Estimates of Manufacturing Energy Consumption Energy Preview: Propane-Provider Fleet Survey 1993, Preliminary Estimates Energy Preview: Propane-Provider Fleet Survey 1993, Preliminary Estimates	January 1994 February 1994 April 1994 June 1994 July 1994 August 1994 August 1994 September 1994 September 1994 October 1994 October 1994 October 1994 November 1994 November 1994 November 1994
Energy Preview: Atlanta Private Fleet Survey 1994, Preliminary Estimates	December 1994
Energy Preview: Residential Transportation Energy Consumption Survey, Preliminary Estimates, 1991. EIA Data News: Natural Gas Transported for the Account of Others Highlights: Federal Energy Subsidies: Direct and Indirect Interventions in Energy Markets Highlights: Household Energy Consumption and Expenditures 1990. Article: Demand, Supply, and Price Outlook for Low-Sulfur Diesel Fuel Energy Preview: Manufacturing Energy Consumption Survey, Preliminary Estimates, 1991. Highlights: Natural Gas 1992: Issues and Trends. Highlights: International Energy Outlook 1993. Highlights: The Changing Structure of the U.S. Coal Industry: An Update Highlights: Emissions of Greenhouse Gases in the United States 1985-1990. Highlights: Assessment of Energy Use in Multibuilding Facilities.	January 1993 February 1993 July 1993 August 1993 August 1993 September 1993 October 1993 November 1993 December 1993
1992 Energy Preview: Residential Energy Consumption and Expenditures Preliminary Estimates, 1990 EIA Data News: Oxygenate Data Collection Begins Highlights: Lighting in Commercial Buildings Article: Demand, Supply, and Price Outlook for Oxygenated Gasoline, Winter 1992-1993 EIA Data News: EIA Statistics on Electric Utility Demand-Side Management EIA Data News: EIA Statistics on Nonutility Power Producers EIA Data News: EIA Statistics on Electric Utility Demand-Side Management Article: Energy Efficiency in the Manufacturing Sector	April 1992 May 1992 June 1992 August 1992 September 1992 October 1992 November 1992 December 1992
1991 Highlights: U.S. Energy Industry Financial Developments, 1990 Fourth Quarter Article: U.S. Wholesale Electricity Transactions	March 1991 April 1991
1990	luno 1000
Article: Refining Results Highlight Energy Companies' First-Half Profit Performance Highlights: U.S. Oil and Gas Reserves by Year of Field Discovery	June 1990 August 1990
Article: Refining Results Highlight Energy Companies' First-Half Profit Performance Highlights: U.S. Oil and Gas Reserves by Year of Field Discovery 1989 Article: A Review of Valdez Oil Spill Market Impacts Article: Monthly U.S. Crude Oil Production Estimates Article: Superconductivity and Energy Production and Consumption Highlights: Commercial Buildings Consumption and Expenditures 1986 Article: Higher Prices Yield Improved Energy Industry Financial Results in the First Half of 1989 Article: The Future Structure of the U.S. Commercial Nuclear Power Equipment Manufacturing Industry Highlights: Potential Costs of Restricting Chlorofluorocarbon Use	August 1990 March 1989 March 1989 May 1989 May 1989 June 1989 July 1989 September 1989
Article: Refining Results Highlight Energy Companies' First-Half Profit Performance Highlights: U.S. Oil and Gas Reserves by Year of Field Discovery 1989 Article: A Review of Valdez Oil Spill Market Impacts Article: Monthly U.S. Crude Oil Production Estimates Article: Superconductivity and Energy Production and Consumption Highlights: Commercial Buildings Consumption and Expenditures 1986 Article: Higher Prices Yield Improved Energy Industry Financial Results in the First Half of 1989 Article: The Future Structure of the U.S. Commercial Nuclear Power Equipment Manufacturing Industry	August 1990 March 1989 March 1989 May 1989 May 1989 June 1989 July 1989

1988 (Continued) Article: State Energy Severance Taxes, 1972-1987 Highlights: Manufacturing Energy Consumption Survey: Consumption of Energy, 1985 Highlights: Profiles of Foreign Direct Investment in U.S. Energy 1987 Highlights: Manufacturing Energy Consumption Survey: Fuel Switching, 1985 Article: Increased Refining Income Led U.S. Energy Industry Financial Recovery in 1988	July 1988 September 1988 October 1988 November 1988 December 1988
1987 Article: Manufacturing Sector Energy Consumption, 1985 Provisional Estimates	January 1987
Highlights: Consumption and Expenditures, April 1984 Through March 1985, Part 1: National Data	April 1987
Highlights: Consumption and Expenditures, April 1984 Through March 1985, Part 2: Regional Data	May 1987
Article: U.S. Energy Industry Financial Developments, 1987 Second Quarter Article: End-Use Consumption of Residential Energy	June 1987 July 1987
Highlights: Uranium Industry Annual 1986 Highlights: Potential Oil Production from ANWR Highlights: Profiles of Foreign Direct Investment in U.S. Energy 1986 Article: The U.S. Energy Industry in 1987: A Slow Recovery	September 1987 October 1987 November 1987 December 1987
1986 Article: State Motor Gasoline Taxes, 1960-1985. Article: The Impact of Low Oil Prices on Electric Utility Fuel Choice. Article: U.S. Energy Industry Financial Developments, 1986 Second Quarter. Highlights: International Energy Annual 1985. Article: U.S. Energy Industry Financial Developments, 1986.	March 1986 June 1986 June 1986 September 1986 December 1986
Highlights: Annual Energy Review 1984 Highlights: Performance Profiles of Major Energy Producers 1983 Article: Estimating Well Completions Highlights: State Energy Price and Expenditure Report 1970-1982 Highlights: State Energy Data Report, Consumption Estimates, 1960-1983 Highlights: Annual Outlook for U.S. Electric Power 1985 Highlights: Short-Term Energy Outlook, Volume 1, October 1985 Highlights: Analysis of Growth in Electricity Demand, 1980-1984 Highlights: Performance Profiles of Major Energy Producers 1984	January 1985 February 1985 March 1985 March 1985 April 1985 June 1985 August 1985 August 1985 November 1985 December 1985
Highlights: Annual Energy Review 1983 Highlights: Annual Energy Outlook 1983 Highlights: State Energy Data Report, Consumption Estimates, 1960-1982 Highlights: State Energy Price and Expenditure Report, 1970-1981 Highlights: Solar Collector Manufactruring Activity 1983 Highlights: International Energy Annual 1983 Highlights: Estimates of U.S. Wood Energy Consumption, 1980-1983 Highlights: Energy Conservation Indicators 1983 Annual Report. Highlights: Annual Energy Outlook 1984	February 1984 March 1984 March 1984 May 1984 June 1984 September 1984 November 1984 December 1984
Highlights: Residential Energy Consumption Survey: Consumption and Expenditures Highlights: Residential Energy Consumption Survey: Housing Characteristics Article: The Effect of Weather on Energy Use Article: Trends in U.S. Energy Since 1973 Article: Data Series on Petroleum Use at Electric Utilities Highlights: Energy Price and Expenditure Data Report, 1970-1980 Highlights: Railroad Deregulation: Impact on Coal Highlights: Port Deepening and User Fees: Impact on U.S. Coal Exports Highlights: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1982 Annual Report Article: Residential Energy Consumption, 1978 Through 1981 Article: Exploring for Oil and Gas Article: The Influence of Federal Actions on Petroleum Exploration Article: Aggregate Statistics: Accurate or Misleading?	January 1983 February 1983 April 1983 May 1983 July 1983 July 1983 August 1983 August 1983 September 1983 September 1983 November 1983 December 1983[2]
1982 Article: The Interstate and Intrastate Natural Gas Markets Article: Natural Gas Drilling and Production Under the Natural Gas Policy Act Highlights: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1981 Annual Report Article: Impacts of Financial Constraints on the Electric Utility Industry Highlights: Energy Company Development Patterns in the Postembargo Era	January 1982 February 1982 September 1982 October 1982 November 1982

Article:	Changes in 1981 Petroleum Data Series Information Services of the Energy Information Administration An Overview of Natural Gas Markets	May 1981 September 1981 December 1981
Article: Article: Article: Article: Article:	The Solar Collector Industry and Solar Energy Trends in the Installation of Energy Using Equipment in New Residential Buildings The Energy Information Administration's Oil and Gas Reserves Program—The First Year's Report Energy From Urban Waste Natural Gas Liquids: Revisions to 1979 Data EIA Weekly Petroleum Data: Data Collection and Methods of Estimation The Department of Energy Disclosure Policy for Individually Identifiable Information Maintained by the Energy Information Administration	February 1980 March 1980 June 1980 August 1980 October 1980 November 1980 December 1980
Article:	The Energy Requirements of U.S. Agriculture Three Mile Island—Possible Regulatory Responses and Their Impacts on the Nation's Short-Term Electric Utility Fuel Outlook Reduction in Natural Gas Requirements Due to Fuel Switching	July 1979 October 1979 December 1979
1978 Article:	Short-Term Petroleum Supply and Demand	May 1978
	Crude Oil Entitlements Program	January 1977 July 1977
Article:	Curtailments of Natural Gas Service	January 1976 March 1976 September 1976
Article: Article: Article: Article:	Energy Consumption Nuclear Power The Price of Crude Oil U.S. Coal Resources and Reserves Propane—A National Energy Resource Short-Term Energy Supply and Demand Forecasting at FEA	March 1975 April 1975 June 1975 July 1975 September 1975 October 1975

Glossary

Anthracite: The highest rank of coal. It is a hard, brittle, and black lustrous coal, often referred to as hard coal, containing a high percentage of fixed carbon and a low percentage of volatile matter. It is used primarily for residential and commercial space heating. The moisture content of fresh-mined anthracite generally is less than 15 percent. The heat content of anthracite ranges from 22 to 28 million Btu per ton on a moist, mineral-matter-free basis. The heat content of anthracite coal consumed in the United States averages 25 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter). Note: Since the 1980s anthracite refuse or mine waste has been used for steam-electric power generation. This fuel typically has a heat content of 15 million Btu per ton or less.

Anthracite Culm: Waste from Pennsylvania anthracite preparation plants, consisting of coarse rock fragments containing as much as 30 percent small-sized coal; sometimes defined as including very fine coal particles called silt. Its heat value ranges from 8 to 17 million Btu per short ton.

Asphalt: A dark-brown-to-black cement-like material containing bitumens as the predominant constituents obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts.

ASTM: The American Society for Testing and Materials.

Aviation Gasoline Blending Components: Naphthas that are used for blending or compounding into finished aviation gasoline (e.g., straight-run gasoline, alkylate, and reformate). Excludes oxygenates (alcohols and ethers), butane, and pentanes plus.

Aviation Gasoline, Finished: All special grades of gasoline used in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G-5572. Excludes blending components that will be used in blending or compounding into finished aviation gasoline.

Barrel (petroleum): A unit of volume equal to 42 U.S. gallons.

Base (Cushion) Gas: The volume of gas needed as a permanent inventory to maintain adequate underground storage reservoir pressures and deliverability rates throughout the withdrawal season. All native gas is included in the base gas volume.

Bituminous Coal: A dense, black coal, often with well-defined bands of bright and dull material. Bituminous coal is the most abundant coal in active U.S. mining regions. It is used primarily as fuel in

steam-electric power generation, with substantial quantities also used for heat and power applications in manufacturing and to make coke. Its moisture content usually is less than 20 percent. The heat content of bituminous coal ranges from 21 to 30 million Btu per ton on a moist, mineral-matter-free basis. The heat content of bituminous coal consumed in the United States averages 24 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

British Thermal Unit (Btu): The quantity of heat needed to raise the temperature of 1 pound of water by 1° F at or near 39.2° F. See Heat Content of a Quantity of Fuel, Gross and Heat Content of a Quantity of Fuel, Net.

Bunker Oil: Fuels supplied to ships and aircraft in international transportation, irrespective of the flag of the carrier, consisting primarily of residual, distillate, and jet fuel oils.

Butane: A normally gaseous straight-chain or branched-chain hydrocarbon (C_4H_{10}). It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

Isobutane: A normally gaseous branched-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. It is extracted from natural gas or refinery gas streams.

Normal Butane: A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 31.1° F. It is extracted from natural gas or refinery gas streams.

Butylene: An olefinic hydrocarbon (C_4H_8) recovered from refinery processes.

Capacity Factor: The ratio of the electrical energy produced by a generating unit for a given period of time to the electrical energy that could have been produced at continuous full-power operation during the same period.

Chained Dollars: A measure used to express real prices. Real prices are those that have been adjusted to remove the effect of changes in the purchasing power of the dollar; they usually reflect buying power relative to a reference year. Prior to 1996, real prices were expressed in constant dollars, a measure based on the weights of goods and services in a single year, usually a recent year. In 1996, the U.S. Department of Commerce introduced the chained-dollar measure. The new measure is based on the average weights of goods and services in successive pairs of years. It is "chained" because the second year in each pair, with its weights, becomes the first year of the next pair. The advantage of using the chained-dollar measure is that it is more closely related to any given period and is therefore subject to less distortion over time.

CIF: See Cost, Insurance, Freight.

City Gate: A point or measuring station at which a distribution gas utility receives gas from a natural gas pipeline company or transmission system.

Coal: A readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time.

Coal Coke: See Coke, Coal.

Coal Rank: The classification of coals according to their degree of progressive alteration from lignite to anthracite. In the U.S. classification, the ranks include lignite, subbituminous coal, bituminous coal, and anthracite, and are based on fixed carbon, volatile matter, heating value, and agglomerating (or caking) properties.

Coal Stocks: Coal quantities that are held in storage for future use and disposition. Note: When coal data are collected for a particular reporting period (month, quarter, or year), coal stocks are commonly measured as of the last day of the period.

Cogenerator: A generating facility that produces electricity and another form of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes. See **Nonutility Power Producers.**

Coke, Coal: A solid carbonaceous residue derived from low-ash, low-sulfur bituminous coal from which the volatile constituents are driven off by baking in an oven at temperatures as high as 2,000° F so that the fixed carbon and residual ash are fused together. Coke is used as a fuel and as a reducing agent in smelting iron ore in a blast furnace. Coke (coal) has a heating value of 24.8 million Btu per ton.

Coke, Petroleum: A residue high in carbon content and low in hydrogen that is the final product of thermal decomposition in the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion is 5 barrels (42 U.S. gallons each) per short ton. Coke (petroleum) has a heating value of 6.024 million Btu per barrel.

Coking Coal: Bituminous coal suitable for making coke. See Coke, Coal.

Commercial Sector: Defined economically, consists of business establishments that are not engaged in transportation or in manufacturing or other types of industrial activity (agriculture, mining, or construction). Commercial establishments include hotels, motels, restaurants, wholesale businesses, retail stores, laundries, and other service enterprises; religious and nonprofit organizations; health, social, and educational institutions; and Federal, State, and local governments. Street lights, pumps, bridges, and public services are also included if the establishment operating them is considered commercial.

Completion: The installation of permanent equipment for the production of oil or gas. If a well is equipped to produce only oil or gas from one zone or reservoir,

the definition of a well (classified as an oil well or gas well) and the definition of a completion are identical. However, if a well is equipped to produce oil and/or gas separately from more than one reservoir, a well is not synonymous with a completion.

Constant Dollars: See Chained Dollars.

Conventional Gasoline: Finished motor gasoline not included in the oxygenated or reformulated gasoline categories. Note: This category excludes reformulated gasoline blendstock for oxygenate blending (RBOB) as well as other blendstock.

Conversion Factor: A number that translates units of one system into corresponding values of another system. Conversion factors can be used to translate physical units of measure for various fuels into Btu equivalents. See British Thermal Unit.

Cost, Insurance, Freight (CIF): A type of sale in which the buyer of the product agrees to pay a unit price that includes the f.o.b. value of the product at the point of origin plus all costs of insurance and transportation. This type of transaction differs from a "delivered" purchase in that the buyer accepts the quantity as determined at the loading port (as certified by the Bill of Loading and Quality Report) rather than paying on the basis of the quantity and quality ascertained at the unloading port. It is similar to the terms of an f.o.b. sale, except that the seller, as a service for which he is compensated, arranges for transportation and insurance.

Crude Oil: A mixture of hydrocarbons that exists in liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Crude oil may also include: (1) Small amounts of hydrocarbons that exist in the gaseous phase in natural underground reservoirs but are liquid at atmospheric pressure after being recovered from oil well (casinghead) gas in lease separators and that subsequently are commingled with the crude stream without being separately measured. (2) Small amounts of nonhydrocarbons produced with the oil, such as sulfur and other compounds. Note: In reporting crude oil data at various stages of the petroleum supply stream, EIA survey programs have definitional variations due to whether associated products or materials are counted with crude oil. Some products and other materials are either mixed with the crude oil and cannot be separately measured or they are logically associated with crude oil for accounting purposes. Crude oil reserves data contain separate estimates for lease condensate, whereas crude oil supply data include lease condensate. Crude oil supply data also include liquid hydrocarbons produced from tar sands, gilsonite, and oil shale.

Crude Oil f.o.b. Price: The crude oil price actually charged at the oil-producing country's port of loading. Includes deductions for any rebates and discounts or additions of premiums, where applicable. It is the actual price paid with no adjustment for credit terms.

Crude Oil (Including Lease Condensate): A mixture of hydrocarbons that exists 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. Where identifiable, liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded.

Crude Oil Landed Cost: The price of crude oil at the port of discharge, including charges associated with the purchase, transporting, and insuring of a cargo from the purchase point to the port of discharge. The cost does not include charges incurred at the discharge port (e.g., import tariffs or fees, wharfage charges, and demurrage).

Crude Oil Refinery Input: The total crude oil put into processing units at refineries.

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

Crude Oil Used Directly: Crude oil consumed as fuel by crude oil pipelines and on crude oil leases.

Cubic Foot (natural gas): A unit of volume equal to 1 cubic foot at a pressure base of 14.73 pounds standard per square inch absolute and a temperature base of 60° F.

Degree-Day Normals: Simple arithmetic averages of monthly or annual degree-days over a long period of time (usually the 30-year period 1961-1990). The averages may be simple degree-day normals or population-weighted degree-day normals.

Degree-Days, Cooling (CDD): 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 (HDD): 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. Degree-day readings for each division are multiplied by the corresponding population weight for each division and those products are then summed to arrive at the State populationweighted degree-day figure. To compute national population-weighted degree-days, the Nation is divided into nine Census regions, each comprising 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 those products are then summed to arrive at the national population-weighted degree-day figure.

Design Electrical Rating, Net: The nominal net electrical output of a nuclear unit as specified by the electric utility for the purpose of plant design.

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

Distillate Fuel Oil: A general classification for one of the petroleum fractions produced in conventional distillation operations. Included are products known as No. 1, No. 2, and No. 4 fuel oils and No. 1, No. 2, and No. 4 diesel fuels. It is 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 and unaccounted-for uses.

Electricity Generation: The process of producing electric energy or transforming other forms of energy into electric energy. It is also the amount of electric energy produced or expressed in watthours (Wh).

Electricity Generation, Gross: The total amount of electric energy produced by the generating station or stations, measured at the generator terminals.

Electricity Generation, Net: 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.

Electricity Production: Net electricity (gross electricity output measured at generator terminals minus power plant use) generated by publicly and privately owned electric utilities. Excludes industrial electricity generation (except autogeneration of hydroelectric power).

Electricity Sales: The amount of kilowatthours sold in a given period of time; usually grouped by classes of service, such as residential, commercial, industrial, and other. "Other" sales include sales for public street and highway lighting and other sales to public authorities, sales to railroads and railways, and interdepartmental sales.

Electric Power Plant: A station containing prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or fission energy into electric energy.

Electric Utility: A corporation, person, agency, authority, or other legal entity or instrumentality that owns and/or operates facilities for the generation, transmission, distribution, or sale of electric energy, primarily for use by the public, and that files forms listed in the *Code of Federal Regulations*, Title 18, Part 141. Facilities that qualify as cogenerators or small power producers under the Public Utility Regulatory Policies Act are not considered electric utilities.

Electric Utility Sector: Privately and publicly owned establishments that generate, transmit, distribute, or sell electricity primarily for use by the public and meet the definition of an electric utility. Nonutility power producers are not included in the electric utility sector.

End-Use Sectors: The residential, commercial, industrial, and transportation sectors of the economy.

Energy: The capacity for doing work as measured by the capability of doing work (potential energy) or the conversion of this capability to motion (kinetic energy). Energy has several forms, some of which are easily convertible and can be changed to another form useful for work. Most of the world's convertible energy comes from fossil fuels that are burned to produce heat that is then used as a transfer medium to mechanical or other means in order to accomplish tasks. Electrical energy is usually measured in kilowatthours, while heat energy is usually measured in British thermal units.

Energy Consumption: The use of energy as a source of heat or power or as an input in the manufacturing process.

Energy Source: A substance, such as petroleum, natural gas, or coal, that supplies heat or power. In Energy Information Administration reports, electricity and renewable forms of energy, such as biomass, geothermal, wind, and solar, are considered to be energy sources.

Ethane: A normally gaseous straight-chain hydrocarbon (C_2H_6). It is a colorless, paraffinic gas that boils at a temperature of -127.48° F. It is extracted from natural gas and refinery gas streams.

Ethanol: See Fuel Ethanol.

Ethylene: An olefinic hydrocarbon (C₂H₄) recovered from refinery processes or petrochemical processes.

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 and to Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

Extraction Loss: The reduction in volume of natural gas due to the removal of natural gas constituents, such as ethane, propane, and butane, at natural gas processing plants.

f.a.s.: See Free Alongside Ship.

Federal Energy Administration (FEA): A predecessor of the Energy Information Administration.

Federal Energy Regulatory Commission (FERC): The Federal agency with jurisdiction over interstate electricity sales, wholesale electric rates, hydroelectric licensing, natural gas pricing, oil pipeline rates, and gas pipeline certification. FERC is an independent regulatory agency within the Department of Energy and is the successor to the Federal Power Commission.

Federal Power Commission (FPC): The predecessor agency of the Federal Energy Regulatory Commission. The Federal Power Commission was created by an Act of Congress under the Federal Water Power Act on June 10, 1920. It was charged originally with regulating the electric power and natural gas industries. It was abolished on September 30, 1977, when the Department of Energy was created. Its functions were divided between the Department of Energy and the

Federal Energy Regulatory Commission, an independent regulatory agency.

First Purchase Price: The marketed first sales price of domestic crude oil, consistent with the removal price defined by the provisions of the Windfall Profits Tax on Domestic Crude Oil (Public Law 96-223, Sec. 4998 (c)).

Flared Natural Gas: Natural gas burned in flares on the base site or at gas processing plants.

f.o.b. See Free on Board.

Footage Drilled: Total footage for wells in various categories, as reported for any specified period, includes (1) the deepest total depth (length of well bores) of all wells drilled from the surface, (2) the total of all bypassed footage drilled in connection with reported wells, and (3) all new footage drilled for directional sidetrack wells. Footage reported for directional sidetrack wells does not include footage in the common bore, which is reported as footage for the original well. In the case of old wells drilled deeper, the reported footage is that which was drilled below the total depth of the old well.

Former U.S.S.R.: See U.S.S.R.

Fossil Fuel: Any naturally occurring organic fuel, such as petroleum, coal, and natural gas.

Fossil-Fueled 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.

Free Alongside Ship (f.a.s.): The value of a commodity at the port of exportation, generally including the purchase price, plus all charges incurred in placing the commodity alongside the carrier at the port of exportation

Free on Board (f.o.b.): A transaction whereby the seller makes the product available within an agreed-on period at a given port at a given price. It is the responsibility of the buyer to arrange for the transportation and insurance.

Fuel Ethanol: An anhydrous, denatured aliphatic alcohol (C_2H_5OH) intended for motor gasoline blending. See **Oxygenates.**

Full-Power Operation: Operation of a nuclear generating unit at 100 percent of its design capacity. Full-power operation precedes commercial operation.

Gasohol: A blend of finished motor gasoline containing 10 percent or less alcohol (generally ethanol but sometimes methanol). See Oxygenated Gasoline.

Gas-Turbine Electric Power Plant: A plant in which the prime mover is a gas turbine. A gas turbine typically consists of an axial-flow air compressor, one or more combustion chambers where liquid or gaseous fuel is burned and the hot gases expand to drive the generator and then are used to run the compressor.

Gas Well: A well completed for the production of natural gas from one or more gas zones or reservoirs. (Wells producing both crude oil and natural gas are classified as oil wells.)

Geothermal Energy: Energy from the internal heat of the Earth, which may be residual heat, friction heat, or

a result of radioactive decay. The heat is found in rocks and fluids at various depths and can be extracted by drilling and/or pumping.

Gross Domestic Product (GDP): The total value of goods and services produced by labor and property located in the United States. As long as the labor and property are located in the United States, the supplier (that is, the workers and, for property, the owners) may be either U.S. residents or residents of foreign countries

GT/IC: Gas turbine and internal combustion plants.

Heat Content of a Quantity of Fuel, Gross: The total amount of heat released when a fuel is burned. Coal, crude oil, and natural gas all include chemical compounds of carbon and hydrogen. When those fuels are burned, the carbon and hydrogen combine with oxygen in the air to produce carbon dioxide and water. Some of the energy released in burning goes into transforming the water into steam and is usually lost. The amount of heat spent in transforming the water into steam is counted as part of gross heat content but is not counted as part of net heat content. It is also referred to as the higher heating value. Btu conversion factors typically used in EIA represent gross heat content.

Heat Content of a Quantity of Fuel, Net: The amount of usable heat energy released when a fuel is burned under conditions similar to those in which it is normally used. Also referred to as the lower heating value. Btu conversion factors typically used in EIA represent gross heat content.

Heavy Oil: The fuel oils remaining after the lighter oils have been distilled off during the refining process. Except for start-up and flame stabilization, virtually all petroleum used in steam-electric power plants is heavy oil

Hydrocarbon: An organic chemical compound of hydrogen and carbon in the gaseous, liquid, or solid phase. The molecular structure of hydrocarbon compounds varies from the simplest (methane, the primary constituent of natural gas) to the very heavy and very complex.

Hydroelectric Power: The production of electricity from the kinetic energy of falling water.

Hydroelectric Power Plant: A plant in which the turbine generators are driven by falling water.

Hydroelectric Pumped Storage: Hydroelectricity that is generated during peak load periods by using water previously pumped into an elevated storage reservoir during off-peak periods when excess generating capacity is available to do so. When additional generating capacity is needed, the water can be released from the reservoir through a conduit to turbine generators located in a power plant at a lower level.

Imports: Receipts of goods into the 50 States and the District of Columbia from foreign countries and from Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

Independent Power Producer: Wholesale electricity producers (other than qualifying facilities under the Public Utilities Regulatory Policies Act of 1978) that are unaffiliated with franchised utilities in the area in

which the independent power producers are selling power and that lack significant marketing power. Unlike traditional electric utilities, independent power producers do not possess transmission facilities that are essential to the customers and do not sell power in any retail service territory where they have a franchise. See **Nonutility Power Producer.**

Industrial Sector: Comprises manufacturing industries, which make up the largest part of the sector, along with mining, construction, agriculture, fisheries, and forestry. Establishments in this sector range from steel mills to small farms to companies assembling electronic components.

Injections (Natural Gas): Natural gas injected into storage reservoirs

Internal Combustion Electric Power Plant: A power plant in which the prime mover is an internal combustion engine. Diesel or gas-fired engines are the principal types used in electric power plants. The plant is usually operated during periods of high demand for electricity.

Isobutane: A normally gaseous branch-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9 F. It is extracted from natural gas or refinery gas streams. See **Butane**.

Isobutylene: An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

Isopentane: A saturated branched-chain hydrocarbon obtained by fractionation of natural gasoline or isomerization of normal pentane.

Jet Fuel, Finished: A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in aviation reciprocating engines. Fuel specifications are provided in ASTM Specification D910 and Military Specification MIL-G-5572. Note: Data on blending components are not counted in data on finished aviation gasoline.

Jet Fuel, Kerosene-Type: A kerosene-based product with a maximum distillation temperature of 400 F at the 10-percent recovery point and a final maximum boiling point of 572° F. Fuel specifications are provided in ASTM Specification D 1655 and Military Specifications MIL-T-5624P and MIL-T-83133D (Grades JP-5 and JP-8). It is used primarily for commercial turbojet and turboprop aircraft engines.

Jet Fuel, Naphtha-Type: A fuel in the heavy naphtha boiling range, with an average gravity of 52.8 degrees API, 20 to 90 percent distillation temperatures of 290 to 470 F and meeting Military Specification MIL-T-5624L (Grade JP-4). It is used by the military for turbojet and turboprop engines.

Kerosene: A petroleum distillate having a maximum distillation temperature of 401° F at the 10-percent recovery point, a final boiling point of 572° F, and a minimum flash point of 100° F. Included are the two grades designated in ASTM D3699 (No. 1-K and No. 2-K) and all grades of kerosene called range or stove oil. Kerosene is used in space heaters, cook stoves, and water heaters; it is suitable for use as an illuminant when burned in wick lamps.

Kilowatthour (kWh): A measure of electricity defined as a unit of work or energy, measured as 1 kilowatt (1,000 watts) of power expended for 1 hour. One kilowatthour is equivalent to 3,412 Btu.

Landed Costs: The dollar-per-barrel price of crude oil at the port of discharge. Included are the charges associated with the purchase, transporting, and insuring of a cargo from the purchase point to the port of discharge. Not included are charges incurred at the discharge port (e.g., import tariffs or fees, wharfage charges, and demurrage charges).

Lease and Plant Fuel: Natural gas used in well, field, and lease operations (such as gas used in drilling operations, heaters, dehydrators, and field compressors) and used as fuel in natural gas processing plants.

Lease Condensate: A mixture consisting primarily of pentanes and heavier hydrocarbons, which is recovered as a liquid from natural gas in lease or field separation facilities. Note: This category excludes natural gas liquids, such as butane and propane, which are recovered at natural gas processing plants or facilities.

Light Oil: Lighter fuel oils distilled off during the refining process. Virtually all petroleum used in internal combustion and gas-turbine engines is light oil.

Lignite: The lowest rank of coal. Often referred to as brown coal, it is used almost exclusively as fuel for steam-electric power generation. It is brownish-black and has a high inherent moisture content, sometimes as high as 45 percent. The heat content of lignite ranges from 9 to 17 million Btu per ton on a moist, mineral-matter-free basis. The heat content of lignite consumed in the United States averages 14 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

Liquefied Natural Gas (LNG): Natural gas (primarily methane) that has been liquefied by reducing its temperature to -260° F at atmospheric pressure.

Liquefied Petroleum Gases (LPG): Ethane, ethylene, propane, propylene, normal butane, butylene, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate new natural gas plant liquids.

Low-Power Testing: The period of time between a nuclear generating unit's initial fuel loading date and the issuance of its operating (full-power) license. The maximum level of operation during that period is 5 percent of the unit's design thermal rating.

Lubricants: Substances used to reduce friction between bearing surfaces or as process materials either incorporated into other materials used as processing aids in the manufacturing of other products or as carriers of other materials. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. Excluded are byproducts of lubricating oil refining, such as aromatic extracts derived from solvent extraction or tars derived from deasphalting. Included are all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. Lubricant categories are paraffinic and naphthenic.

Marketed Production: Gross withdrawals less gas used for repressuring, quantities vented and flared, and nonhydrocarbon gases removed in treating or processing operations. Includes all quantities of gas used in field and processing operations.

Metallurgical Coal: Coking coal and pulverized coal consumed in making steel.

Methane: A hydrocarbon gas (CH₄) that is the principal constituent of natural gas.

Methyl Tertiary Butyl Ether: An ether, (CH₃)₃COCH₃, intended for motor gasoline blending. See Oxygenates.

Methanol: A light, volatile alcohol (CH₃OH) eligible for motor gasoline blending. See **Oxygenates.**

Miscellaneous Petroleum Products: All finished petroleum products not classified elsewhere—for example, petrolatum, lube refining byproducts (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and specialty oils.

Motor Gasoline (Finished): A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in spark-ignition engines. Motor gasoline, as defined in ASTM Specification D-4814 or Federal Specification VV-G-1690C, is characterized as having a boiling range of 122 to 158° at the 10-percent recovery point to 365° to 374° at the 90-percent recovery point. "Motor Gasoline" includes conventional gasoline, all types of oxygenated gasoline including gasohol, and reformulated gasoline, but excludes aviation gasoline. Note: Data on blending components, as well as oxygenates, are not counted in data on finished motor gasoline.

Motor Gasoline Blending: Mechanical mixing of motor gasoline blending components and oxygenates as required, to produce finished motor gasoline. Finished motor gasoline may be further mixed with other motor gasoline blending components or oxygenates, resulting in increased volumes of finished motor gasoline and/or changes in the formulation of finished motor gasoline (e.g., conventional motor gasoline mixed with MTBE to produce oxygenated motor gasoline).

Motor Gasoline Blending Components: Naphthas (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, xylene) used for blending or compounding into finished motor gasoline. These components include reformulated gasoline blendstock for oxygenate blending (RBOB) but exclude oxygenates (alcohols, ethers), butane, and pentanes plus. Note: Oxygenates are reported as individual components and are included in the total for other hydrocarbons, hydrogens, and oxygenates.

Motor Gasoline Grades: The classification of gasoline by octane ratings. Each type of gasoline (Conventional, Oxygenated, and Reformulated) is classified by three grades - Regular, Midgrade, and Premium. Note: Gasoline sales are reported by grade in accordance with their classification at the time of sale. In general, automotive octane requirements are lower at high altitudes. Therefore, in some areas of the United States, such as the Rocky Mountain States, the octane ratings for the gasoline grades may be 2 or more octane points lower.

Motor Gasoline, Midgrade: Gasoline having an antiknock index, i.e., octane rating, greater than or equal to 88 and less than or equal to 90. Note: Octane requirements may vary by altitude. See Motor Gasoline Grades.

Premium Gasoline: Gasoline having an antiknock index, i.e., octane rating, greater than 90. Note: Octane requirements may vary by altitude. See **Motor Gasoline Grades.**

Motor Gasoline, Reformulated: Finished motor gasoline formulated for use in motor vehicles, the composition and properties of which meet the requirements of the reformulated gasoline regulations promulgated by the U.S. Environmental Protection Agency under Section 211(k) of the Clean Air Act. Note: This category includes oxygenated fuels program reformulated gasoline (OPRG) but excludes reformulated gasoline blendstock for oxygenate blending (RBOB).

Regular Gasoline: Gasoline having an antiknock index, i.e., octane rating, greater than or equal to 85 and less than 88. Note: Octane requirements may vary by altitude. See **Motor Gasoline Grades.**

Motor Gasoline Retail Prices: Motor gasoline prices calculated each month by the Bureau of Labor Statistics (BLS) in conjunction with the construction of the Consumer Price Index (CPI). Those prices are collected 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-service).

Motor Gasoline, Total: For stock level data, a sum including finished motor gasoline stocks plus stocks of motor gasoline blending components but excluding stocks of oxygenates.

MTBE: See Methyl Tertiary Butyl Ether.

Nameplate Capacity: The maximum design production capacity specified by the manufacturer of a processing unit or the maximum amount of a product that can be produced running the manufacturing unit at full capacity.

Naphtha: A generic term applied to a petroleum fraction with an approximate boiling range between 122 and 400° F.

Natural Gas: A mixture of hydrocarbons (principally methane) and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

Natural Gas, Dry: The marketable portion of natural gas production, which is obtained by subtracting extraction losses, including natural gas liquids removed at natural gas processing plants, from total production.

Natural Gas Marketed Production: Gross withdrawals of natural gas from production reservoirs, less gas used for reservoir repressuring; nonhydrocarbon gases removed in treating and processing operations; and quantities vented and flared.

Natural Gas Plant Liquids (NGPL): Natural gas liquids recovered from natural gas in processing plants and, in some situations, from natural gas field facilities, as well as those extracted by fractionators. Natural gas plant liquids are defined according to the

published specifications of the Gas Processors Association and the American Society for Testing and Material 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. Minerals Management Service. 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.

Natural Gasoline: A mixture of hydrocarbons (mostly pentanes and heavier) extracted from natural gas that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane, which is a saturated branch-chain hydrocarbon obtained by fractionation of natural gasoline or isomerization of normal pentane.

Net Summer Capability: The steady hourly output that generating equipment is expected to supply to system load, exclusive of auxiliary power, as demonstrated by testing at the time of summer peak demand.

Neutral Zone: A 6,200 square-mile area shared equally between Kuwait and Saudi Arabia under a 1992 agreement. The Neutral Zone contains an estimated 5 billion barrels of oil and 8 trillion cubic feet of natural gas.

Nonhydrocarbon Gases: Typical nonhydrocarbon gases that may be present in reservoir natural gas are carbon dioxide, helium, hydrogen sulfide, and nitrogen.

Nonutility Power Producer: A corporation, person, agency, authority, or other legal entity of instrumentality that owns electric generating capacity and is not an electric utility. Nonutility producers include qualifying cogenerators, qualifying small power producers, and other nonutility generators (including independent power producers) without a designated, franchised, service area that do not file forms listed in the Code of Federal Regulations, Title 18, Part 141. See Cogenerator; Independent Power Producer; and Small Power Producer.

Nuclear Electric 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.

Nuclear Electric Power Plant: A single-unit or multiunit facility in which heat produced in one or more reactors by the fissioning of nuclear fuel is used to drive one or more steam turbines.

Nuclear Reactor: An apparatus in which the nuclear fission chain can be initiated, maintained, and controlled so that energy is released at a specific rate. The reactor includes fissionable material (fuel), such as uranium or plutonium; fertile material; moderating material (unless it is a fast reactor); a heavy-walled pressure ves-

sel; shielding to protect personnel; provision for heat removal; and control elements and instrumentation.

Octane Rating: A number used to indicate gasoline's antiknock performance in motor vehicle engines. The two recognized laboratory engine test methods for determining the antiknock rating of gasolines are the Research method and the Motor method. To provide a single number as guidance to the consumer, the antiknock index (R + M)/2, which is the average of the Research and Motor octane numbers, was developed.

Offshore: That geographic area that lies seaward of the coastline. In general, the coastline is the line of ordinary low water along with that portion of the coast that is in direct contact with the open sea or the line marking the seaward limit of inland water.

Oil: See Crude Oil.

Oil Well: A well completed for the production of crude oil from one or more oil zones or reservoirs. Wells producing both crude oil and natural gas are classified as oil wells.

Operable Unit (Nuclear): In the United States, a nuclear generating unit that has completed low-power testing and been issued a full-power operating license by the Nuclear Regulatory Commission, or equivalent permission to operate.

Organization for Economic Cooperation and Development (OECD): Members are Australia, Austria, Belgium, Canada, Denmark, Faroe Islands, Finland, France, Germany, Greece, Greenland, Hawaiian Trade Zone, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States and its territories (Guam, Puerto Rico, and the Virgin Islands). In addition, Czech Republic, Hungary, Poland, and South Korea joined the OECD in 1996.

Organization of Petroleum Exporting Countries (OPEC): Countries that have organized for the purpose of negotiating with oil companies on matters of oil production, prices, and future concession rights. Current members are Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

Oxygenated Gasoline: Finished motor gasoline having an oxygen content of 1.8 percent or higher, by weight. This product is required by the U.S. Environmental Protection Agency (EPA) to be sold in areas with higher-than-acceptable levels of carbon monoxide (CO), i.e., "nonattainment areas". These nonattainment areas are identified by EPA on the basis of detailed CO measurements and States are required to submit plans to improve air quality [State Implementation Plans (SIP)]. Such a program may, at the State's discretion, address an area larger than its officially-designated nonattainment area(s). Note: For data on sales of oxygenated gasoline, any gasoline meeting the oxygen content specification and intended for use within the area designated by a SIP is counted as oxygenated gasoline. For data on production and supply of oxygenated gasoline, gasohol is included in the oxygenated gasoline category, regardless of where it is sold. Oxygenated gasoline excludes reformulated gasoline, oxygenated fuels program reformulated

gasoline (OPRG), and reformulated gasoline blendstock for oxygenated blending (RBOB).

Oxygenates: Substances which, when added to gasoline, increase the amount of oxygen in that gasoline blend. Ethanol, MTBE, and methanol are common oxygenates.

PAD Districts: Petroleum Administration for Defense Districts. Geographic aggregations of the 50 States and the District of Columbia into five districts for the Petroleum Administration for Defense in 1950. The districts were originally instituted for economic and geographic reasons as Petroleum Administration for War (PAW) Districts, which were established in 1942.

Pentanes Plus: A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline, and plant condensate.

Petrochemical Feedstocks: Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics.

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: See Coke, Petroleum.

Petroleum Coke, Catalyst: The carbonaceous residue that is deposited on and deactivates the catalyst used in many catalytic operations (e.g., catalytic cracking). Carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refining process. That carbon or coke is not recoverable in a concentrated form.

Petroleum Coke, Marketable: Those grades of coke produced in delayed or fluid cokers that may be recovered as relatively pure carbon. Marketable petroleum coke may be sold as is or may be further purified by calcining.

Petroleum Consumption: The sum of all refined petroleum products supplied. For each refined petroleum product, the amount supplied is calculated by adding production and imports, then subtracting changes in primary stocks (net withdrawals are a plus quantity and net additions are a minus quantity) and exports.

Petroleum Imports: Imports of petroleum into the 50 States and the District of Columbia from foreign countries and from Puerto Rico, the Virgin Islands, and other U.S. territories and possessions. 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: Products obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feed-stocks, special naphthas, lubricants, waxes, petroleum

coke, asphalt, road oil, still gas, and miscellaneous products.

Petroleum Products Supplied: An approximate measure of consumption. It measures the disappearance of the products from primary sources, i.e., refineries, blending plants, and bulk terminals. In general, products supplied in any given period is computed as follows: field production, plus imports, plus unaccounted-for crude oil (plus net receipts when calculated on a PAD District basis) minus stock change, minus crude oil losses, minus refinery inputs, and minus exports. See also Petroleum Consumption.

Petroleum Stocks, Primary: For individual products, quantities that are held at refineries, in pipelines, and at bulk terminals that have a capacity of 50,000 barrels or more, or that are in transit thereto. Stocks held by product retailers and resellers, as well as tertiary stocks held at the point of consumption, are excluded. Stocks of individual products held at gas processing plants are excluded from individual product estimates but are included in other oils estimates and total.

Photovoltaic Energy: Direct-current electricity generated from sunlight through solid-state semiconductor devices that have no moving parts.

Pipeline Fuel: Gas consumed in the operation of pipelines, primarily in compressors.

Plant Condensate: One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquid at gas inlet separators or scrubbers in processing plants.

Prime Mover: The engine, turbine, water wheel, or similar machine that drives an electric generator; or, for reporting purposes, a device that converts energy to electricity directly.

Primary Consumption: All energy consumed by end users excluding electricity but including the energy consumed to generate electricity.

Propane: A normally gaseous straight-chain hydrocarbon (C_3H_8). It is a colorless paraffinic gas that boils at a temperature of -43.67° F. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane.

Propylene: An olefinic hydrocarbon (C_3H_6) recovered from refinery or petrochemical processes.

Pumped Storage: See Hydroelectric Pumped Storage.

Refiner Acquisition Cost of Crude Oil: 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.

Refinery (petroleum): An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

Renewable Energy: Energy obtained from sources that are essentially inexhaustible (unlike, for example, the fossil fuels, of which there is a finite supply). Renewable sources of energy include wood, waste, photovoltaic, and solar thermal energy.

Repressuring: The injection of a pressurized fluid (such as air, gas, or water) into oil and gas reservoir formations to effect greater ultimate recovery.

Residential Sector: Consists of all private residences, whether occupied or vacant, owned or rented, including single-family homes, multifamily housing units, and mobile homes. Secondary homes, such as summer homes, are also included. Institutional housing, such as school dormitories, hospitals, and military barracks, generally are not included in the residential sector; they are included in the commercial sector.

Residual Fuel Oil: The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations and that conform to ASTM Specifications D396 and 975. Included are No. 5, a residual fuel oil of medium viscosity; Navy Special, for use in steam-powered vessels in government service and in shore power plants; and No. 6, which includes Bunker C fuel oil and is used for commercial and industrial heating, for electricity generation, and to power ships. Imports of residual fuel oil include imported crude oil burned as fuel.

Road Oil: Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades, from 0, the most liquid, to 5, the most viscous.

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

Short Ton (coal): A unit of weight equal to 2,000 pounds.

SIC: See Standard Industrial Classification.

Small Power Producer: Under the Public Utility Regulatory Policies Act, a small power production facility (small power producer) generates electricity by using waste or renewable energy (biomass, conventional hydroelectric, wind, solar, and geothermal) as a primary energy source. Fossil fuels can be used, but renewable resources must provide at least 75 percent of the total energy input. See **Nonutility Power Producer.**

Solar Energy: Electricity produced from solar energy that heats a medium that powers the electricity-generating device.

Special Naphthas: All finished products within the naphtha boiling ranges that are used as paint thinner, cleaners or solvents. Those products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline, or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks, are excluded.

Spent Liquor: The liquid residue left after an industrial process; can be a component of waste materials used as fuel.

Standard Industrial Classification (SIC): A set of codes developed by the Office of Management and Budget which categorizes industries into groups with similar economic activities.

Startup Test Phase of Nuclear Power Plant: A nuclear power plant that has been licensed by the Nuclear Regulatory Commission to operate but is still in the initial testing phase, during which the production of electricity may not be continuous. In general, when the electric utility is satisfied with the plant's performance, it formally accepts the plant from the manufacturer and places it in commercial operation status. A request is then submitted to the appropriate utility rate commission to include the power plant in the rate base calculation.

Steam Coal: All nonmetallurgical coal.

Steam-Electric Power Plant: A plant in which the prime mover is a steam turbine. The steam used to drive the turbine is produced in a boiler where fossil fuels are burned.

Still Gas (Refinery Gas): Any form or mixture of gas produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, and propylene. It is used primarily as refinery fuel and petrochemical feedstock.

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

Subbituminous Coal: A coal that ranges in properties from those of lignite to those of bituminous coal. It may be dull, dark brown or black, soft and crumbly, at the lower end of the range, to bright, jet black, hard, and relatively strong, at the upper end. It is used primarily as fuel for steam-electric power generation. Subbituminous coal contains 20 to 30 percent inherent moisture by weight. The heat content of subbituminous coal ranges from 17 to 24 million Btu per ton on a moist, mineral-matter-free basis. The heat content of subbituminous coal consumed in the United States averages 18 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

Supplemental Gaseous Fuels: Any gaseous substance that, introduced into or commingled with natural gas, increases the volume available for disposition. Such substances include, but are not limited to, propane-air, refinery gas, coke oven gas, still gas, manufactured gas, biomass gas, or air or inert gases added for Btu stabilization.

Synthetic Natural Gas (SNG): A manufactured product chemically similar in most respects to natural gas, resulting from the conversion or reforming of petroleum hydrocarbons. It may easily be substituted for, or interchanged with, pipeline quality natural gas. Also referred to as substitute natural gas.

Terawatthours: Billion kilowatthours.

Thermal Conversion Factor: See Conversion Factor.

Total Consumption: See Energy Consumption, End-Use.

Transportation Sector: Consists of 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.

Unaccounted-for Crude Oil: Arithmetic difference between the calculated supply and the calculated disposition of crude oil. The calculated supply is the sum of crude oil production and imports, less changes in crude oil stocks. The calculated disposition of crude oil is the sum of crude oil input to refineries, crude oil exports, crude oil burned as fuel, and crude oil losses.

Unfinished Oils: All oils requiring further refinery processing except those requiring only mechanical blending. Includes naphthas and lighter oils, kerosene and light gas oils, heavy gas oils and residuum.

Unfractionated Stream: Mixtures of unsegregated natural gas liquid components, excluding those in plant condensate. This product is extracted from natural gas.

Underground Storage: The storage of natural gas in underground reservoirs at a different location from which it was produced.

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.

Useful Thermal Output: The thermal energy made available for use in any industrial or commercial process, or used in any heating or cooling application, i.e., total thermal energy made available for processes and applications other than electrical generation.

U.S.S.R.: The Union of Soviet Socialist Republics consisted of 15 constituent republics: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. As a political entity, the U.S.S.R. ceased to exist as of December 31, 1991.

Vented Natural Gas: Gas released into the air on the base site or at processing plants.

Vessel Bunkering: Includes sales for the fueling of commercial or private boats, such as pleasure craft, fishing boats, tugboats, and ocean-going vessels, including vessels operated by oil companies. Excluded are volumes sold to the U.S. Armed Forces.

Waste Energy: Garbage, bagasse, sewerage gas, and other industrial, agricultural, and urban refuse used to generate electricity.

Waxes: Solid or semisolid material derived from petroleum distillates or residues. Waxes are light-colored, more or less translucent crystalline masses, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Included are all marketable waxes, whether crude scale or fully refined. Waxes are used primarily as industrial coating for surface protection.

Wellhead Price: The value of crude oil or natural gas at the mouth of the well.

Well Servicing Unit: Truck-mounted equipment generally used for downhole services after a well is drilled. Services include well and recompletions, maintenance,

repairs, workovers, and well plugging and abandonments. Jobs range from minor operations, such as pulling the rods and rod pumps out of an oil well, replacing the pump and rerunning the assemblage into the well, to major workovers, such as milling out and repairing collapsed casing. Well depth and characteristics determine the type of equipment used.

Wind Energy: The kinetic energy of wind converted into mechanical energy by wind turbines (e.g., blades rotating from a hub) that drive generators to produce electricity.

Withdrawals (Natural Gas): Total volume of gas withdrawn during the applicable reporting period.

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

Working Gas: The gas in a reservoir that is in addition to the base (cushion) gas. It may or may not be completely withdrawn during any particular withdrawal season. Conditions permitting, the total working capac-

Energy Plug:

Motor Gasoline Assessment

This publication is available on the Web at: www.eia.doe.gov/mer.

Energy Plug:

Motor Gasoline Assessment

This publication is available on the Web at: www.eia.doe.gov/mer.

Energy Plug:

Motor Gasoline Assessment

This publication is available on the Web at: www.eia.doe.gov/mer.

Expanded Motor Vehicle Coverage See Table 1.10 **Expanded Motor Vehicle Coverage** See Table 1.10