

DOE/EIA-0035/8

NTISUB/D/127-008

August 1978

Monthly Energy Review



U.S. Department of Energy
Energy Information Administration

The *Monthly Energy Review* is prepared by the Office of Energy Data, Energy Information Administration, U.S. Department of Energy, under the direct supervision of Frank E. Lalley.

Editor: Steven C. Newman

Publication Coordinator and Editorial Review:
Patricia M. Jacobus

Graphics Review: Graphics Branch, Office of Administrative Services

Overview: Editor

Crude Petroleum and Products: Katherine E. Seiferlein, David A. Carleton, Leonard L. Fanelli

Strategic Petroleum Reserve: Jay F. Lubin

Natural Gas: Gordon Koelling

Coal: Leonard W. Westerstrom

Electric Utilities: Mark A. O'Neal

Nuclear Power: Barry W. Roberts

Consumption: Michael J. Maloney, James Harrigan

Petroleum Consumption Forecast: Ercan Tukenmez

Degree-Days: Michael J. Maloney, James Harrigan

Resource Development: Editor

Price: Christopher B. Bordeaux, William Davis, William Gillespie, Annie Whatley

International: David A. Carleton

The cooperation of other government agencies and private establishments which provide data appearing in this publication is gratefully acknowledged.

This periodical is available on a subscription basis from the following:

Subscriptions
National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161

For addresses within the North American Continent, the cost is \$50 per year (12 issues), or \$68 per year for priority mailing. For addresses outside the North American Continent, the cost is \$100 per year. Single copies are available at \$6.25 each within the North American Continent and \$12.50 each outside the North American Continent.

Correspondence regarding editorial matters should be addressed to:

Editor, Monthly Energy Review
National Energy Information Center
U.S. Department of Energy
Washington, D.C. 20461

Feature articles appearing in previous issues:

Energy Consumption—March 1975

Nuclear Power—April 1975

The Price of Crude Oil—June 1975

U.S. Coal Resources and Reserves—July 1975

Propane, A National Energy Resource—
September 1975

Short-Term Energy Supply and Demand Forecasting at FEA—October 1975

Curtailments of Natural Gas Service—January 1976

Home Heating Conservation Alternatives and the Solar Collector Industry—March 1976

Trends in United States Petroleum Imports—
September 1976

Crude Oil Entitlements Program—January 1977

Motor Gasoline Supply and Demand—July 1977

Short-Term Petroleum Supply and demand—
May 1978

Contents

Part 1—Overview	1
Part 2—Crude Oil and Refined Petroleum Products	3
Crude Oil	4
Total Refined Petroleum Products	6
Total Petroleum Imports	6
Motor Gasoline	10
Jet Fuel	12
Distillate Fuel Oil	14
Residual Fuel Oil	16
Natural Gas Liquids	18
U.S. Petroleum Supply and Demand	20
Strategic Petroleum Reserve	21
Part 3—Natural Gas	23
Part 4—Coal	27
Bituminous and Lignite	28
Anthracite	30
Part 5—Electric Utilities	31
Part 6—Nuclear Power	39
Part 7—Consumption	43
Energy Consumption	44
Degree-Days	51
Part 8—Resource Development	53
Oil and Gas Exploration and Development	54
Part 9—Price	57
Crude Oil	58
Motor Gasoline	65
Aviation Fuels	71
Heating Oil	72
Diesel Fuel	75
Residual Fuel Oil	77
Propane and Butane	78
Natural Gas	79
Utility Fossil Fuels	82
Part 10—International	85
Petroleum Consumption	86
Crude Oil Production	88
Definitions	89
Explanatory Notes	93
Units of Measure	96

Overview

During the month of June, domestic production of energy exceeded the level for June 1977. June 1978 production totaled 5.4 quadrillion Btu (or 31.0 million barrels per day of crude oil equivalent*). For the first 6 months of 1978 domestic production of energy was down 2.0 percent from the same period in 1977.

Domestic consumption of energy during May was up 7.9 percent from the May 1977 level. For the January-May 1978 period, domestic consumption was 4.3 percent higher than the 1977 period.

This section of the Monthly Energy Review (MER) will incorporate several changes beginning this issue. Production and consumption of geothermal power, consumption of net coke imports, total coke imports, and exports of fossil fuels have been included in the Overview calculations. Such changes will make the reporting of energy data in this section much more inclusive.

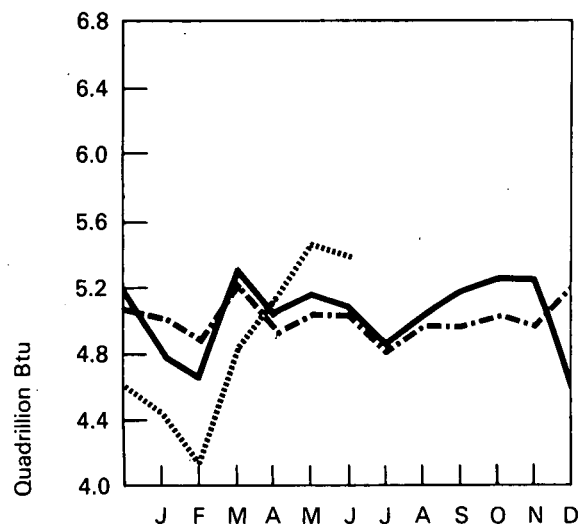
Production of electricity by utilities totaled 187.5 billion kilowatt hours in June 1978, 3.7 percent above the June 1977 level. For the first 6 months of 1978, total electricity generation was 3.1 percent higher than the previous year's total.

Motor gasoline production for June 1978 was only slightly higher than production in June 1977. Stocks of motor gasoline held at the end of June 1978 were down 10.8 percent from last year's level.

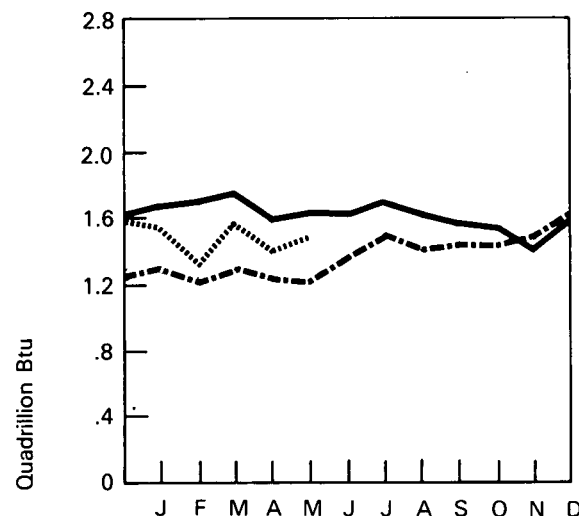
*One barrel of crude oil contains approximately 5.8 million Btu.

	Domestic Production of Energy*	Imports of Fossil Fuels**	Domestic Consumption of Energy****	Exports of Fossil Fuels****
	Quadrillion Btu			
1972 TOTAL	R62.969	R11.569	R71.610	2.091
1973 TOTAL	R62.416	R14.550	R74.588	2.029
1974 TOTAL	R61.207	R14.258	R72.728	2.198
1975 TOTAL	R60.017	R14.006	R70.648	2.138
1976				
January	R5.078	R1.309	R7.188	.134
February	R4.860	R1.226	R6.267	.130
March	R5.214	R1.302	R6.260	.148
April	R4.935	R1.250	R5.736	.203
May	R5.048	R1.234	R5.664	.193
June	R5.043	R1.396	R5.697	.222
July	R4.802	R1.508	R5.891	.183
August	R4.958	R1.427	R5.835	.164
September	R4.953	R1.473	R5.613	.196
October	R5.032	R1.464	R6.125	.201
November	R4.955	R1.505	R6.608	.214
December	R5.176	R1.625	R7.524	.180
TOTAL	R60.060	R16.720	R74.409	2.170
1977				
January	R4.787	R1.703	R7.683	.100
February	R4.644	R1.721	R6.502	.127
March	R5.318	R1.788	R6.397	.135
April	R5.001	R1.609	R5.816	.197
May	R5.149	R1.643	R5.825	.210
June	R5.066	R1.638	R5.922	.211
July	R4.830	R1.722	R6.028	.195
August	R5.031	R1.645	R6.125	.165
September	R5.188	R1.594	R5.919	.192
October	R5.250	R1.576	R6.111	.186
November	R5.245	R1.511	R6.326	.171
December	R4.614	R1.599	R7.281	.162
TOTAL	R60.122	R19.748	R75.934	2.051
1978				
January	R4.453	R1.553	R7.554	.076
February	R4.129	R1.328	R6.909	.055
March	R4.847	R1.599	R6.806	NA
April	R5.098	R1.414	R6.073	NA
May	R5.463	R1.502	R6.283	NA
June	††5.396	NA	NA	NA
TOTAL (Year to date)	29.386	7.396	33.624	.131

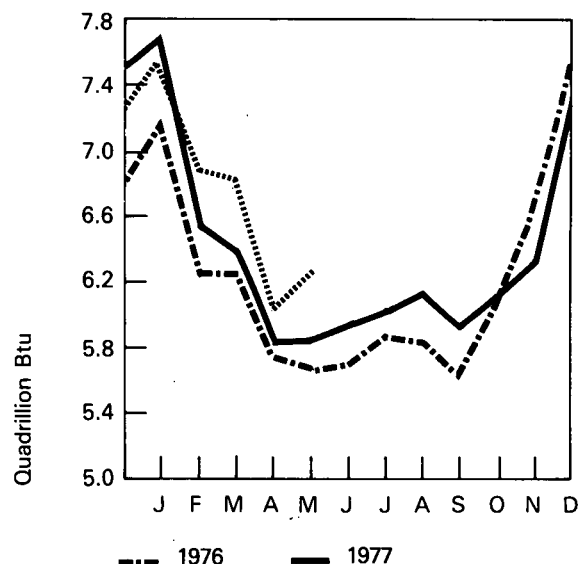
Domestic Production of Energy



Imports of Fossil Fuels



Domestic Consumption of Energy



*See Explanatory Note 1.

**See Explanatory Note 2.

***See Explanatory Note 3.

****See Explanatory Note 4.

†Preliminary data.

††Partially estimated.

R=Revised data.

NA = Not available.

Source: Energy Information Administration (EIA) calculations based on data appearing elsewhere in this publication.

Part 2 Crude Oil and Refined Petroleum Products

Crude Oil and Refined Petroleum Products

Domestic crude oil production averaged 8.9 million barrels per day in June,* 10.9 percent higher than in June 1977. The average for the first half of 1978 was 8.6 million barrels per day, 7.6 percent above the January through June 1977 average.

Total petroleum imports averaged 7.9 million barrels per day in June 1978**, 11.0 percent less than the June 1977 rate. Imports averaged 7.8 million barrels per day over the first half of the 1978, 13.3 percent less than for the same period in 1977.

Total domestic demand for petroleum products averaged 17.9 million barrels per day in June, 0.9 percent below the rate in June 1977. The major components of domestic demand in June were: motor gasoline (43.0 percent), distillate fuel oil (15.8 percent), and residual fuel oil (14.8 percent). Total domestic demand averaged 19.1 million barrels per day during the first half of 1978, 2.9 percent higher than over the first half of 1977.

Preliminary statistics indicate that motor gasoline demand averaged 7.7 million barrels per day in June 1978, 1.3 percent above the rate of last June. The January through June average was 7.2 million barrels per day, 2.9 percent above the average for the first 6 months of 1977. Motor gasoline stocks measured 228.6 million barrels at the end of June, 10.8 percent below a year ago but above the end of June levels in 1975 and 1976.

Distillate fuel oil demand averaged 2.8 million barrel per day in June, 1.9 percent higher than a year ago. The average for the first half of 1978 was 3.7 million barrels per day, 2.5 percent above the January through June 1977 average. Residual fuel oil demand averaged 2.6 million barrels per day in June 1978, 19.6 percent less than a year ago. The average for the first half of 1978 was 3.2 million barrels per day, 0.8 percent above the January through June 1977 average.

*June 1978 estimates are based on preliminary data from the American Petroleum Institute and will be revised to conform with data from the EIA Petroleum Reporting System as available.

**Excludes crude petroleum imported for the Strategic Petroleum Reserve.

Crude Oil

		Crude Input to Refineries	Domestic Production ¹	Crude Oil Imports ^{1,2}	Strategic Petroleum Reserve (SPR) Imports	Exports	Crude Oil Stocks ^{1,3}	Strategic Petroleum Reserve (SPR) Stocks
		Thousands of barrels per day					Thousands of barrels	
1972	AVERAGE	11,696	9,441	2,216		1	*246,395	
1973	AVERAGE	12,431	9,208	3,244		2	*242,478	
1974	AVERAGE	12,133	8,774	3,477		3	*265,020	
1975	AVERAGE	12,442	8,375	4,105		6	*271,354	
1976	January	12,560	8,232	4,594		0	289,296	
	February	12,834	8,231	4,208		0	277,414	
	March	12,877	8,232	4,738		1	283,112	
	April	12,727	8,077	4,790		0	286,628	
	May	12,920	8,125	4,669		0	283,982	
	June	13,799	8,094	5,628		0	281,715	
	July	13,901	8,127	5,792		0	282,599	
	August	13,888	8,111	5,556		12	277,272	
	September	13,716	8,150	5,875		0	284,357	
	October	13,319	8,063	5,689		18	297,683	
	November	14,101	8,080	5,946		30	298,836	
	December	14,333	8,061	5,925		34	285,471	
	AVERAGE	13,416	8,132	5,287		8		
1977	January	14,140	7,790	6,288		13	294,037	
	February	14,740	8,067	6,652		59	291,387	
	March	14,270	8,022	6,633		32	299,464	
	April	14,185	8,079	6,785		17	318,588	
	May	14,605	8,009	6,821		89	328,559	
	June	14,867	8,039	6,997		10	333,635	
	July	14,884	8,040	7,021		53	335,193	
	August	14,645	8,244	6,416		37	338,300	
	September	14,930	8,416	6,429		91	334,180	
	October	14,658	8,508	6,270	93	38	340,517	2,646
	November	14,636	8,513	6,230	73	45	345,098	5,084
	December	14,749	8,423	6,049	79	69	339,813	7,826
	AVERAGE	14,608	8,179	6,548	21	50		
1978	January	14,139	8,347	5,974	114	98	340,082	11,106
	February	R13,959	R8,373	R5,551	109	8	R335,794	14,276
	March	14,154	8,699	5,984	132	NA	338,638	18,437
	April	13,943	8,696	5,331	108	NA	333,436	21,826
	May	R14,962	R8,586	R5,452	133	NA	R321,637	25,629
	June	14,610	8,919	6,255	149	NA	333,633	30,140
	AVERAGE (Year to date)	14,300	8,605	5,761	124	55		

¹See Definitions.

²Excludes SPR imports.

³Excludes SPR stocks.

⁴Total as of December 31.

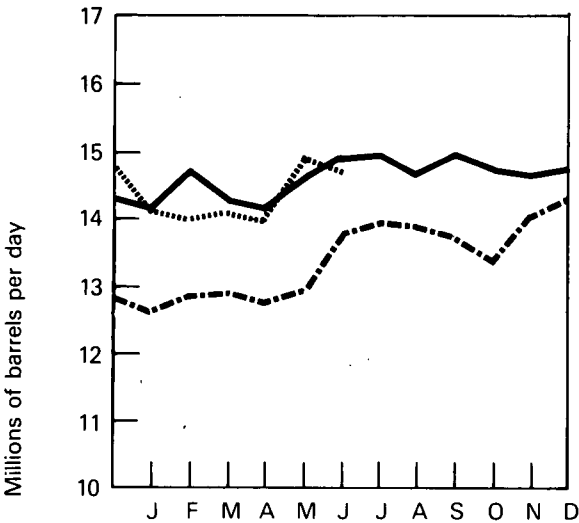
R=Revised data.

NA = Not available.

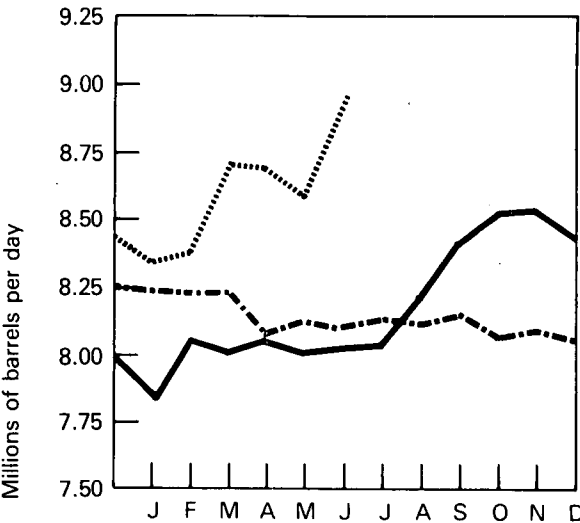
Sources: 1972 through 1976: Bureau of Mines (BOM) *Mineral Industry Surveys*, "Petroleum Statement, Annual;" January 1977 through April 1977: Bureau of Mines *Mineral Industry Surveys*, "Petroleum Statement, Monthly;" May 1977 through February 1978: Energy Information Administration (EIA) *Energy Data Reports*, "Petroleum Statement, Monthly;" March 1978 through May 1978: EIA "Monthly Petroleum Statistics Report;" June 1978 data are EIA estimates based on data from the American Petroleum Institute (API) "Weekly Statistical Bulletin," except for June SPR Imports which is from DOE.

Crude Oil

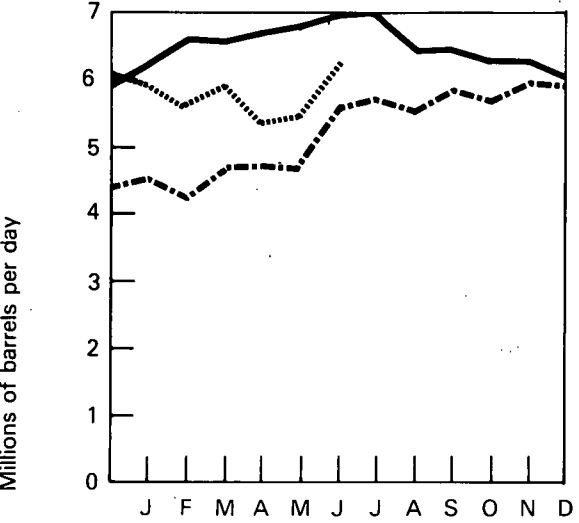
Crude Input to Refineries



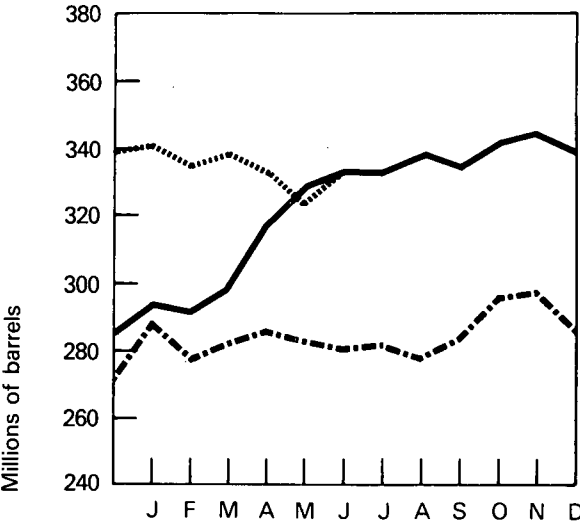
Domestic Production



Imports



Stocks



--- 1976 BOM
 — 1977 BOM, EIA
 1978 EIA, API

Total Refined Petroleum Products

		Domestic Demand	Imports*	Exports
		Thousands of barrels per day		
1972	AVERAGE	16,367	2,525	222
1973	AVERAGE	17,308	3,012	229
1974	AVERAGE	16,653	2,635	218
1975	AVERAGE	16,322	1,951	204
1976	January	18,647	2,119	156
	February	17,509	2,504	241
	March	17,302	1,949	183
	April	16,672	1,806	222
	May	15,977	1,654	179
	June	16,825	1,847	213
	July	16,607	2,092	242
	August	16,642	1,827	208
	September	16,837	2,050	196
	October	17,090	1,847	180
	November	18,847	2,115	318
	December	20,560	2,522	246
	AVERAGE	17,461	2,026	215
1977	January	20,481	2,594	179
	February	20,427	3,278	175
	March	18,056	2,610	175
	April	17,570	1,886	207
	May	16,960	1,753	199
	June	18,048	1,872	215
	July	17,549	2,021	201
	August	18,009	2,175	193
	September	17,733	2,136	203
	October	17,831	1,862	170
	November	18,440	1,814	190
	December	20,046	2,183	206
	AVERAGE	18,418	2,176	193
1978	January	R19,691	2,065	R158
	February	R20,874	R2,337	200
	March	19,687	2,308	NA
	April	18,041	2,102	NA
	May	R18,598	R1,879	NA
	June	17,891	1,640	NA
	AVERAGE (Year to date)	19,114	2,053	178

Total Petroleum Imports (Crude Oil and Refined Products)

Total Imports (Excluding SPR)	SPR Imports	Total Imports (Including SPR)
Thousands of barrels per day		
4,741		
6,256		
6,112		
6,056		
6,714		
6,712		
6,687		
6,595		
6,323		
7,474		
7,884		
7,382		
7,924		
7,536		
8,060		
8,447		
7,313		
8,882		
9,930		
9,243		
8,671		
8,574		
8,869		
9,042		
8,591		
8,565		
8,132	93	8,225
8,044	73	8,117
8,232	79	8,311
8,696	21	8,744
8,040	114	8,154
R7,887	109	R7,996
8,292	132	8,424
7,433	108	7,541
R7,331	133	7,464
7,895	149	8,044
7,813	124	7,938

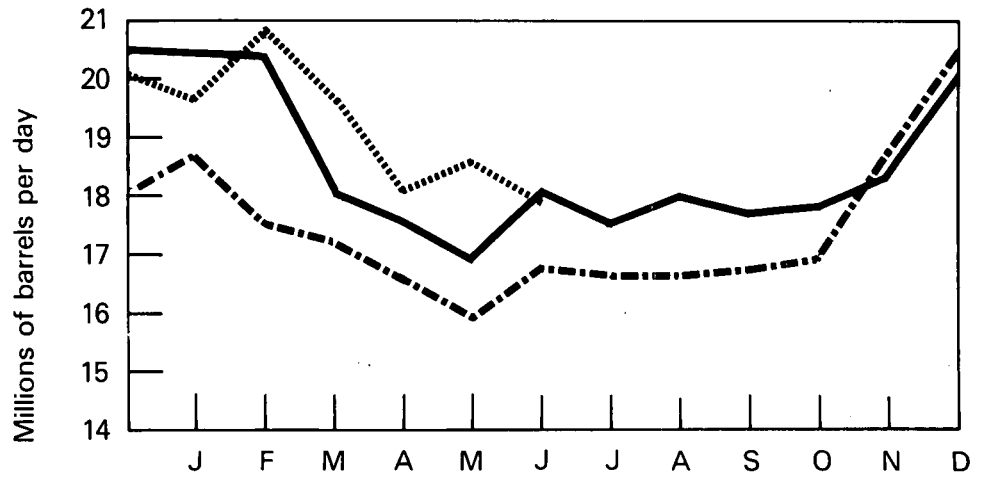
*See Definitions.

R=Revised data.

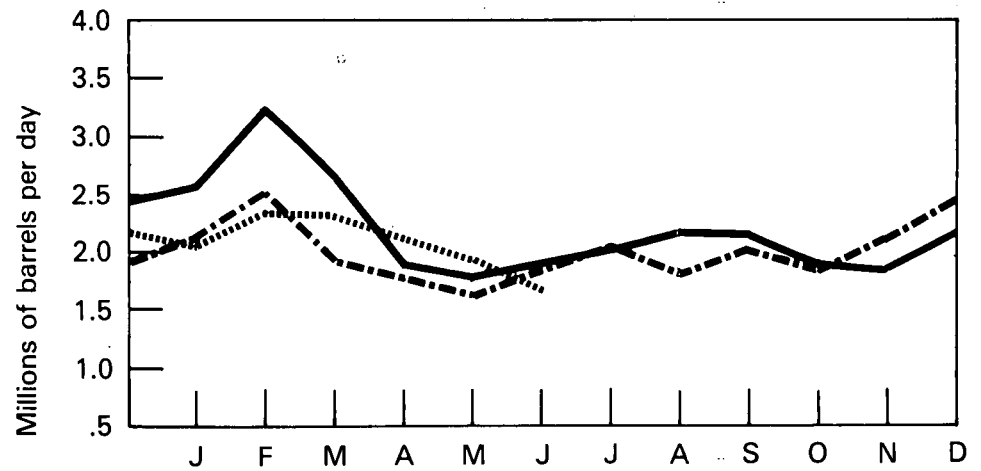
NA=Not available.

Sources: 1972 through 1976: Bureau of Mines (BOM) *Mineral Industry Surveys*, "Petroleum Statement, Annual;" January 1977 through April 1977: Bureau of Mines *Mineral Industry Surveys*, "Petroleum Statement, Monthly;" May 1977 through February 1978: Energy Information Administration (EIA) *Energy Data Reports*, "Petroleum Statement, Monthly;" March 1978 through May 1978: EIA "Monthly Petroleum Statistics Report;" June 1978 data are EIA estimates based on data from the American Petroleum Institute (API) "Weekly Statistical Bulletin."

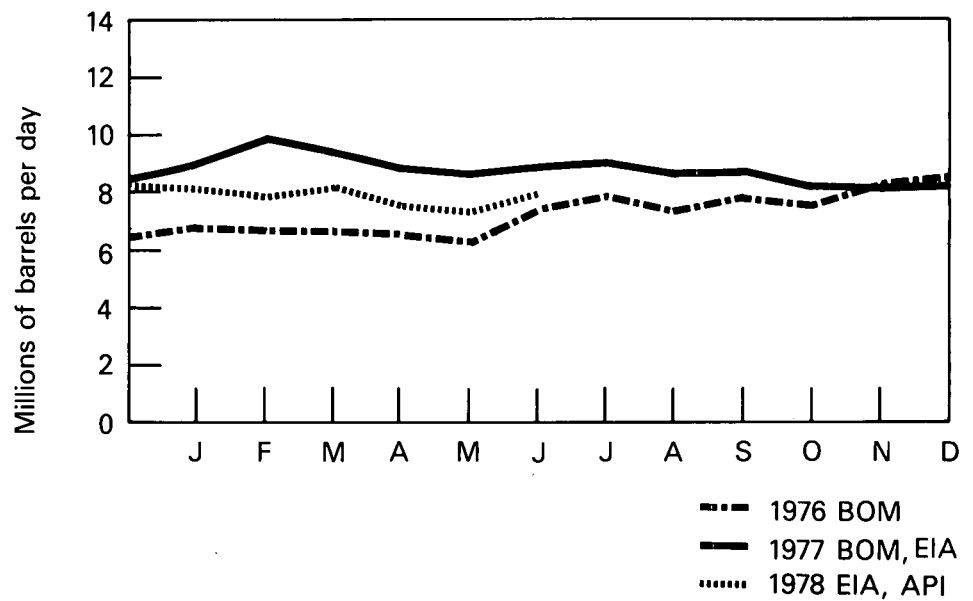
Total Refined Product Domestic Demand



Refined Product Imports



Total Petroleum Imports



- - - 1976 BOM
 — 1977 BOM, EIA
 1978 EIA, API

Direct and Indirect* U.S. Petroleum Imports from OPEC Countries

	Algeria	Indonesia	Iran	Libya	Nigeria	Saudi Arabia	United Arab Emirates	Venezuela	Other OPEC**	Total OPEC	Arab Members of OPEC
Thousands of barrels per day											
1973											
Direct	134.2	212.7	222.7	164.3	458.9	487.3	70.6	1,124.7	106.5	2,981.9	914.4
Indirect	17.0	25.0	211.0	144.0	149.0	253.0	13.0	509.0	88.0	1,409.0	463.0
TOTAL	151.2	237.7	433.7	308.3	607.9	740.3	83.6	1,633.7	194.5	4,390.9	1,377.4
1974											
Direct	190.2	300.1	468.8	4.4	697.6	460.6	70.5	979.3	88.3	3,259.8	748.5
Indirect	16.9	40.8	262.2	35.9	214.6	214.6	17.3	478.5	128.7	1,409.5	357.9
TOTAL	207.1	310.9	731.0	40.3	912.2	675.2	87.8	1,457.8	217.0	4,669.3	1,106.4
1975											
Direct	281.5	388.4	280.4	232.0	761.5	715.0	116.7	697.6	116.1	3,589.2	1,381.3
Indirect	6.7	49.3	244.4	97.3	76.3	176.6	37.5	332.5	143.2	1,163.8	408.8
TOTAL	288.2	437.7	524.8	329.3	837.8	891.6	154.2	1,030.1	259.3	4,753.0	1,790.1
1976											
Direct	428.3	537.4	298.5	453.3	1,025.2	1,229.8	255.2	699.2	134.0	5,060.9	2,421.0
Indirect	10.0	32.0	248.0	76.0	94.0	136.0	68.0	82.0	1,019.0	352.0	
TOTAL	438.3	569.4	546.5	529.3	1,119.2	1,365.8	323.2	972.2	216.0	6,079.9	2,773.0
1977											
Direct											
January	493.0	619.2	396.8	627.0	1,285.8	1,328.0	319.5	841.8	324.2	6,236.0	3,000.0
February	666.1	570.3	412.4	638.0	1,265.1	1,441.8	316.7	920.6	241.0	6,472.0	3,141.1
March	459.8	567.0	735.0	701.2	1,300.0	1,371.6	369.5	664.3	184.3	6,352.7	3,022.1
April	660.7	523.9	517.2	782.9	1,242.4	1,437.4	323.5	663.3	250.5	6,401.8	3,363.2
May	392.8	512.7	539.3	784.1	1,072.3	1,724.1	237.1	534.4	435.9	6,232.7	3,451.3
June	436.6	671.6	553.0	827.1	1,190.8	1,432.7	438.6	668.7	343.5	6,562.6	3,374.1
July	573.9	519.0	857.3	763.4	1,194.7	1,369.8	286.1	652.8	R350.8	6,567.8	3,232.1
August	632.2	552.8	500.1	640.0	960.5	1,449.4	308.6	744.4	276.9	6,064.9	3,169.8
September	550.8	391.0	448.9	679.2	1,084.8	1,487.4	348.4	744.8	201.0	5,936.3	3,215.1
October	626.2	461.0	413.0	690.5	1,104.2	1,303.3	246.9	586.7	272.0	5,703.9	2,998.1
November	590.6	514.6	422.7	840.1	943.0	1,119.2	420.1	515.1	285.0	5,650.4	3,162.5
December	553.0	492.7	549.0	604.4	987.2	1,064.8	390.5	724.2	289.1	5,654.9	2,835.4
Total Direct	552.0	532.8	530.2	714.7	1,135.1	1,377.0	333.4	687.0	288.3	6,150.5	3,162.7
Indirect	11.1	52.2	297.9	133.8	105.7	208.1	98.5	221.0	100.5	1,228.8	530.8
TOTAL	563.1	585.0	828.1	848.5	1,240.8	1,585.1	431.9	908.0	388.8	7,379.3	3,693.5
1978											
Direct											
January	682.3	R462.7	R681.5	R559.9	822.9	R1,198.2	348.7	R628.4	R227.9	R5,612.5	R2,925.1
February	R635.9	R393.5	526.2	575.8	R758.4	R982.4	485.8	R750.5	R242.3	R5,350.8	R2,792.3
March	709.5	574.8	547.3	590.8	944.8	1,127.5	296.2	889.0	240.4	5,920.3	2,886.7
April	597.6	503.7	408.6	601.8	584.3	986.7	435.0	631.5	R220.2	R4,969.4	R2,732.3
May	667.1	517.0	730.4	498.7	790.2	786.3	404.5	524.9	84.4	5,003.5	2,396.7
Total Direct	659.3	492.2	581.0	565.0	781.8	1,017.1	391.9	683.9	202.1	5,374.3	2,745.8
Indirect	9.4	59.0	350.7	131.8	109.9	186.9	94.2	220.4	72.8	1,235.1	469.6
TOTAL	668.7	551.2	931.7	696.8	891.7	1,204.0	486.1	904.3	274.9	6,609.4	3,215.4
(5 months)											

*Indirect imports refer to U.S. imports of petroleum products, primarily from Caribbean and European areas, that have been refined from crude oil produced in other areas. U.S. imports of these products have been prorated to each OPEC country of origin based on the share of total crude oil supply in the Caribbean and European areas which was imported from each OPEC country.

**Includes Ecuador, Gabon, Iraq, Kuwait, and Qatar.

Sources: Direct Imports—Bureau of Mines *Mineral Industry Surveys*, "Petroleum Statement, Monthly" and "PAD Districts Supply/Demand, Monthly" through April 1977; EIA *Energy Data Reports*, "PAD Districts Supply/Demand, Monthly" for May 1977 through February 1978; EIA "Monthly Petroleum Statistics Report" for March 1978 through May 1978; Indirect Imports—EIA estimates.

U.S. Petroleum Imports from Non-OPEC Sources

	Bahamas	Canada	Mexico	Netherlands Antilles	Puerto Rico	Trinidad and Tobago	Virgin Islands	Other	Total
Thousands of barrels per day									
1973	170.8	1,312.9	15.2	573.6	99.3	250.6	329.2	523.5	3,274.2
1974	159.3	1,067.6	8.4	509.6	90.4	241.2	391.7	384.2	2,852.4
1975	152.0	845.2	71.4	323.6	89.7	240.9	406.5	306.1	2,435.4
1976									
January	134.1	681.7	58.7	291.7	71.0	343.2	468.4	321.5	2,370.3
February	127.6	644.9	70.0	262.4	122.2	326.3	462.3	251.7	2,267.4
March	90.4	590.2	108.0	328.7	114.0	315.6	424.5	367.5	2,338.9
April	131.9	578.4	112.0	274.9	68.5	291.9	341.2	404.5	2,203.3
May	95.2	614.9	89.3	214.1	70.6	257.5	388.5	316.4	2,046.5
June	104.2	653.3	79.5	190.4	54.3	319.3	427.5	373.5	2,202.0
July	112.8	581.7	79.4	259.1	77.9	279.2	386.5	434.0	2,210.6
August	98.5	580.9	88.1	268.7	81.5	163.6	437.2	428.5	2,147.0
September	143.1	564.8	84.8	273.3	104.1	182.6	408.5	453.1	2,214.3
October	78.3	562.0	79.2	239.0	92.2	215.2	460.5	422.8	2,149.2
November	140.4	561.8	132.1	267.6	104.1	254.3	454.4	333.2	2,247.9
December	141.5	578.3	65.5	400.3	98.5	324.2	408.4	405.0	2,421.3
TOTAL	116.5	599.3	87.1	274.6	88.1	272.6	422.3	373.5	2,234.0
1977									
January	170.0	505.9	97.9	304.1	82.5	316.2	619.6	549.8	2,646.0
February	289.5	605.1	168.1	406.6	86.3	406.3	548.8	947.8	3,458.5
March	200.4	561.7	171.5	257.3	97.4	286.5	505.5	810.4	2,890.7
April	130.7	506.1	155.2	110.1	85.3	210.5	409.0	662.4	2,269.3
May	138.5	437.8	173.6	153.7	105.8	308.1	376.2	647.6	2,341.3
June	137.7	493.0	180.7	196.2	89.4	271.1	322.0	616.0	2,306.1
July	169.8	482.9	158.7	239.0	129.7	275.8	477.7	540.1	2,473.7
August	168.8	501.5	213.6	224.5	88.4	281.2	461.6	586.9	2,526.5
September	140.2	528.5	167.6	201.1	156.7	250.9	433.9	750.1	2,629.0
October	122.3	487.0	246.6	197.4	114.1	288.4	451.9	612.9	2,520.6
November	184.4	504.6	230.7	93.3	98.7	237.2	462.8	654.7	2,466.4
December	159.8	580.1	186.5	191.9	97.8	305.5	555.6	579.2	2,656.4
TOTAL	166.9	515.5	179.3	213.7	105.3	286.0	466.2	660.7	2,593.6
1978									
January	R167.5	R479.7	236.4	R215.2	98.0	295.0	466.0	R583.3	R2,541.1
February	R217.6	R507.5	R221.9	R225.2	R99.6	R295.8	490.6	R587.2	2,645.4
March	211.5	438.7	230.9	238.1	63.6	274.4	492.8	553.6	2,503.6
April	140.9	408.2	231.4	255.9	95.0	302.1	371.9	625.9	R2,572.1
May	193.0	480.8	257.6	230.6	73.6	188.8	304.0	732.5	2,460.9
TOTAL (5 months)	185.8	462.5	235.9	233.0	85.6	270.5	424.1	615.4	2,542.4

R=Revised data.

Source: Bureau of Mines *Mineral Industry Surveys*, "Petroleum Statement, Monthly" and "PAD Districts Supply/Demand, Monthly," through April 1977; EIA *Energy Data Reports*, "PAD Districts Supply/Demand Monthly" for May 1977 through February 1978; and EIA "Monthly Petroleum Statistics Report" for March 1978 through May 1978.

Motor Gasoline

Domestic Demand

		Total	Unleaded	Unleaded Percent of Total	Production*	Imports	Exports	Stocks*
		Thousands of barrels per day						Thousands of barrels
1972	AVERAGE	6,376	NA	NA	6,281	68	1	**212,770
1973	AVERAGE	6,674	NA	NA	6,527	134	4	**209,395
1974	AVERAGE	6,537	NA	NA	6,358	204	2	**218,346
1975	AVERAGE	6,675	NA	NA	6,518	184	2	**234,925
1976	January	6,398	NA	NA	6,483	92	0	240,464
	February	6,263	1,117	17.8	6,473	84	6	248,854
	March	6,890	1,456	21.1	6,455	123	6	239,049
	April	7,159	1,312	18.3	6,562	99	8	223,965
	May	6,853	1,393	20.3	6,775	112	1	225,037
	June	7,482	1,549	20.7	7,303	188	0	225,365
	July	7,315	1,594	21.8	7,174	190	1	226,922
	August	7,168	1,553	21.7	7,149	141	7	230,578
	September	7,079	1,628	23.0	6,878	171	0	229,751
	October	6,929	1,552	22.4	6,678	138	0	226,300
	November	7,038	1,604	22.8	6,938	146	1	227,742
	December	7,138	1,797	25.2	7,176	84	7	231,387
	AVERAGE	6,978	1,508	21.6	6,838	131	3	
1977	January	6,466	1,549	24.0	6,934	222	8	252,608
	February	6,897	1,773	25.7	6,817	184	2	255,519
	March	6,899	1,657	24.0	6,864	245	0	262,118
	April	7,348	1,863	25.4	6,968	269	1	258,831
	May	7,034	1,803	25.6	6,950	202	2	262,498
	June	7,595	2,142	28.2	7,145	246	1	256,389
	July	7,441	2,146	28.8	7,248	248	1	258,152
	August	7,419	2,096	28.3	7,191	187	1	256,904
	September	7,317	2,080	28.4	7,062	220	1	255,859
	October	7,132	2,135	29.9	6,932	179	1	255,194
	November	7,191	2,060	28.6	7,123	179	2	258,537
	December	7,373	2,400	32.6	7,146	196	1	257,578
	AVERAGE	7,176	1,976	27.5	7,033	215	2	
1978	January	6,670	2,097	31.4	6,932	211	1	272,287
	February	R6,884	2,162	R31.4	R6,630	210	1	R271,077
	March	7,244	2,425	33.5	6,749	142	NA	259,214
	April	7,186	2,391	33.3	6,668	179	NA	248,986
	May	R7,742	2,343	30.3	R7,059	R174	NA	R233,166
	June	7,697	NA	NA	7,164	199	NA	228,600
	AVERAGE (Year to date)	7,241	2,285	NA	6,870	185	1	

*See Definitions.

**Total as of December 31.

Note: Bureau of Mines' stock coverage was expanded at the end of 1974 to include an additional 100 bulk terminal operators; the new coverage begins here with 1975.

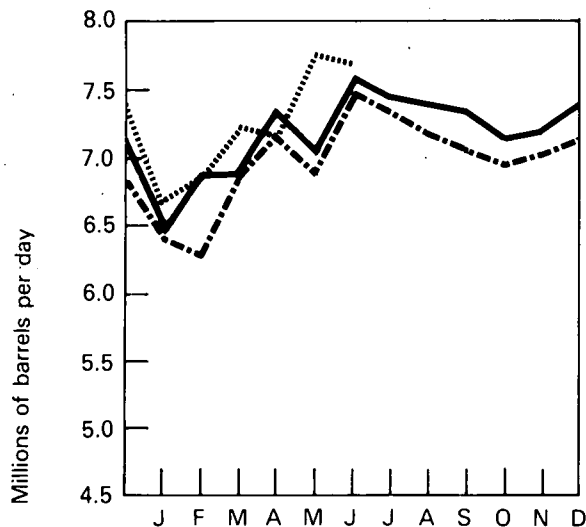
R=Revised data.

NA=Not available.

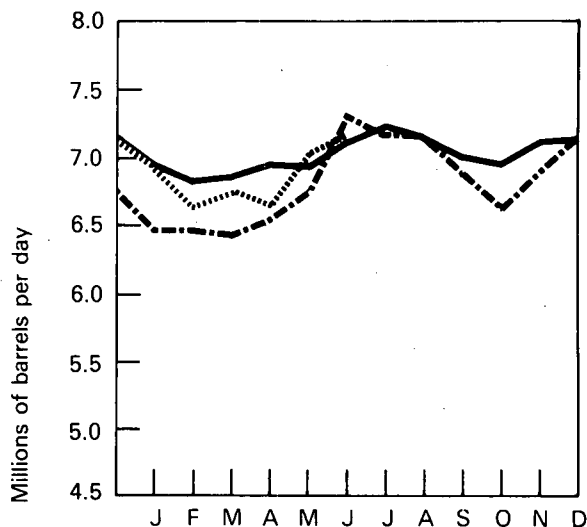
Sources: Data other than unleaded—1972 through 1976: Bureau of Mines (BOM) *Mineral Industry Surveys*, "Petroleum Statement, Annual;" January 1977 through April 1977: Bureau of Mines *Mineral Industry Surveys*, "Petroleum, Statement, Monthly;" May 1977 through February 1978: Energy Information Administration (EIA) *Energy Data Reports*, "Petroleum Statement, Monthly;" March 1978 through May 1978: "Monthly Petroleum Statistics Report;" June 1978 data are EIA estimates based on data from the American Petroleum Institute (API) "Weekly Statistical Bulletin." Unleaded data—EIA Petroleum Reporting System.

Motor Gasoline

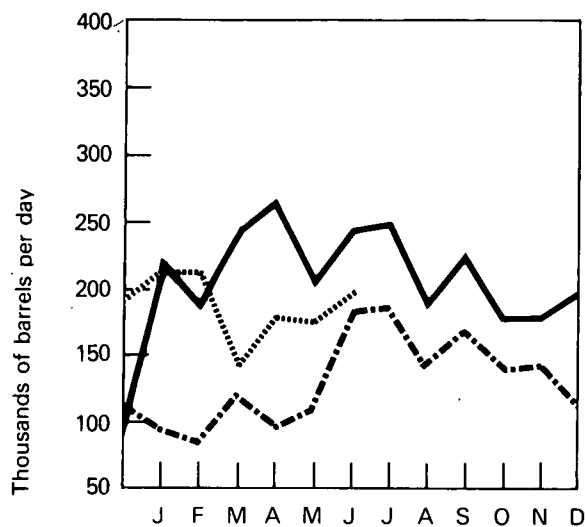
Domestic Demand



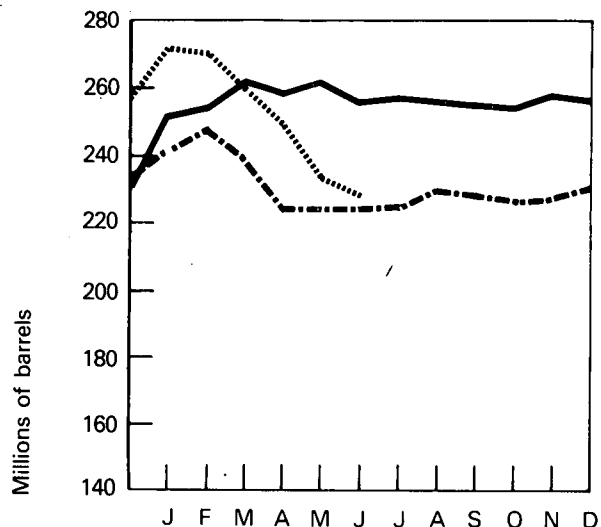
Production



Imports



Stocks



--- 1976 BOM
 — 1977 BOM, EIA
 1978 EIA, API

Jet Fuel

		Domestic Demand	Production*	Imports	Exports	Stocks*
		Thousands of barrels per day				Thousands of barrels
1972	AVERAGE	1,045	847	194	3	*25,493
1973	AVERAGE	1,059	859	212	4	*28,544
1974	AVERAGE	993	836	163	3	*29,435
1975	AVERAGE	1,001	871	133	2	*30,380
1976	January	948	889	69	3	30,618
	February	965	918	71	4	31,180
	March	965	927	86	2	32,619
	April	1,010	927	108	2	33,332
	May	960	899	106	1	34,664
	June	972	879	68	1	33,879
	July	1,099	933	130	2	32,732
	August	965	942	38	2	33,121
	September	1,048	990	63	2	33,204
	October	911	890	50	2	34,032
	November	978	920	56	3	33,859
	December	1,027	900	72	2	32,085
	AVERAGE	987	918	76	2	
1977	January	1,054	917	77	2	30,170
	February	1,036	974	74	2	30,455
	March	1,041	954	98	2	30,739
	April	1,019	991	86	4	32,355
	May	993	979	57	2	33,644
	June	989	996	30	1	34,707
	July	1,043	969	85	1	35,048
	August	1,113	1,009	71	1	33,986
	September	1,050	1,004	53	2	34,159
	October	1,016	973	67	2	34,861
	November	1,038	950	107	1	35,409
	December	1,089	978	85	2	34,568
	AVERAGE	1,040	974	74	2	
1978	January	980	922	60	1	34,603
	February	R1,107	994	R69	2	33,332
	March	1,100	972	86	NA	32,011
	April	1,007	983	113	NA	34,627
	May	R999	R1,016	R113	NA	R38,603
	June	1,061	975	88	NA	37,787
	AVERAGE (Year to date)	1,041	977	88	1	

*Total as of December 31.

Note: Bureau of Mines' stock coverage was expanded at the end of 1974 to include an additional 100 bulk terminal operators; the new coverage begins here with 1975.

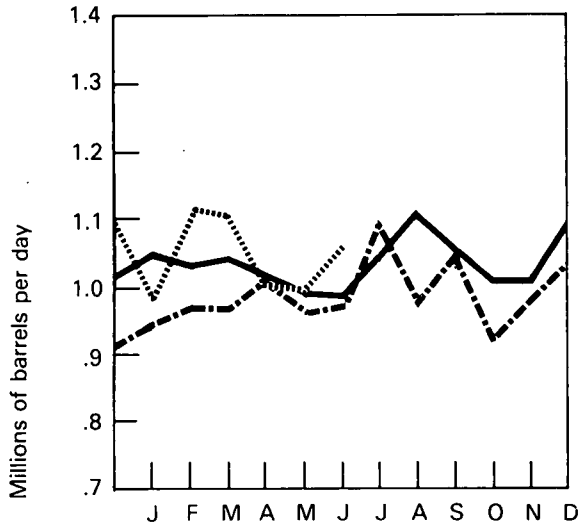
R=Revised data.

NA=Not available.

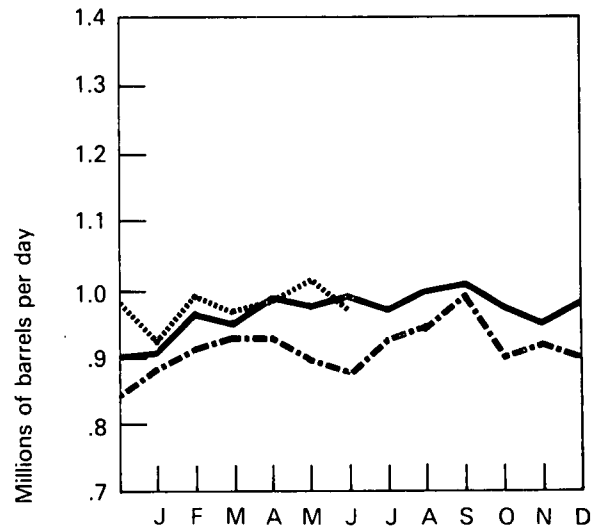
Sources: 1972 through 1976: Bureau of Mines (BOM) *Mineral Industry Surveys*, "Petroleum Statement, Annual;" January 1977 through April 1977: Bureau of Mines *Mineral Industry Surveys*, "Petroleum Statement, Monthly;" May 1977 through February 1978: Energy Information Administration (EIA) *Energy Data Reports*, "Petroleum Statement, Monthly;" March 1978 through May 1978: EIA "Monthly Petroleum Statistics Report;" June 1978 data are EIA estimates based on data from the American Petroleum Institute (API) "Weekly Statistical Bulletin."

Jet Fuel

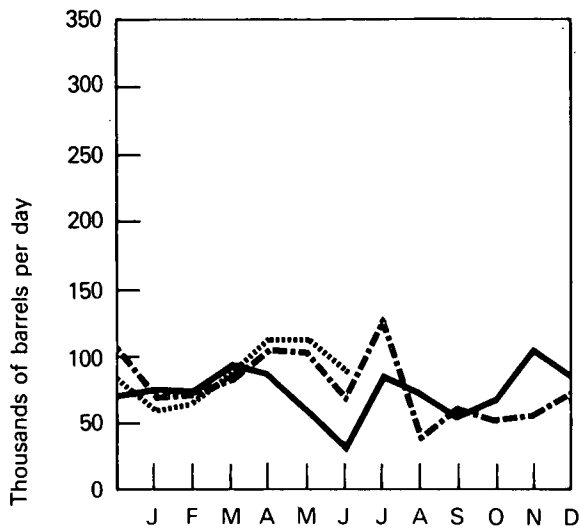
Domestic Demand



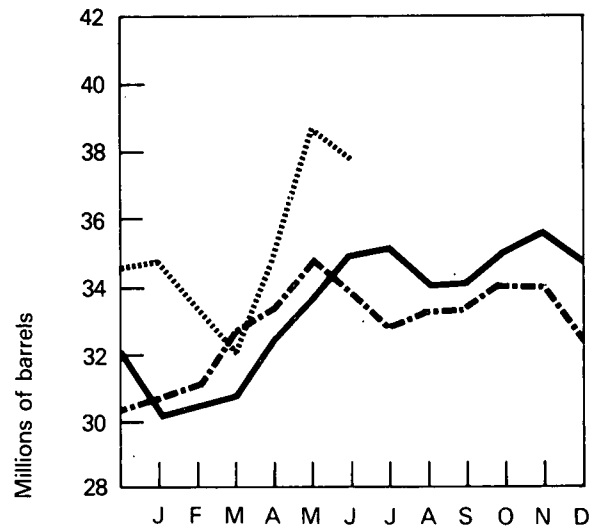
Production



Imports



Stocks



--- 1976 BOM
 — 1977 BOM, EIA
 1978 EIA, API

Distillate Fuel Oil

		Domestic Demand	Production*	Imports	Exports	Stocks*
		Thousands of barrels per day				Thousands of barrels
1972	AVERAGE	2,913	2,630	182	3	**154,284
1973	AVERAGE	3,092	2,820	392	9	**196,421
1974	AVERAGE	2,948	2,668	289	2	**200,029
1975	AVERAGE	2,851	2,653	155	1	**208,787
1976	January	4,297	2,734	163	0	165,428
	February	3,697	2,961	218	1	150,439
	March	3,339	2,793	153	1	138,306
	April	2,788	2,655	96	1	137,249
	May	2,519	2,738	97	1	147,057
	June	2,436	2,885	151	1	165,064
	July	2,255	2,959	126	0	190,861
	August	2,237	2,982	131	4	217,930
	September	2,620	2,947	149	1	232,230
	October	3,031	2,995	144	1	235,599
	November	3,714	3,180	135	1	223,648
	December	4,667	3,255	196	1	185,948
	AVERAGE	3,133	2,924	146	1	
1977	January	5,111	3,375	350	1	142,989
	February	4,714	3,702	664	1	133,261
	March	3,421	3,179	519	1	141,882
	April	2,942	3,001	153	3	148,246
	May	2,777	3,124	99	0	162,123
	June	2,776	3,198	135	0	178,842
	July	2,545	3,192	192	0	204,899
	August	2,635	3,274	161	0	229,757
	September	2,717	3,314	169	1	252,783
	October	3,038	3,363	150	5	267,392
	November	3,420	3,339	188	3	270,571
	December	4,205	3,324	226	2	250,280
	AVERAGE	3,352	3,279	248	1	
1978	January	4,439	3,054	194	1	213,411
	February	R4,831	R2,937	R209	16	R165,830
	March	4,066	2,982	183	NA	137,897
	April	3,087	2,933	100	NA	136,234
	May	R3,039	R3,212	R125	NA	R144,982
	June	2,829	3,061	137	NA	158,103
AVERAGE (Year to date)		3,705	3,032	158	8	

*See Definitions.

**Total as of December 31.

Note: Bureau of Mines' stock coverage was expanded at the end of 1974 to include an additional 100 bulk terminal operators; the new coverage begins here with 1975.

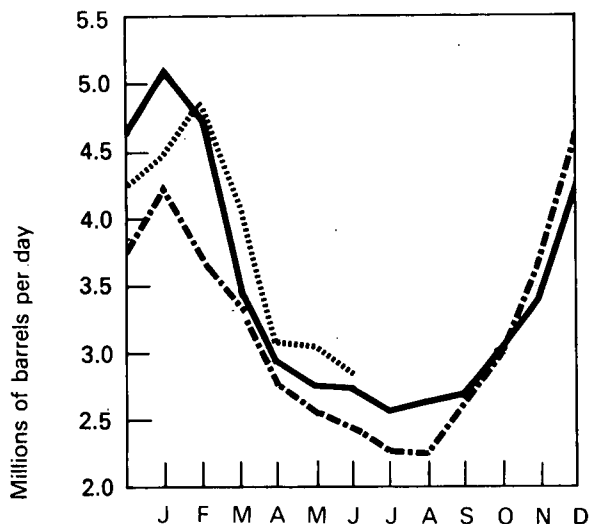
R=Revised data.

NA=Not available.

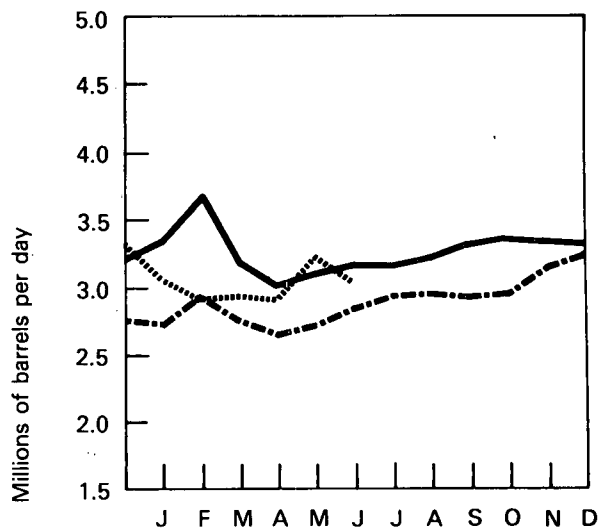
Sources: 1972 through 1976: Bureau of Mines (BOM) *Mineral Industry Surveys*, "Petroleum Statement, Annual;" January 1977 through April 1977: Bureau of Mines *Mineral Industry Surveys*, "Petroleum Statement, Monthly;" May 1977 through February 1978: Energy Information Administration (EIA) *Energy Data Reports*, "Petroleum Statement, Monthly;" March 1978 through May 1978: EIA "Monthly Petroleum Statistics Report;" June 1978 data are EIA estimates based on data from the American Petroleum Institute (API) "Weekly Statistical Bulletin."

Distillate Fuel Oil

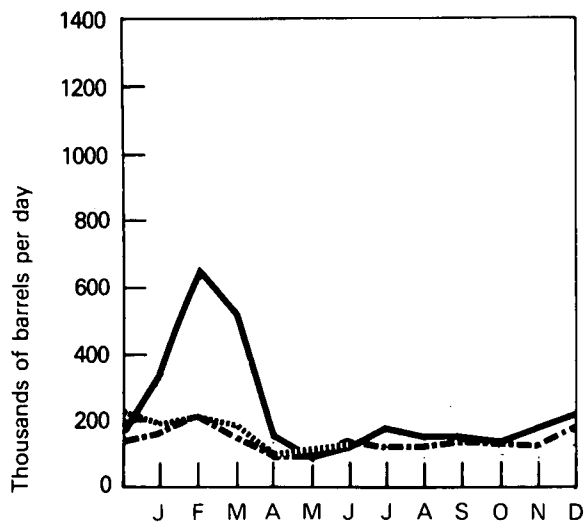
Domestic Demand



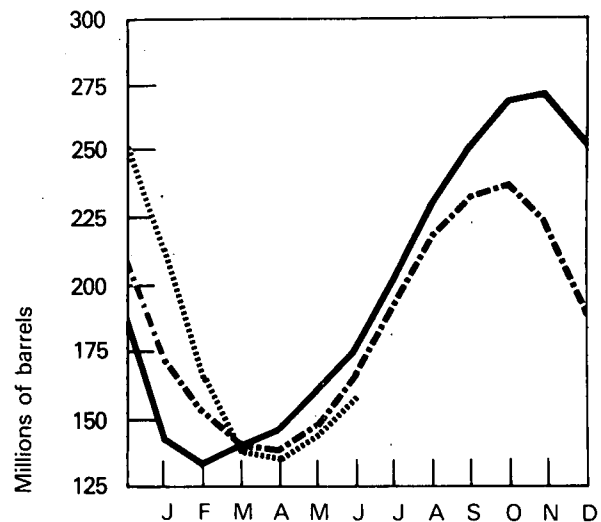
Production



Imports



Stocks



--- 1976 BOM
 — 1977 BOM, EIA
 1978 EIA, API

Residual Fuel Oil

		Domestic Demand	Production	Imports	Exports	Stocks
		Thousands of barrels per day				Thousands of barrels
1972	AVERAGE	2,529	799	1,742	33	*55,216
1973	AVERAGE	2,822	971	1,853	23	*53,480
1974	AVERAGE	2,639	1,070	1,587	14	*59,694
1975	AVERAGE	2,462	1,235	1,223	15	*74,126
1976	January	3,118	1,415	1,455	13	66,592
	February	3,077	1,394	1,774	30	68,859
	March	2,779	1,311	1,342	10	65,132
	April	2,496	1,283	1,258	18	66,458
	May	2,439	1,257	1,134	10	65,147
	June	2,509	1,241	1,229	7	64,272
	July	2,548	1,266	1,455	11	69,812
	August	2,678	1,321	1,307	8	68,490
	September	2,526	1,330	1,452	8	76,436
	October	2,547	1,351	1,270	5	79,117
	November	3,253	1,581	1,474	16	73,284
	December	3,645	1,772	1,828	4	72,344
	AVERAGE	2,801	1,377	1,413	12	
1977	January	3,741	1,889	1,596	2	64,749
	February	3,662	1,951	1,943	8	71,414
	March	3,150	1,715	1,417	3	71,186
	April	2,855	1,687	1,125	3	70,165
	May	2,719	1,671	1,145	5	73,376
	June	2,954	1,714	1,181	2	71,924
	July	2,805	1,729	1,271	18	77,770
	August	3,046	1,634	1,441	9	78,762
	September	2,926	1,750	1,458	3	87,522
	October	2,707	1,749	1,218	2	95,896
	November	2,819	1,695	1,094	7	95,155
	December	3,364	1,839	1,348	12	89,673
	AVERAGE	3,059	1,751	1,350	6	
1978	January	3,496	1,872	1,358	13	81,434
	February	R3,964	R1,801	R1,565	10	R64,852
	March	3,517	1,747	1,700	NA	62,193
	April	2,977	1,549	1,565	NA	65,928
	May	R2,660	R1,645	R1,230	NA	R72,309
	June	2,642	1,563	1,067	NA	74,872
	AVERAGE (Year to date)	3,201	1,696	1,413	12	

*Total as of December 31.

Note: Bureau of Mines' stock coverage was expanded at the end of 1974 to include an additional 100 bulk terminal operators; the new coverage begins here with 1975.

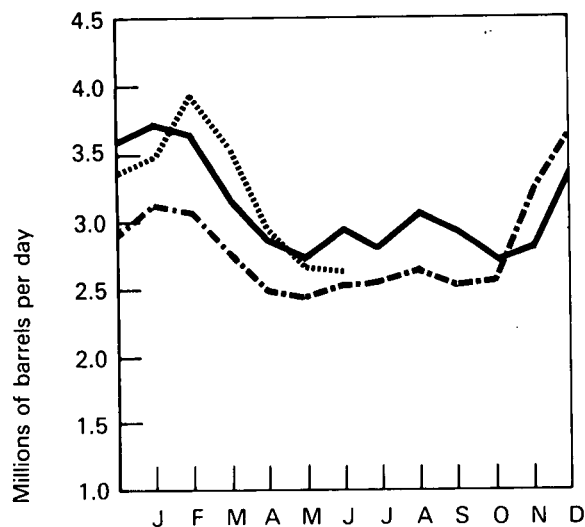
R=Revised data.

NA=Not available.

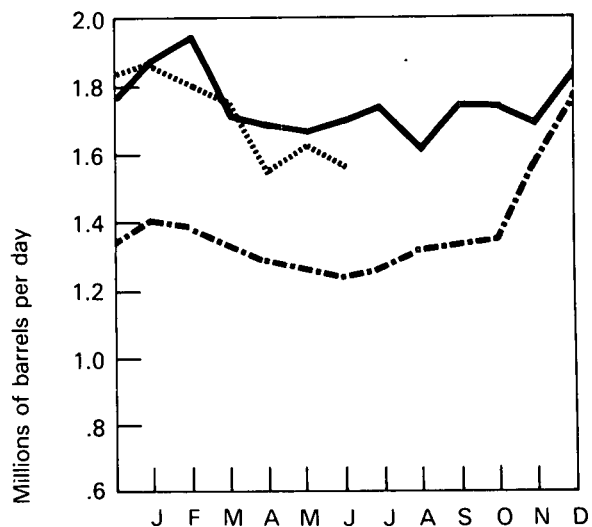
Sources: 1972 through 1976: Bureau of Mines (BOM) *Mineral Industry Surveys*, "Petroleum Statement, Annual;" January 1977 through April 1977: Bureau of Mines *Mineral Industry Surveys*, "Petroleum Statement, Monthly;" May 1977 through February 1978: Energy Information Administration (EIA) *Energy Data Reports*, "Petroleum Statement, Monthly;" March 1978 through May 1978: EIA "Monthly Petroleum Statistics Report;" June 1978 data are EIA estimates based on data from the American Petroleum Institute (API) "Weekly Statistical Bulletin."

Residual Fuel Oil

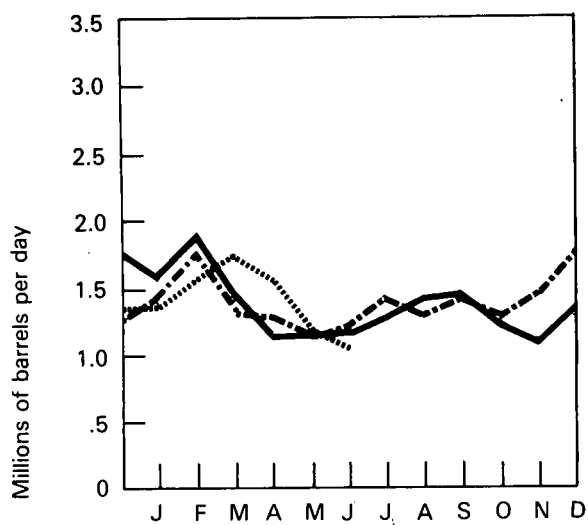
Domestic Demand



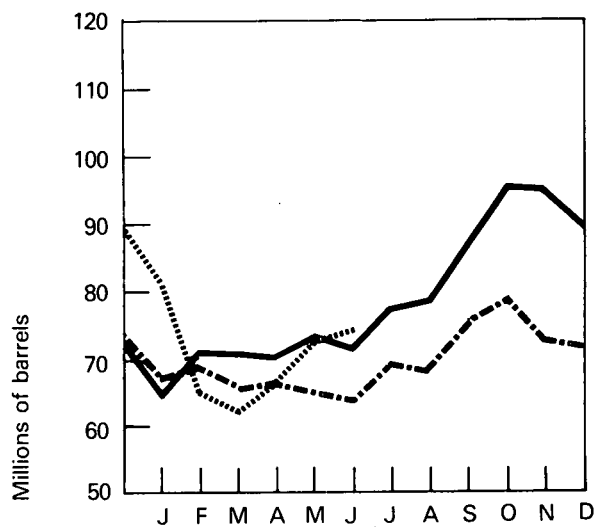
Production



Imports



Stocks



--- 1976 BOM
 — 1977 BOM, EIA
 1978 EIA, API

Natural Gas Liquids

		Domestic Demand*	Production*		Used at Refineries*	Imports	Stocks*
			At processing plants	At refineries			
			Thousands of barrels per day				Thousands of barrels
1972	AVERAGE	1,420	1,744	365	826	174	**92,024
1973	AVERAGE	1,454	1,738	375	815	239	**106,659
1974	AVERAGE	1,422	1,688	338	746	212	**120,175
1975	AVERAGE	1,352	1,633	311	710	185	**132,653
1976	January	1,885	1,585	305	728	240	116,707
	February	1,518	1,640	316	793	270	113,373
	March	1,303	1,615	333	674	194	117,486
	April	1,201	1,616	349	716	171	123,100
	May	1,138	1,581	376	673	144	131,421
	June	1,110	1,606	356	718	163	139,291
	July	1,103	1,592	354	710	147	147,034
	August	1,213	1,596	362	695	160	152,704
	September	1,243	1,602	352	713	152	156,436
	October	1,497	1,601	309	709	203	152,666
	November	1,747	1,615	331	726	244	143,422
	December	1,921	1,589	341	853	269	124,518
	AVERAGE	1,407	1,603	340	725	196	
1977	January	2,018	1,549	323	730	331	106,524
	February	1,887	1,589	336	693	238	94,128
	March	1,354	1,687	331	688	239	100,025
	April	1,228	1,664	337	672	198	108,235
	May	1,167	1,620	397	614	165	120,018
	June	1,235	1,616	364	622	203	129,315
	July	1,133	1,609	381	594	157	141,631
	August	1,181	1,593	360	659	204	150,830
	September	1,220	1,585	355	654	148	156,726
	October	1,242	1,632	355	710	168	162,440
	November	1,765	1,627	352	700	187	152,971
	December	1,760	1,637	345	727	254	144,617
	AVERAGE	1,430	1,618	353	672	208	
1978	January	1,867	1,557	327	645	201	130,797
	February	R1,802	R1,562	R338	R659	R207	R120,274
	March	R1,429	R1,590	R362	R601	R132	R121,317
	April	R1,419	R1,648	338	624	R140	123,300
	May***	R1,189	R1,594	378	582	184	134,600
	June***	1,231	1,597	360	595	195	143,800
	AVERAGE (6 months)	1,486	1,591	351	617	176	

*See Explanatory Note 5.

**Total as of December 31.

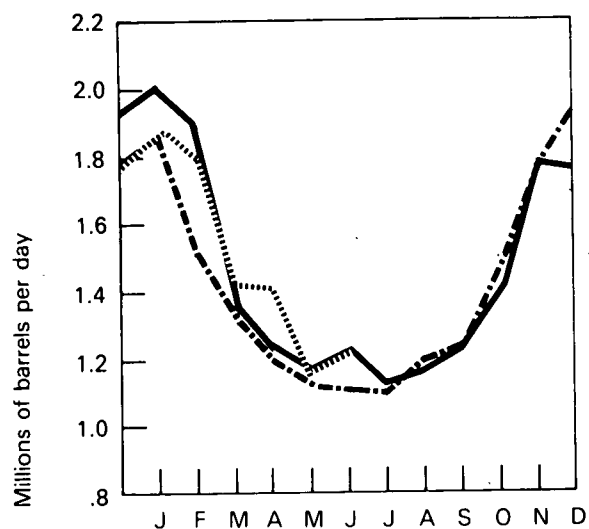
***Estimated.

R=Revised data.

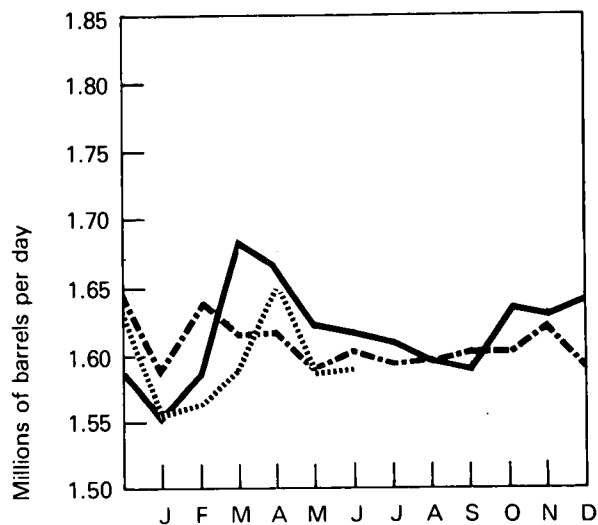
Source: Bureau of Mines *Mineral Industry Surveys*, "Petroleum Statement, Monthly" through April 1977; EIA *Energy Data Reports*, "Petroleum Statement, Monthly" for May 1977 through March 1978, and EIA estimates for April 1978 forward.

Natural Gas Liquids

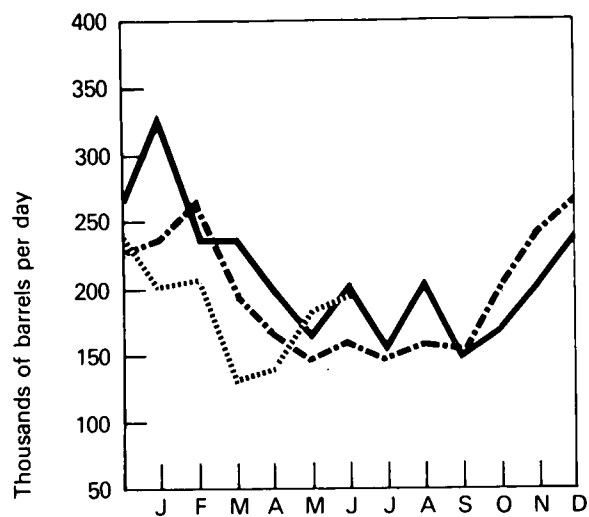
Domestic Demand



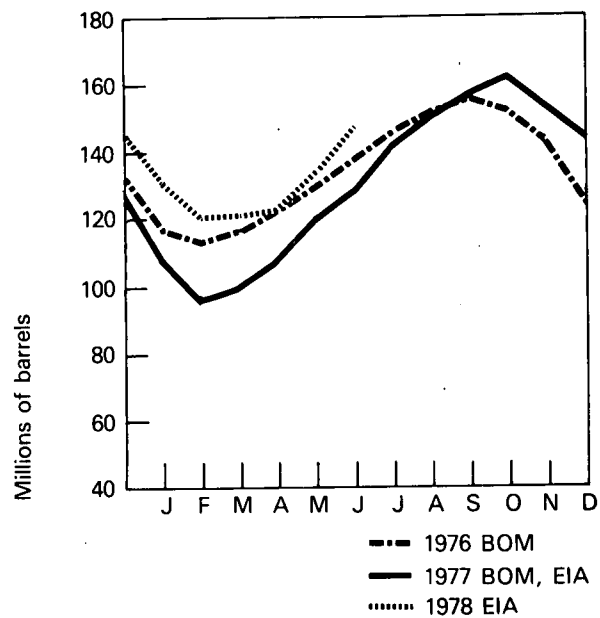
Production at Processing Plants



Imports



Stocks



U.S. Petroleum Supply and Demand

	1977 Actual				
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Year
Thousands of barrels per day					
Supply					
Crude oil and lease condensate production	7,956	8,042	8,231	8,481	8,179
Natural gas plant liquids production	1,609	1,633	1,596	1,632	1,618
Other hydrocarbon supply	43	54	52	52	50
Crude oil imports ¹	6,520	6,867	6,624	6,182	6,548
Refined products imports ²	2,813	1,836	2,110	1,955	2,176
Total new supply	18,941	18,432	18,613	18,302	18,571
Processing gain	521	450	543	569	521
Stock change—all oils ³	-278	+1,190	+1,177	+12	+528
Total net supply	19,740	17,692	17,979	18,859	18,564
Unaccounted for crude oil ⁴	+114	+88	+59	+172	+113
Demand					
Crude oil and refined products exports	210	245	259	255	243
Crude oil losses	15	15	16	16	16
Domestic demand for refined products ⁵	19,629	17,520	17,764	18,776	18,418
Total demand	19,854	17,780	18,039	19,047	18,677

	1978 Actual		1978 First Half Year	1977 First Half Year	1977-1978 First Half Year Percent Difference
	1st Qtr.	2nd Qtr.			
Thousand of barrels per day					
Supply					
Crude oil and lease condensate production	R8,476	8,732	8,605	7,999	+7.6
Natural gas plant liquids production	R1,570	1,613	1,592	1,621	-1.8
Other hydrocarbon supply	R58	57	57	49	+16.3
Crude oil imports ¹	R5,846	5,677	5,761	6,694	-13.9
Refined products imports ²	R2,233	1,874	2,053	2,322	-11.6
Total new supply	R18,183	17,953	18,068	18,685	-3.3
Processing gain	R487	520	504	485	+3.9
Stock change—all oils ³	R-1,802	R-21	-907	+460	-297.2
Total net supply	R20,472	18,494	19,479	18,710	+4.1
Unaccounted for crude oil ⁴	R-174	-90	-134	+102	-231.4
Demand					
Crude oil and refined products exports	R225	208	216	228	-5.3
Crude oil losses	15	15	15	15	0.0
Domestic demand for refined products ⁵	R20,058	18,181	19,114	18,569	+2.9
Total demand	R20,298	18,404	19,345	18,812	+2.8

¹Excludes crude oil imported for the Strategic Petroleum Reserve.

²Includes plant condensate and unfinished oils.

³Excludes petroleum stored in the Strategic Petroleum Reserve.

⁴Balancing item resulting from statistical inconsistencies.

⁵Includes international bunkers.

R=Revised Data

Note: 1978 data are preliminary.

Sources: 1st Quarter 1977—BOM *Mineral Industry Surveys*, "Petroleum Statement, Monthly;" 2nd, 3rd, and 4th Quarters 1977—BOM *Mineral Industry Surveys*, "Petroleum Statement, Monthly;" and Energy Information Administration (EIA) *Energy Data Reports*, "Petroleum Statement, Monthly;" 1st and 2nd Quarters 1978—EIA *Energy Data Reports*, "Petroleum Statement, Monthly —EIA "Monthly Petroleum Statistics Report," and EIA estimates.

Strategic Petroleum Reserve

		Crude Oil Deliveries*	Cumulative Deliveries	Average Delivered Price	Cumulative Average Delivered Price
		Barrels		Dollars per barrel	
1977	July	414,172	414,172	13.565	13.565
	August	0	414,172	—	—
	September	674,961	1,089,133	13.59	13.58
	October	1,539,263	2,628,396	14.22	13.95
	November	2,434,463	5,062,859	14.50	14.21
	December	2,455,466	7,518,325	14.58	14.33
1978	January	3,531,481	11,049,806	14.46	14.37
	February	3,058,683	14,108,489	14.38	14.37
	March	4,106,270	18,214,759	14.46	14.39
	April	3,252,374	21,467,133	14.95	14.47
	May	4,115,953	25,583,086	15.28	14.60
	June	4,389,042	29,972,128	14.50	14.58

*Does not include cargoes in transit at the end of the reporting month, nor cargoes that discharged into Caribbean transshipment terminals for eventual transfer to SPRO terminals.

Source: U.S. Department of Energy, Strategic Petroleum Reserve Office.

Natural Gas

Domestic consumption of natural gas in June 1978 was an estimated 3.1 percent lower than in June 1977. Estimated consumption during January-June 1978, however, was 6.4 percent higher than during the first half of 1977.

Marketed production of natural gas in June was estimated at approximately the same level as in June 1977, and production during the first half of 1978 was only an estimated 0.8 percent lower than during the comparable 1977 period.

Imports of natural gas in June 1978 were an estimated 2.6 percent higher than in the previous June, but imports during the first 6 months of 1978 were an estimated 5.6 percent less than during the comparable 1977 period. Exports of natural gas during January-June 1978 were estimated at approximately the same level as during the first half of 1977.

Net injections of natural gas into underground storage reservoirs in June totaled 347 billion cubic feet, 13.8 percent higher than the net volume injected in June 1977. Working gas* in storage at the end of June 1978, however, was 9.6 percent less than that available a year earlier.

Domestic producer sales of natural gas to major interstate pipeline companies in April 1978 were slightly higher than during April 1977, but sales during the first 4 months of 1978 were 2.4 below those for the January-April 1977 period.

*Gas available for withdrawal.

Natural Gas

		Domestic Consumption*	Marketed Production*	Domestic Producer Sales to Major Interstate Pipelines	Imports	Exports
Billion cubic feet						
1972	TOTAL	22,102	22,532	12,429	1,019	78
1973	TOTAL	22,049	22,648	12,067	1,033	77
1974	TOTAL	21,223	21,601	11,462	959	77
1975	TOTAL	19,538	20,109	10,652	953	73
1976	January	2,291	1,751	894	84	5
	February	1,938	1,647	850	78	5
	March	1,721	1,714	894	85	6
	April	1,508	1,623	849	86	6
	May	1,434	1,673	860	82	5
	June	1,335	1,640	815	76	5
	July	1,372	1,676	822	73	6
	August	1,317	1,636	810	77	6
	September	1,302	1,565	793	74	6
	October	1,621	1,639	840	85	5
	November	1,875	1,635	841	81	5
	December	2,232	1,753	872	83	5
	TOTAL	19,946	19,952	10,140	964	65
1977	January	2,386	1,734	848	85	5
	February	1,793	1,668	807	85	4
	March	1,693	1,742	910	106	4
	April	1,408	1,634	830	82	3
	May	1,352	1,688	830	84	3
	June	1,311	1,643	789	76	5
	July	1,304	1,669	801	74	7
	August	1,343	1,639	784	78	5
	September	1,403	1,587	741	78	5
	October	1,490	1,620	831	85	5
	November	1,663	1,599	830	86	5
	December	2,082	1,719	882	90	5
	TOTAL	19,228	19,942	9,883	1,009	56
1978	January	2,353	1,707	862	87	5
	February	2,116	1,618	756	77	4
	March	R1,889	R1,714	861	86	4
	April	R1,543	R1,672	836	R78	R3
	May	R1,410	R**1,680	NA	R**83	R4
	June	1,270	**1,640	NA	**78	5
	TOTAL (Year to date)	10,581	10,031	3,315 (4 months)	489	25

*See Explanatory Note 6.

**Preliminary data.

R=Revised data.

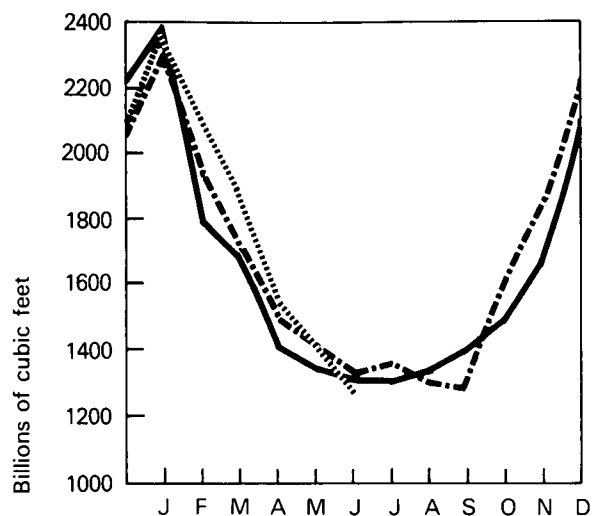
NA=Not available.

Note: All monthly Domestic Consumption and 1978 Exports data are estimated.

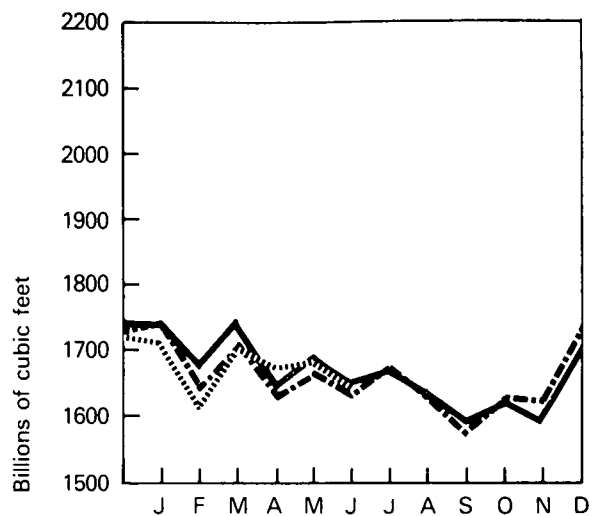
Sources: Domestic Consumption—EIA estimates; Marketed Production, Imports, and Exports—Bureau of Mines *Mineral Industry Surveys*, "Natural Gas, Monthly" through June 1977 and EIA *Energy Data Reports*, "Natural Gas, Monthly" for July 1977 forward; Domestic Producer Sales—Federal Power Commission Form 11, "Monthly Statement of Gas Operating Revenues, Sales."

Natural Gas

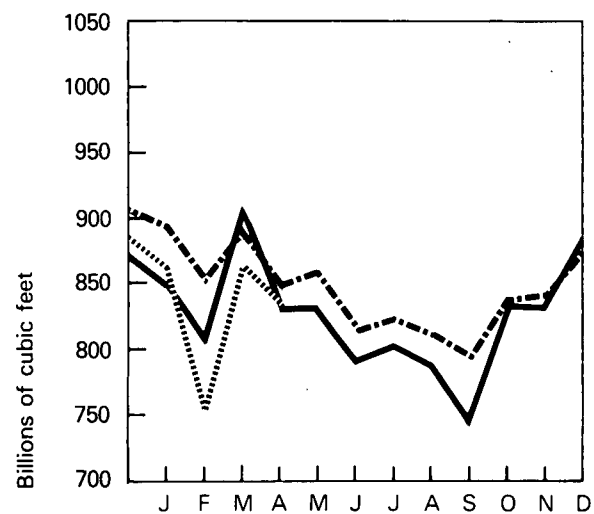
Domestic Consumption



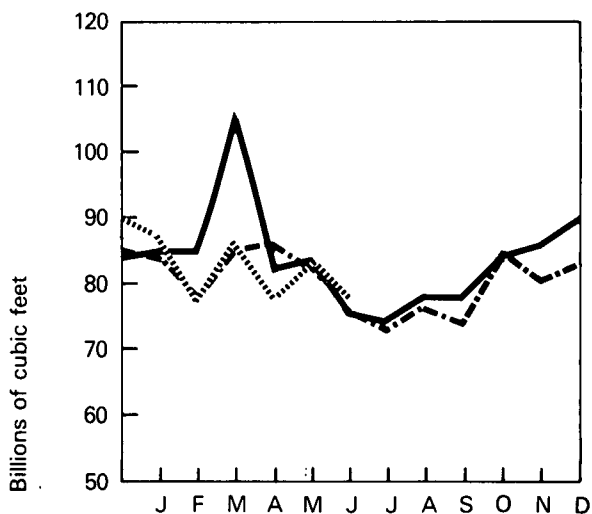
Marketed Production



Domestic Producer Sales to Major Interstate Pipelines



Imports



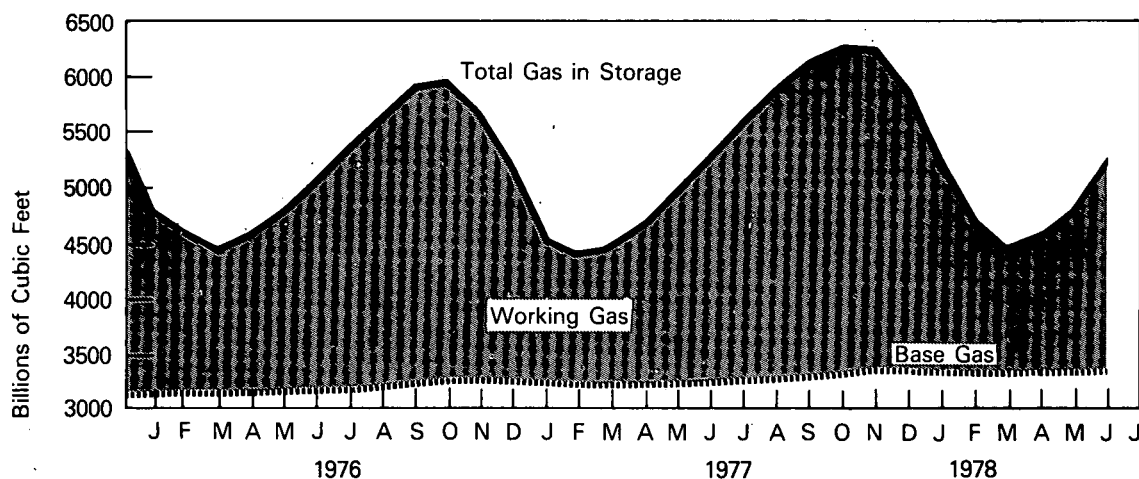
--- 1976
 — 1977
 1978

Natural Gas (Continued)

Natural Gas in Underground Storage*

		Total Gas in Storage	Base Gas	Working Gas	Storage Injections	Storage Withdrawals	Net Storage Injections
		Billion cubic feet					
1975	September	5,553	3,085	2,468	220	31	189
	October	5,706	3,107	2,599	190	51	139
	November	5,691	3,150	2,541	98	146	-48
	December	5,358	3,150	2,208	38	371	-333
1976	January	4,817	3,169	1,648	17	526	-509
	February	4,617	3,173	1,444	66	265	-199
	March	4,496	3,170	1,326	79	200	-121
	April	4,607	3,184	1,423	185	75	110
	May	4,827	3,190	1,637	245	24	221
	June	5,116	3,208	1,908	304	27	277
	July	5,412	3,220	2,192	301	6	295
	August	5,698	3,251	2,447	298	17	281
	September	5,946	3,296	2,650	259	22	237
	October	5,966	3,302	2,664	135	116	19
	November	5,713	3,305	2,408	40	291	-251
	December	5,231	3,310	1,921	23	505	-482
1977	January	4,580	3,293	1,287	18	670	-652
	February	4,446	3,283	1,163	101	235	-134
	March	4,501	3,286	1,215	187	132	55
	April	4,713	3,286	1,427	256	43	213
	May	5,024	3,293	1,731	329	17	312
	June	5,330	3,300	2,030	317	12	305
	July	5,665	3,317	2,348	348	15	333
	August	5,945	3,346	2,599	290	21	269
	September	6,188	3,364	2,824	262	2	260
	October	6,302	3,373	2,929	157	44	113
	November	6,224	3,403	2,821	84	160	-76
	December	5,844	3,377	2,467	41	416	-375
1978	January	5,193	3,374	1,819	21	668	-647
	February	4,683	3,373	1,310	21	530	-509
	March	4,497	3,374	1,123	92	278	-186
	April	4,608	3,377	1,231	179	68	111
	May	4,870	3,378	1,491	291	30	261
	June	5,217	3,381	1,836	365	18	347

Gas in Storage



*See Explanatory Note 7.

Sources: Federal Energy Administration Form G318-M-O and Federal Power Commission Form 8 "Underground Gas Storage Report."

Coal

Bituminous coal and lignite production climbed to 193.9 million tons in the second quarter of 1978, an increase of 8.5 million tons over production for the same period in 1977. Production in the first 6 months of 1978, however, lagged far behind the level of output for the same period of 1977, because of the coal mining strike. The 6-month total this year was 279.3 million tons—66.1 million tons or 19.1 percent below the production level for the same period in 1977.

Domestic consumption of bituminous coal and lignite totaled 48.7 million tons in May 1978, down 0.8 percent from the amount consumed during May 1977. In the first 5 months of 1978, domestic coal consumption was 238.4 million tons, 5.5 percent below consumption for the same period in 1977. Electric utility coal consumption* was 37.1 million tons in May 1978, compared with 37.0 million tons in May 1977. Utilities consumed 183.9 tons in the first 5 months of 1978, 4.8 million tons less than the amount consumed in the same period a year earlier. The second largest coal consuming sector, steel company coke plants, used 6.4 million tons in May 1977. In the first 5 months of 1978, coal consumption by coke plants was 25.4 million tons, 8.0 million tons below the amount consumed in the same period a year earlier, while coal consumption by the general industry sector totaled 25.6 million tons, 1.1 million tons less than for the January-May period of 1977. Shipments of coal to retail dealers in the first 5 months of 1978 totaled 3.5 million tons, 0.1 million tons more than shipments in the same 5-month period a year earlier.

Stocks of bituminous coal and lignite on May 31, 1978, were 111.5 million tons, or 71 days' supply at May burn rates, up 15.0 million tons from the stock level at the end of April. Electric utilities increased their stockpiles* from 85.8 million tons to 98.5 million tons during May. Utility stocks on May 31, 1977 were 120.5 million tons—equivalent to 101 days' supply. Stocks of coking coal were 7.1 million tons on May 31, 1.5 million tons above the April 30 level. Coal stocks held by general industry increased from 4.9 million tons at the end of April

to 5.7 million tons at the end of May. Coal stocks at retail dealers' yards increased from 0.1 million ton to 0.2 million ton during May.

United States exports of coal increased from 4.4 million tons in May to 5.4 million in June. Exports for the first 6 months of 1978 were 14.2 million tons, 11.8 million tons below the amount exported during the same period a year earlier, and 14.6 million tons below exports for the first half of 1976. U.S. imports of coal increased from 0.6 million tons during the first 6 months of 1977 to 1.6 million tons for same period in 1978.

*Does not include anthracite or coke consumption stocks.

Bituminous and Lignite

		Domestic Consumption*	Production*	Exports	Imports	Stocks**
			Thousands of short tons			
1972	TOTAL	516,776	595,386	55,997	47	115,372
1973	TOTAL	556,022	591,738	52,870	127	103,022
1974	TOTAL	552,709	603,406	59,926	2,080	95,528
1975	TOTAL	556,301	648,438	65,669	940	127,115
1976	January	52,932	52,568	3,697	103	119,220
	February	46,832	53,773	3,050	114	119,004
	March	48,624	60,918	3,979	40	123,471
	April	46,415	59,145	5,780	132	128,393
	May	46,681	57,934	5,667	90	136,013
	June	48,445	59,680	6,569	192	140,144
	July	51,717	44,318	4,880	39	129,661
	August	52,082	53,622	4,223	90	123,853
	September	47,689	60,634	5,614	65	129,878
	October	49,312	58,899	5,871	94	133,624
	November	51,877	58,780	5,451	149	135,019
	December	56,144	58,414	4,625	95	133,555
	TOTAL	598,750	678,685	59,406	1,203	
1977	January	56,561	44,525	2,143	123	118,116
	February	50,033	49,045	3,079	75	114,363
	March	50,278	66,445	3,390	31	122,593
	April	46,290	60,280	5,637	170	129,878
	May	49,120	62,220	5,673	94	137,673
	June	51,690	62,810	6,019	92	145,914
	July	56,141	49,425	5,158	112	137,463
	August	54,758	57,560	4,279	100	136,832
	September	50,622	69,200	5,037	175	144,953
	October	50,191	67,420	4,871	274	158,164
	November	50,245	68,715	4,491	326	173,063
	December	53,687	30,930	3,910	231	152,317
	TOTAL	619,616	688,575	53,687	1,803	
1978	January	54,405	23,115	870	139	118,121
	February	46,014	23,520	555	159	93,130
	March	43,810	38,765	325	231	83,942
	April	R45,504	59,530	2,594	417	R96,462
	May	48,707	68,760	4,411	323	111,500
	June	NA	65,565	5,398	291	NA
	TOTAL (Year to date)	238,440	279,255	14,153	1,560	

*See Explanatory Note 8.

**Total stocks held by utilities, industrial consumers, and retail dealers at end of year or month.

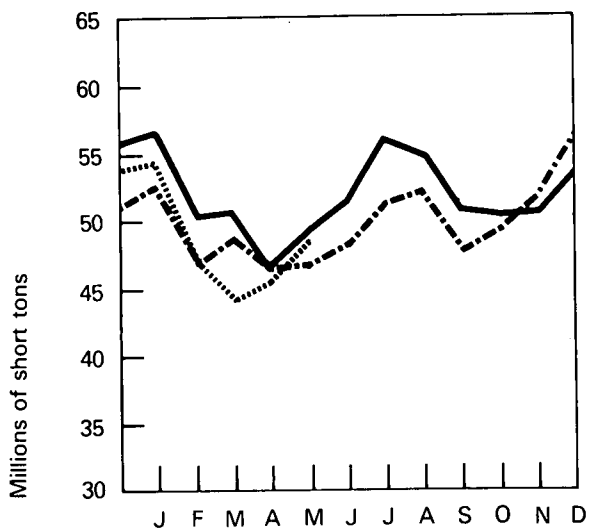
R=Revised data.

NA=Not available.

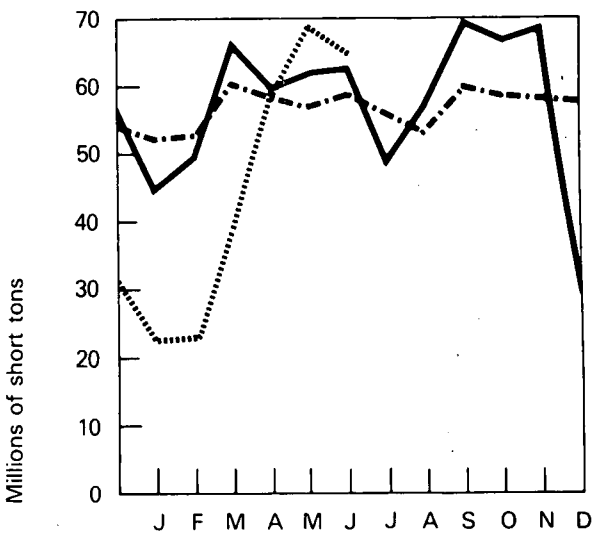
Source: Exports and Imports—U.S. Department of Commerce, Bureau of the Census; remaining data—Bureau of Mines *Mineral Industry Surveys*, "Weekly Coal Report" through September 1977; and EIA *Energy Data Reports*, "Weekly Coal Report" for October 1977 forward.

Bituminous and Lignite

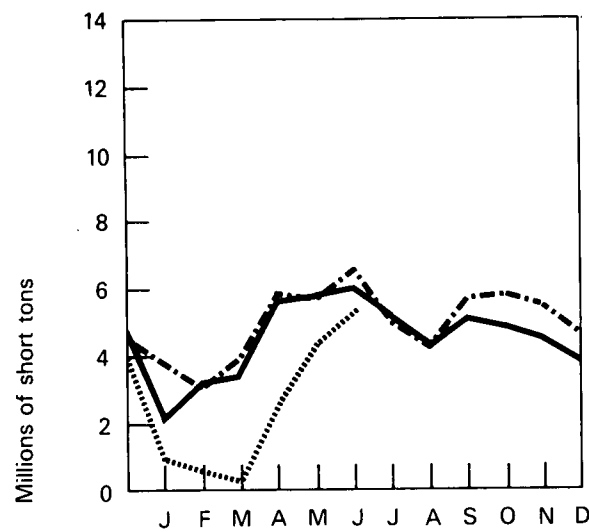
Domestic Consumption



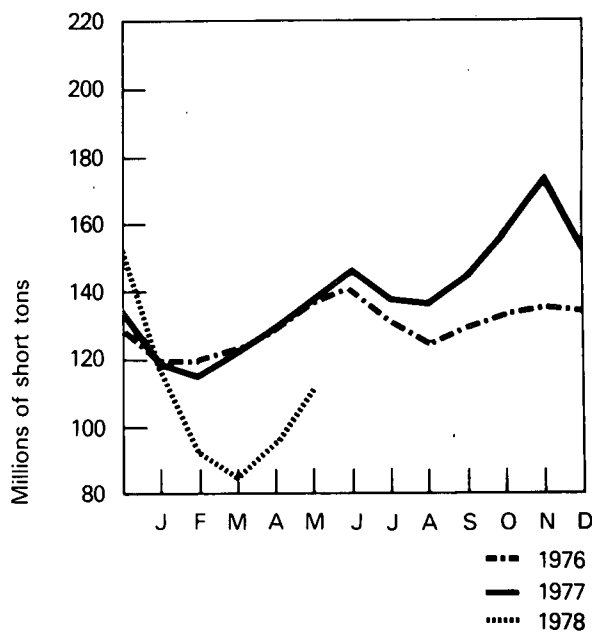
Production



Exports



Stocks

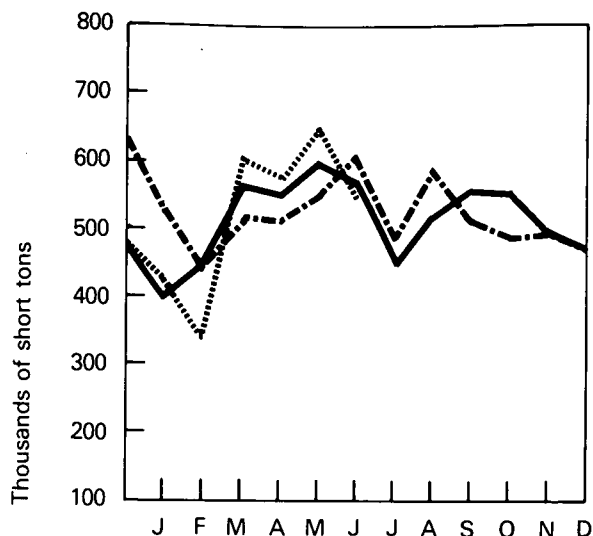


-- 1976
— 1977
... 1978

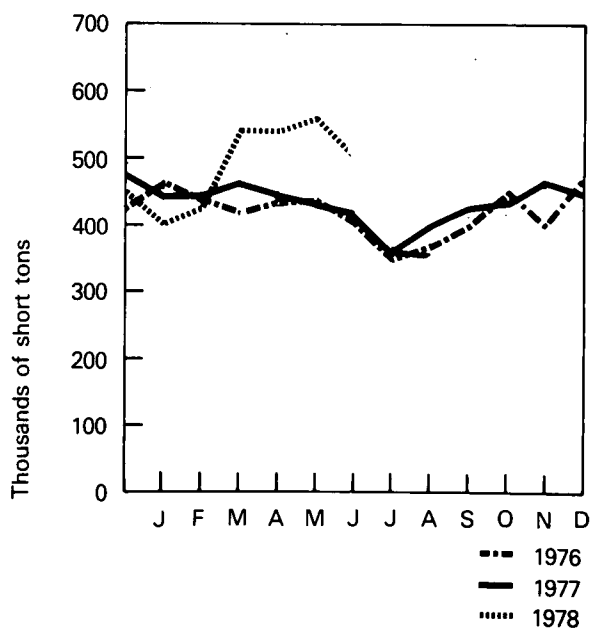
Anthracite

		Production	Apparent Domestic Consumption
		Thousands of short tons	
1972	TOTAL	7,106	5,915
1973	TOTAL	6,830	5,671
1974	TOTAL	6,617	5,448
1975	TOTAL	6,203	5,108
1976	January	525	460
	February	440	430
	March	525	420
	April	520	435
	May	555	440
	June	610	400
	July	490	350
	August	590	375
	September	515	400
	October	490	455
	November	493	400
	December	475	475
	TOTAL	6,228	5,040
1977	January	400	440
	February	450	450
	March	570	470
	April	550	450
	May	600	440
	June	570	420
	July	450	360
	August	525	400
	September	560	430
	October	550	435
	November	500	470
	December	475	450
	TOTAL	6,200	5,215
1978	January	430	400
	February	340	425
	March	610	540
	April	575	540
	May	650	560
	June	550	500
	TOTAL	3,155	2,965
	(6 months)		

Production



Apparent Domestic Consumption



Source: Bureau of Mines *Mineral Industry Surveys*, "Weekly Coal Report" through September 1977; and EIA *Energy Data Reports*, "Weekly Coal Report" for October 1977 forward.

Electric Utilities

May 1978 production of electricity by utilities was 175.2 billion kilowatt hours, an increase of 3.5 percent over the May 1977 production level. Total production during the first 5 months of 1978 was 879.7 billion kilowatt hours, 2.9 percent above the level for the same months of 1977. Edison Electric Institute estimated June 1978 production at 187.5 billion kilowatt hours.

Electric utility oil consumption during May 1978 was 12.7 percent below the May 1977 consumption level. Total oil consumption for the first 5 months of 1978 was 286.6 million barrels, 6.8 percent above the 1977 level. Coal consumption for May 1978 was 37.2 million tons, 0.2 percent above the May 1977 rate. The total consumption of coal for the first 5 months of 1978 was 184.5 million tons, 2.5 percent below the 1977 level. The decline in coal consumption was a result of the UMWA coal strike during the first 3 months of 1978. During May 1978 consumption by gas-fired plants reached 261.5 billion cubic feet, 0.7 percent above the May 1977 consumption rate. Gas consumption for the first 5 months of 1978 was 3.3 percent above the 1977 rate.

During May 1978, coal stocks increased by 14.3 percent above the stockpile level of a month earlier. Although May 31, 1978, coal stocks increased from the previous month's level, stockpiles of coal at electric utilities still were 18 percent below the stock level of May 31, 1977. Oil stocks on May 31, 1978, increased 11.6 percent above the level for the same month of 1977.

Sales of electricity to ultimate consumers by all electric utilities in the United States in April 1978 totaled 148.88 billion kilowatt-hours, an increase of 1.8 percent over April 1977.

Sales to residential consumers during April 1978 were 46.93 billion kilowatt-hours, an increase of 5.7 percent over the corresponding month in 1977. Commercial sales were 33.48 billion kilowatt-hours, 0.9 percent higher than in April 1977. Sales to industrial consumers total 63.13 billion kilowatt-hours, a decrease of 0.2 percent compared to April 1977. Other sales totaled 5.34 billion kilowatt-hours, or 1.5 percent less than the same month of the previous year.

Electric Utilities

Net Electricity Production

		Coal	Oil	Gas	Nuclear	Hydro-electric	Other*	Total
Millions of kilowatt hours								
1971	TOTAL	714,680	218,622	374,027	38,105	266,301	859	1,612,593
1972	TOTAL	772,857	272,550	375,735	54,091	272,612	1,783	1,749,629
1973	TOTAL	848,988	312,940	340,804	83,334	272,081	2,294	1,860,440
1974	TOTAL	829,973	299,363	320,055	113,976	301,032	2,704	1,867,103
1975	TOTAL	852,968	288,908	299,772	172,506	300,047	3,437	1,917,638
1976	January	83,707	32,214	19,895	16,099	26,070	344	178,329
	February	73,532	24,767	19,163	14,377	24,521	323	156,683
	March	76,570	25,420	21,282	13,993	26,563	346	164,174
	April	72,571	23,299	21,867	10,982	24,137	312	153,168
	May	72,512	21,794	25,319	11,929	25,516	300	157,370
	June	76,939	25,103	29,715	15,757	25,563	314	173,391
	July	83,294	26,997	32,032	17,709	26,064	338	186,434
	August	84,222	28,248	31,394	18,363	23,843	336	186,406
	September	75,384	23,608	28,058	17,290	20,369	327	165,036
	October	76,955	24,168	23,918	17,355	21,042	319	163,757
	November	81,702	30,060	21,119	16,134	19,805	293	169,113
	December	87,220	34,130	20,897	21,115	20,220	332	183,914
	TOTAL	944,608	319,808	294,659	191,103	283,713	3,884	2,037,775
1977	January	89,844	43,363	19,953	22,152	20,700	359	196,371
	February	78,752	29,429	R19,481	19,601	15,150	322	R162,735
	March	77,521	28,343	22,467	20,672	19,801	356	169,160
	April	70,898	25,834	21,297	19,867	18,642	319	156,857
	May	77,071	27,945	24,701	20,599	18,677	341	169,334
	June	83,148	28,947	29,623	21,517	17,226	335	180,796
	July	92,408	34,866	32,715	21,825	16,799	328	198,941
	August	90,764	32,302	33,293	22,750	16,712	317	196,138
	September	82,593	R26,348	30,942	19,630	16,455	342	R176,310
	October	79,406	R23,061	27,359	19,041	17,219	360	R166,446
	November	79,495	24,848	R22,582	19,458	20,428	347	R167,158
	December	83,640	32,652	21,151	23,771	22,787	337	184,338
	TOTAL	985,540	R357,938	R305,564	250,883	220,596	4,063	R2,124,584
1978	January	85,027	39,227	R22,299	25,833	25,055	357	R197,798
	February	70,693	R38,072	20,360	21,833	22,399	309	R173,666
	March	R66,758	R36,854	R22,259	R22,449	24,662	264	R173,246
	April	R70,411	R24,914	21,309	R17,580	25,343	208	R159,765
	May	76,492	24,278	25,036	20,416	28,775	187	175,184
	June	NA	NA	NA	22,143	NA	NA	187,482
	TOTAL (Year to date)	369,381	163,345	111,263	130,254	126,234	1,325	1,067,141

(See chart on page 35)

*Includes electricity produced from geothermal power, wood, and waste.

R=Revised data.

NA=Not available.

Source: Federal Power Commission Form 4, "Monthly Powerplant Report" through May 1978; Edison Electric Institute for June 1978 Total and Nuclear Regulatory Commission for June 1978 Nuclear.

Electric Utilities (Continued)

Fuel Consumption

		Coal	Oil			Gas	
		Thousands of short tons	Steam*	Gas Turbine/ Internal Combustion**	Total	Millions of cubic feet	
Thousands of barrels							
1971	TOTAL	327,887	362,186	34,282	396,468	3,975,971	
1972	TOTAL	352,392	440,229	53,463	493,692	3,976,770	
1973	TOTAL	389,707	513,127	47,020	560,147	3,659,388	
1974	TOTAL	392,423	482,524	53,721	536,245	3,443,293	
1975	TOTAL	406,030	466,940	39,188	506,128	3,157,584	
1976	January	39,986	51,114	4,974	56,088	206,528	
	February	34,965	40,452	2,676	43,128	199,441	
	March	36,099	41,154	2,800	43,954	222,765	
	April	33,805	37,663	2,489	40,152	227,826	
	May	33,944	35,651	2,220	37,871	266,632	
	June	36,381	40,065	3,574	43,639	313,369	
	July	39,841	43,143	4,084	47,227	337,640	
	August	40,330	45,627	3,443	49,070	329,737	
	September	35,895	38,245	2,526	40,771	295,071	
	October	36,783	39,101	3,106	42,207	250,046	
	November	38,845	47,346	4,971	52,317	217,362	
	December	41,582	53,949	5,564	59,513	214,869	
	TOTAL	448,456	513,510	42,427	555,937	3,081,286	
1977	January	43,255	66,379	9,518	75,897	R205,074	
	February	37,665	47,659	3,150	50,809	R200,413	
	March	37,218	46,172	2,495	48,667	R231,826	
	April	34,051	42,218	2,213	44,431	223,081	
	May	37,159	44,779	3,846	48,625	259,800	
	June	40,151	46,249	4,303	50,552	R310,706	
	July	44,977	54,664	7,741	62,405	R346,677	
	August	44,172	51,950	4,646	56,596	350,756	
	September	40,168	43,297	2,523	45,820	R324,614	
	October	38,379	38,071	R1,900	R39,971	284,844	
	November	38,722	40,654	2,469	43,123	R234,198	
	December	41,312	52,780	4,067	56,847	R219,984	
	TOTAL	477,229	574,872	48,871	R623,743	R3,191,973	
1978	January	42,713	61,263	8,243	69,506	R229,046	
	February	35,884	R59,630	R7,694	R67,324	211,079	
	March	R34,066	R58,770	5,466	R64,236	R232,271	
	April	R34,655	R40,916	R2,152	R43,068	R223,415	
	May	37,225	R40,202	2,247	42,449	261,503	
	TOTAL (5 months)	184,543	260,781	25,802	286,583	1,157,314	

*Primarily residual fuel oil.

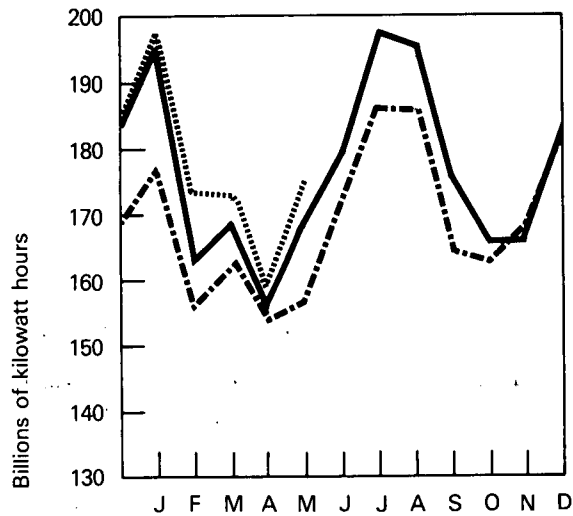
**Primarily middle distillates.

R=Revised.

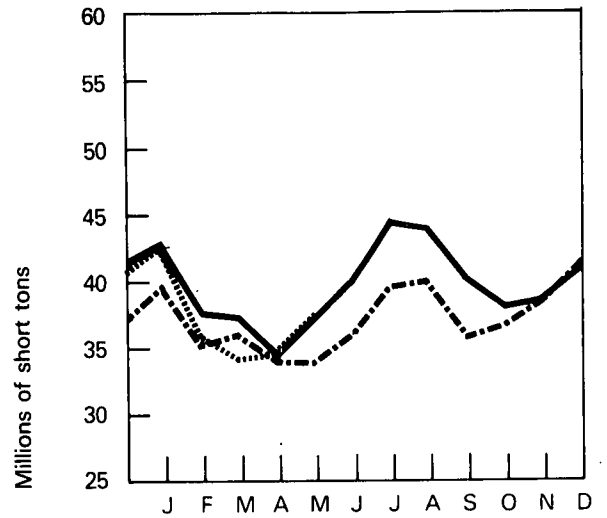
Source: Federal Power Commission Form 4, "Monthly Powerplant Report."

Electric Utilities

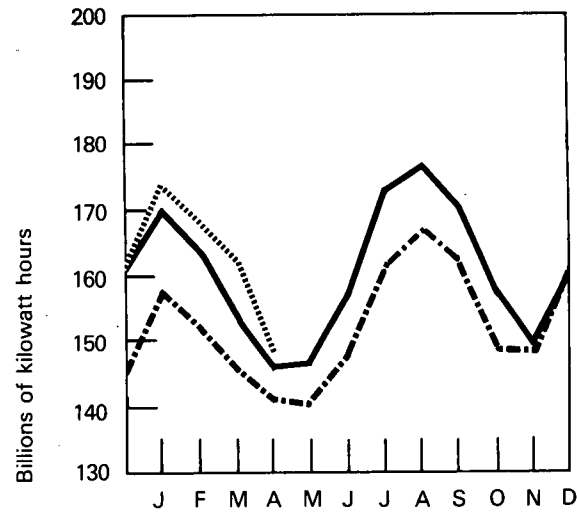
Total Net Electricity Production



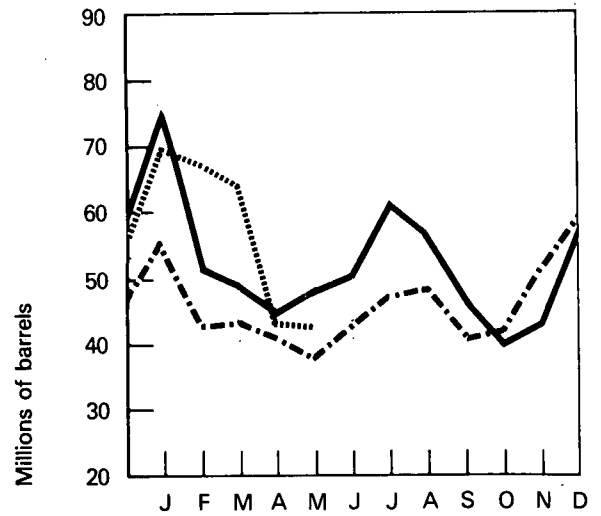
Coal Consumption



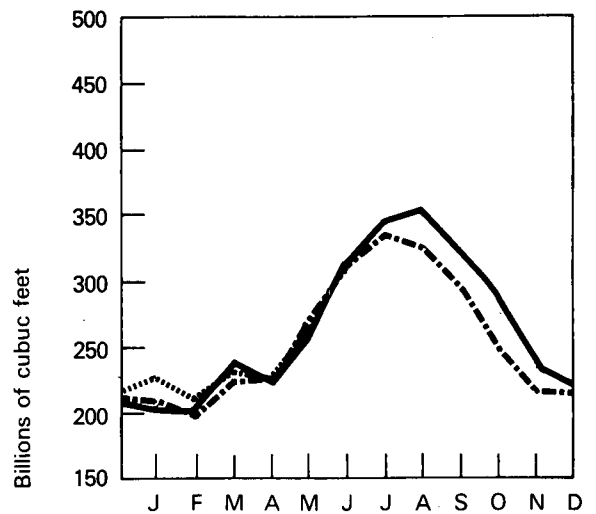
Total Electricity Sales



Oil Consumption



Gas Consumption



--- 1976

— 1977

..... 1978

Electric Utilities (Continued)

Stocks at End of Month

		Coal	Oil		
			Steam*	Gas Turbine/ Internal Combustion**	Total
		Thousands of short tons	Thousands of barrels		
1971		***78,069	***46,451	***3,194	***49,645
1972		***100,009	***52,575	***5,079	***57,654
1973		***87,279	***79,121	***10,095	***89,216
1974		***83,542	***97,201	***15,715	***112,916
1975		***110,750	***108,358	***16,886	***125,244
1976	January	105,518	102,023	15,922	117,945
	February	104,874	102,147	16,706	118,853
	March	108,450	104,082	16,467	120,550
	April	112,862	103,757	16,642	120,399
	May	119,611	109,142	16,962	126,105
	June	123,048	109,660	16,621	126,281
	July	115,204	110,829	15,862	126,691
	August	110,752	109,823	16,007	125,830
	September	115,399	112,965	17,059	130,024
	October	118,591	114,437	16,954	131,391
	November	119,323	111,137	15,517	126,655
	December	117,493	106,744	14,980	121,724
1977	January	106,183	90,104	12,740	102,844
	February	103,307	95,934	14,098	110,032
	March	109,620	98,148	15,478	113,626
	April	115,915	101,801	15,818	117,619
	May	122,834	104,094	15,841	119,935
	June	128,820	107,932	15,515	123,447
	July	123,405	113,250	16,028	129,278
	August	123,856	119,599	17,093	136,692
	September	130,379	125,360	17,864	143,224
	October	139,705	128,452	19,128	147,580
	November	149,731	129,701	19,149	148,850
	December	133,288	125,245	R19,315	R144,560
1978	January	105,327	114,049	16,232	130,281
	February	84,745	R110,015	R17,099	R127,114
	March	R77,187	R110,980	R17,249	R128,229
	April	R88,137	R114,233	R17,375	R131,608
	May	100,784	116,892	16,932	133,824

*Primarily residual fuel oil.

**Primarily middle distillates.

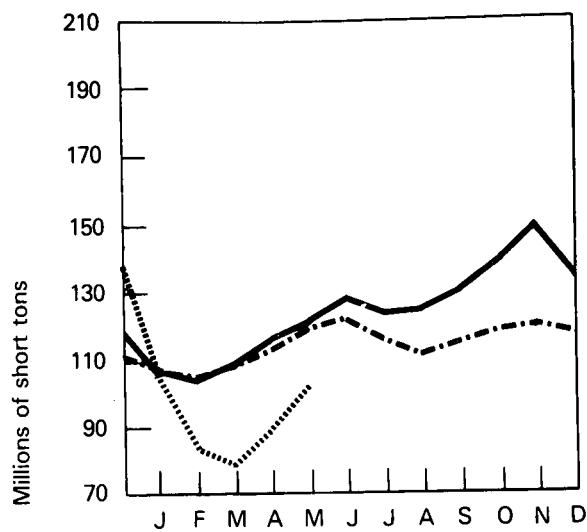
***As of December 31.

R=Revised.

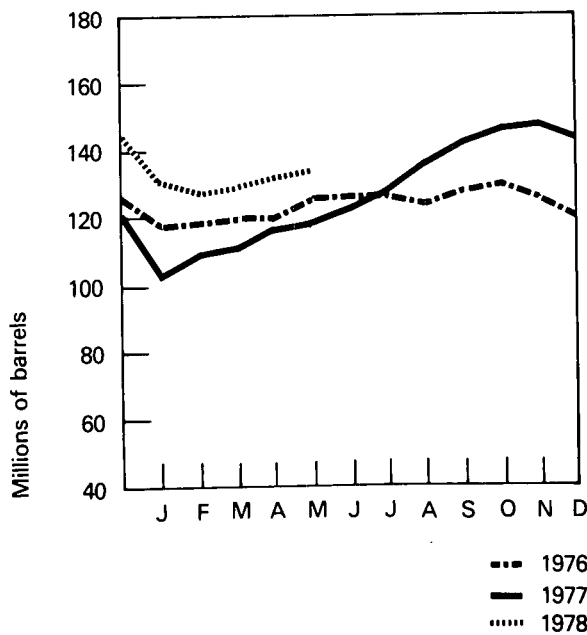
Source: Federal Power Commission Form 4, "Monthly Powerplant Report."

Electric Utilities

Coal Stocks



Oil Stocks



Electric Utilities (Continued)

Electricity Sales*

		Residential	Commercial	Industrial	Other**	Total
		Millions of kilowatt hours				
1972	TOTAL	538,609	359,265	640,978	56,309	1,595,161
1973	TOTAL	579,231	388,266	686,085	59,326	1,712,909
1974	TOTAL	578,184	384,826	684,875	58,039	1,705,924
1975	TOTAL	584,711	401,665	675,270	68,153	1,729,799
1976	January	60,126	34,955	57,463	6,359	158,903
	February	54,264	33,809	58,064	5,855	151,992
	March	47,041	32,520	60,322	5,967	145,850
	April	43,563	31,813	59,967	5,386	140,729
	May	41,044	32,538	61,133	5,473	140,188
	June	44,131	35,325	62,654	5,371	147,481
	July	53,702	39,489	62,388	5,856	161,435
	August	57,349	39,933	63,921	5,829	167,032
	September	53,459	38,817	64,382	6,125	162,783
	October	44,751	34,981	64,028	5,649	149,409
	November	46,682	33,622	63,002	5,802	149,108
	December	56,751	35,838	62,640	5,886	161,115
	TOTAL	602,863	423,640	739,964	69,558	1,836,025
1977	January	65,332	37,598	61,481	6,274	170,685
	February	61,423	36,105	60,439	5,770	163,737
	March	50,859	34,248	63,294	6,158	154,559
	April	R44,414	R33,180	R63,278	R5,425	R146,297
	May	41,497	34,111	65,559	5,240	146,407
	June	49,438	37,601	66,073	5,595	158,707
	July	60,955	41,745	64,708	5,935	173,343
	August	62,440	42,433	66,521	5,837	177,231
	September	57,231	40,845	66,579	5,951	170,606
	October	48,696	36,547	66,442	5,979	157,664
	November	44,962	33,979	64,959	5,866	149,766
	December	55,101	36,047	63,809	6,083	161,040
	TOTAL	R642,348	R444,439	R773,142	R70,113	R1,930,042
1978	January	65,547	37,942	64,300	6,584	174,373
	February	63,936	37,286	60,817	6,252	168,291
	March	58,194	36,201	61,524	6,032	161,951
	April	46,928	33,484	63,129	5,342	148,883
	TOTAL (4 months)	234,605	144,913	249,770	24,210	653,498

(See chart on page 35)

*Electricity sales to ultimate consumers.

**Includes street lighting and transportation uses.

R=Revised.

Source: Federal Power Commission Form 5, "Monthly Statement of Electric Operating Revenue and Income."

Nuclear Power

During June, 1978, the 66 fully operable domestic nuclear reactors, with a maximum dependable capacity of 46,627 electrical megawatts,* performed at 65 percent of capacity. Total electricity generated by all plants (including those units in startup testing) amounted to 22.1 billion net kilowatt hours, which was 11.8 percent of total net domestic production for June.

One operating license was issued during June to the Georgia Power Company for its recently completed Hatch 2 unit (786 MWe capacity) located in south central Georgia. The first unit of this dual-reactor site was completed in 1975.

Also during June, the recently licensed North Anna 1 reactor, owned by the Virginia Electric and Power Company, achieved full commercial operation status. Three additional reactors are under construction at the North Anna site, with project completion anticipated by late 1982.

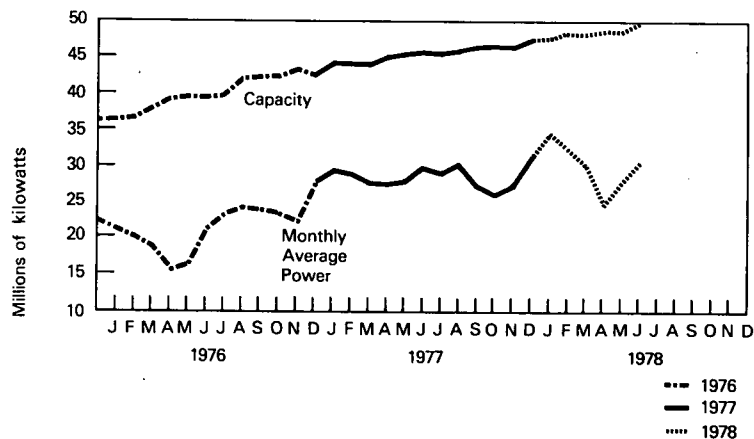
The United States currently is participating with approximately 40 other countries in an International Fuel Cycle Evaluation (INFCE) effort to assess key activities and common concerns in the nuclear fuel cycle. INFCE was established in 1977, and has been organized into eight primary working groups to study (1) uranium and heavy water availability, (2) enrichment availability, (3) supply assurances, (4) reprocessing, plutonium handling and recycle, (5) fast breeders, (6) spent fuel management, (7) waste management and disposal, and (8) advanced concepts. The results of this technical and analytical study will be non-binding on the participating countries.

*Does not include four units in startup testing having a total capacity of 3,087 megawatts.

U.S. Nuclear Powerplant Operations*

		Maximum Dependable Capacity	Average Power	Percent of Total Domestic Electricity Generation
		Thousands of net kilowatts		
1972 AVERAGE		7,726	6,174	3.1
1973 AVERAGE		13,850	8,760	4.5
1974 AVERAGE		29,921	13,011	6.1
1975 AVERAGE		35,671	19,692	9.0
1976	January	36,750	21,638	9.0
	February	36,879	20,657	9.2
	March	38,072	18,808	8.5
	April	39,763	15,142	7.2
	May	39,902	16,034	7.6
	June	39,781	21,885	9.1
	July	40,168	23,802	9.5
	August	42,067	24,681	9.8
	September	42,896	24,014	10.5
	October	42,877	23,327	10.6
	November	43,673	22,408	9.5
	December	42,877	28,380	11.5
AVERAGE		40,642	21,756	9.4
1977	January	44,316	29,774	11.3
	February	44,282	29,168	12.0
	March	44,289	27,785	12.2
	April	45,131	27,631	12.7
	May	45,222	27,687	12.2
	June	45,991	29,885	11.9
	July	45,984	29,335	11.0
	August	45,982	30,578	11.6
	September	46,051	27,264	11.1
	October	46,088	25,593	11.4
	November	46,088	27,025	11.6
	December	47,133	31,350	12.9
AVERAGE		45,554	28,640	11.8
1978	January	47,167	34,722	13.1
	February	48,080	32,490	12.6
	March	48,062	R30,173	13.0
	April	48,926	R24,451	11.0
	May	48,924	R27,441	11.7
	June	49,714	**30,754	**11.8
AVERAGE (6 months)		48,476	29,992	12.2

U.S. Nuclear Powerplants



*Includes all units authorized to generate commercial electricity, including units in startup testing and those owned by the Government.

**Preliminary data.

R=Revised data.

Sources: Capacity data for units in commercial operation or startup testing and Average Power for June 1978 from Nuclear Regulatory Commission. Remaining data from FPC Form 4, "Monthly Powerplant Report."

Status of Nuclear Powerplants—June 30, 1978

Status	Number of Plants				Design Capacity	
	Boiling Water Reactors	High Temperature Gas Reactors	Pressurized Water Reactors	Other**	Total	Net Electrical Megawatts
In operation or startup testing*	26	1	41	2	70	51,000
Construction permit granted	28	0	61	0	89	97,000
Construction permit pending	8	0	28	3	39	44,000
Orders placed for plant	2	0	7	0	9	11,000
Publicly announced	—	—	—	7	7	8,000
TOTAL	64	1	137	12	214	***212,000

*Does not include the Indian Point 1 reactor which is in indefinite shutdown status.

**Includes two dual-purpose Department of Energy-owned reactors, both operating. Also includes 1 Liquid Metal Fast Breeder Reactor and 9 announced intentions to order for which a reactor type has not been chosen.

***Total does not equal sum of components due to independent rounding.

Source: U.S. Department of Energy.

Nuclear Power Generation by Non-Communist Countries—June 1978

Country	Number of Reactors*	Generation of Electricity					
		Capacity Thousands of gross electrical kilowatts	Electricity Generation Millions of gross kilowatt hours	Percent of Design Capacity Used			
				June 1978	1975	Year** 1976 1977	
Asia							
Japan	15	8,780	3,546	56	46	57	41
India	3	620	184	41	46	58	51
Pakistan	1	140	33	33	46	41	28
Taiwan	1	640	171	37	—	—	—
Europe							
Belgium	3	1,740	1,199	95	83	65	78
England***	31	8,100	3,099	46	57	62	55
Finland	1	440	236	74	—	—	92
France	13	5,890	1,882	44	68	59	52
Germany (FR)	10	6,410	2,230	48	72	57	64
Italy	3	630	359	79	69	69	61
Netherlands	2	520	368	98	73	84	81
Spain	3	1,120	504	63	77	77	67
Sweden	6	3,850	1,668	60	44	55	59
Switzerland	3	1,060	509	66	84	85	87
North America							
Canada†	18	4,790	2,696	84	64	80	76
United States	68	51,400	23,329	63	56	55	64
South America							
Argentina	1	370	163	62	85	86	55
Total or Average	172	96,500	42,175	60	58	59	62

*Includes fully operational units and those in startup testing which generated electricity during, or prior to, the current month.

†June Capacity and generation figures are shown as gross values, as opposed to net values shown in previous tables of this chapter.

**Averages are computed for those units in operation, including startup units beginning with first month of electricity generation.

***June figures for 21 units are based on a 5-week period; figures for remaining units are for 30 days.

††June figures are based on 4-week period.

Source: *Nucleonics Week* magazine.

U.S. Uranium Enrichment—June 1978

	Domestic Customers	Foreign Customers	Total
Separative work performed (in metric tons of separative work units)	209.174	726.376	937.547
Cost (in millions of dollars)	16.357	54.851	71.208
Product quantity (in metric tons of uranium)	59.926	195.150	255.076
Feed requirement (in metric tons of uranium)	283.307	959.609	1,242.915

Source: U.S. Department of Energy.

Summary of Monthly Fuel Cycle—May 1978

Fuel Cycle Activity	Product	Processed Material ¹	Percent Utilization of Industry Capacity	Energy Content of Processed Material ²	Energy Consumed in Fuel Cycle Activity ³	Cost Contribution to Electric Power ⁴
		MTU except where noted		Billion Btu		Mills per kilowatt hour
Milling	Yellowcake (U ₃ O ₈) Deliveries	799	76	290,000	438	1.27
Conversion	Uranium Hexafluoride (UF ₆) Deliveries	1,446	80	391,000	172	0.16
Enrichment	Enriched UF ₆ Deliveries	255 (938 MT-SWU)	(⁶)	522,000	2,323	1.53
Fabrication	Finished Fuel Assemblies Shipped	28	NA	57,000	7	0.47
Powerplant Operation	Electricity Generated	19,639 (million kWhe)	59	209,000	998 (million kWhe)	10.93
Spent Fuel	Stored at Reactor Site	NA	—	—	—	71.57
	Stored at Non-Reactor Sites	0	—	—	—	

¹ Units of measure are discussed in Explanatory Notes 9 and 10.

² Assumes 25,000 MWD/MTU for heat content of enriched uranium and a 6.1 feed to product ratio at the enrichment plant.

³ Energy requirements for processing are obtained from U.S.A.E.C. Report No. WASH 1248.

⁴ Cost contribution is computed from unit prices paid for current month's production and requirement for a model 1000 MWe reactor operating at 65 percent capacity factor. Because of the long lead time required for nuclear fuel processing, the sum of numbers in this column does not necessarily reflect the fuel cost of current electricity production.

⁵ Figure for conversion utilization represents material shipped.

⁶ ERDA's enrichment plants are presently operating at maximum utilization of available electric power, with the excess production being placed in the "preproduction stockpile" in anticipation of high demand for enriched uranium in the 1980's.

⁷ Figure represents current industry estimate for cost of spent fuel shipment, reprocessing, and waste disposition, exclusive of cost credits for recovered uranium and plutonium.

NA=Not available.

Source: DOE.

Energy Consumption

Domestic energy consumption in May 1978 was 6.2 quadrillion Btu, 7.9 percent more than in May 1977, and 10.9 percent more than in May 1976. The sectoral breakdown for May is not yet available.

In April 1978, the combined residential/commercial sector consumed 2.3 quadrillion Btu, 8.0 percent more than in April 1977. Industrial energy consumption for April 1978 was 2.2 quadrillion Btu, 4.7 percent more than in April 1977. Transportation consumption in April 1978 was 16 quadrillion Btu, down 0.5 percent from the April 1977 level.

There have been two minor changes to the consumption section this month: geothermal power and net coke imports are both included for the first time. Including geothermal power increases the electrical energy loss distributed to each sector. Net coke imports are shown as part of coal consumption in the industrial sector.

Cooling Degree-Days

For the period July 3 through July 30, 1978, the nation accumulated 3 percent more cooling degree-days than normal, but 12 percent fewer than for the same period in 1977.

National average cumulative cooling degree-days for the period January 1 through July 30, 1978 were 5 percent above normal but 11 percent below the level accumulated during the similar period of 1977.

Energy Consumption

Domestic Energy Consumption by Primary Energy Type

		Coal*	Natural Gas (dry)	Petroleum	Hydro-electric Power**	Nuclear Electric Power	Geo-Thermal Power	Total***	Cumulative Total***
Quadrillion (10 ¹⁵) Btu									
1972	TOTAL	12.424	22.699	32.966	2.946	0.576	0.032	71.610	
1973	TOTAL	R13.286	22.512	34.852	3.006	0.888	0.043	R74.588	
1974	TOTAL	R12.948	21.732	33.468	3.312	1.215	0.053	R72.728	
1975	TOTAL	R12.828	19.948	32.742	3.222	1.839	0.070	R70.648	
1976	January	R1.215	2.337	3.177	R0.281	0.172	0.007	R7.188	R7.188
	February	R1.075	1.977	2.791	0.265	0.153	0.007	R6.267	R13.455
	March	R1.115	1.755	2.948	0.287	0.149	0.007	R6.260	R19.716
	April	R1.065	1.538	2.749	0.261	0.117	0.007	R5.736	R25.452
	May	R1.070	1.463	2.722	0.276	0.127	0.007	R5.664	R31.117
	June	R1.111	1.362	2.774	0.276	0.168	0.007	R5.697	R36.814
	July	1.185	1.399	2.829	0.281	0.189	0.007	R5.891	R42.704
	August	R1.196	1.343	2.835	0.258	0.196	0.007	R5.835	R48.540
	September	R1.096	1.328	2.776	0.222	0.184	0.007	R5.613	R54.152
	October	R1.139	1.653	2.912	0.229	0.185	0.007	R6.125	R60.277
	November	R1.193	1.912	3.107	0.216	0.172	0.007	R6.608	R66.885
	December	R1.292	2.277	3.503	0.221	0.225	0.007	R7.524	R74.409
	TOTAL	13.751	20.345	35.123	3.075	2.037	0.078	R74.409	
1977	January	R1.286	2.434	3.489	R0.232	0.236	0.006	R7.683	R7.683
	February	1.140	1.829	3.143	R0.174	0.209	0.006	R6.502	R14.186
	March	R1.144	1.727	3.076	R0.223	0.220	0.006	R6.397	R20.582
	April	R1.054	1.436	2.897	R0.210	0.212	0.006	R5.816	R26.398
	May	1.120	1.379	2.890	R0.211	0.220	0.006	R5.825	R32.223
	June	1.177	1.337	2.976	R0.196	0.229	0.006	R5.922	R38.145
	July	R1.278	1.330	2.990	R0.191	0.233	0.006	R6.028	R44.173
	August	R1.247	1.370	3.068	R0.190	0.243	0.006	R6.125	R50.298
	September	R1.161	1.431	2.924	R0.188	0.209	0.006	R5.919	R56.216
	October	R1.148	1.520	3.038	R0.196	0.203	0.006	R6.111	R62.327
	November	R1.147	1.696	3.040	R0.229	0.207	0.006	R6.326	R68.653
	December	R1.228	2.124	3.415	R0.254	0.253	0.006	R7.281	R75.934
	TOTAL	R14.129	19.613	36.947	R2.493	2.674	0.078	R75.934	
1978	January	R1.239	2.400	3.355	R0.277	0.275	0.007	R7.554	R7.554
	February	R1.050	2.158	R3.212	R0.250	0.233	0.006	R6.909	R14.462
	March	R1.008	R1.927	3.354	R0.273	0.239	0.005	R6.806	R21.268
	April	1.053	1.574	2.975	0.280	0.187	0.004	6.073	27.341
	May	1.138	1.438	3.169	0.316	0.218	0.004	6.283	33.624
	TOTAL (5 months)	5.487	9.497	16.065	1.396	1.153	0.026	33.624	

*Includes bituminous coal, lignite, anthracite coal, and net coke imports.

**Includes utility production, industrial production, and net imports.

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

R=Revised.

Source: EIA calculations based on data appearing elsewhere in this publication.

Domestic Energy Consumption by Economic Sector*

		Residential/ Commercial	Industrial	Transportation	Total**
		Quadrillion (10 ¹⁵) Btu			
1973	TOTAL	R26.540	R29.170	18.877	R74.587
1974	TOTAL	R25.895	R28.572	18.261	R72.728
1975	TOTAL	R26.177	R26.113	R18.359	R70.648
1976	January	R3.113	R2.422	1.653	R7.188
	February	R2.692	R2.112	1.463	R6.267
	March	R2.435	R2.200	1.626	R6.260
	April	R2.089	2.068	1.580	R5.736
	May	R1.920	2.191	1.553	R5.664
	June	R1.869	R2.229	1.599	R5.697
	July	R1.974	R2.280	1.637	R5.891
	August	R1.981	R2.262	1.592	R5.835
	September	R1.844	R2.212	1.558	R5.613
	October	R1.955	R2.570	1.600	R6.125
	November	R2.377	R2.589	1.642	R6.608
	December	R3.011	R2.719	1.794	R7.524
	TOTAL	R27.260	R27.854	R19.295	R74.409
1977	January	R3.434	R2.527	1.722	R7.683
	February	R2.978	R1.944	R1.580	R6.502
	March	R2.508	R2.237	1.651	R6.397
	April	R2.105	2.086	1.624	R5.816
	May	R1.926	R2.292	1.607	R5.825
	June	R1.981	R2.293	1.648	R5.922
	July	R2.124	R2.234	1.669	R6.028
	August	R2.117	R2.320	1.688	R6.125
	September	R1.964	R2.342	1.613	R5.919
	October	R2.011	R2.450	1.649	R6.111
	November	R2.170	R2.512	R1.644	R6.326
	December	R2.838	R2.637	1.806	R7.281
	TOTAL	R28.157	R27.875	R19.901	R75.934
1978	January	R3.292	R2.562	1.700	R7.554
	February	R3.148	R2.148	R1.612	R6.909
	March	R2.876	R2.160	1.770	R6.806
	April	2.273	2.184	1.616	6.073
	TOTAL (4 months)	11.589	9.054	6.698	27.341

*See Explanatory Note 11 for definitions of the Residential/Commercial, Industrial, and Transportation sectors. The methodology used for sector calculations is provided in the footnotes of the next table.

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

R=Revised data.

Energy Consumption by Economic Sector and Primary Source—April 1978 [Quadrillion (10¹⁵) Btu]

Sector ¹	Primary Energy Source						Primary Energy Consumption	Electricity Distributed ⁷	Net Energy Consumption	Electrical Energy Loss Distributed ⁸	Ultimate Energy Disposition
	Coal ²	Natural Gas (dry) ³	Petroleum ⁴	Hydroelectric ⁵	Nuclear ⁶	Geothermal					
Residential and Commercial	0.020	0.697	0.589	—	—	—	1.306	0.287	1.593	0.680	2.273
Industrial	0.286	0.599	0.573	0.001	—	—	1.459	0.215	1.674	0.510	2.184
Transportation	negl.	0.048	1.550	—	negl.	—	1.598	0.005	1.603	0.012	1.616
Electric Utilities	0.747	0.229	0.263	0.279	0.187	0.004	1.710	—	—	—	—
TOTAL	1.053	1.574	2.975	0.280	0.187	0.004	6.073	0.508	4.871	1.202	6.073

¹ See Explanatory Note 11 for definitions of the Residential and Commercial, Industrial, Transportation, and Electric Utilities Sectors.

² Data are from the Energy Information Administration. Includes anthracite, bituminous coal and lignite, and net coke imports.

³ Aggregate data and data on utility consumption are from the Energy Information Administration. Data from the American Gas Association are used for the Residential and Commercial Sector, which includes 100 percent of the AGA "Other" category. Natural gas used in transportation, mostly for pipeline use, is estimated to be 3.6 percent of total natural gas consumption less electric utilities. This percentage is derived from 1974, 1975, and 1976 Bureau of Mines data on consumption. The Industrial Sector is then the difference between the total and the sum of the other sectors.

⁴ Aggregate petroleum data and data on oil consumed by electric utilities are from the Energy Infor-

mation Administration. Petroleum consumed in transportation was calculated based on Department of Transportation data as follows: Motor gasoline—100 percent; naphtha jet fuel—100 percent; kerosene jet fuel—97 percent; distillate fuel oil—30.3 percent; residual fuel oil—11.2 percent; all other products—4.7 percent. The remainder is distributed to economic sectors using the following percentage shares, derived from 1974, 1975, and 1976 Bureau of Mines data on consumption: Residential and Commercial—50.7 percent; Industrial—49.3 percent.

⁵ EIA hydroelectric power production plus net imports of electricity. These imports are assumed to be from hydroelectric power sources and are estimated at 0.011 quadrillion Btu per month in 1974, 0.005 quadrillion Btu per month for 1975, and 0.007 quadrillion Btu per month for 1976 and 0.015 quadrillion Btu per month for 1977 and 1978. Monthly industrial hydroelectric power consumption is estimated to be one-twelfth of the preliminary Bureau of Mines annual

figure for 1976.

⁶ EIA nuclear power production.

⁷ Electricity was distributed using EIA data on kilowatt-hour sales to ultimate customers. Electrical energy consumed by railroads and for street and highway lighting was distributed to the Transportation Sector. All "Other" sales, largely for use in government buildings, were distributed to the Residential and Commercial Sector.

⁸ In generating electricity with nuclear or fossil fuels, approximately 65 percent of the energy is lost in the form of heat. Transmission and distribution losses consume about an additional 3 percent of the energy inputs of the utility industry. In order to fully account for all energy consumed both directly and indirectly (i.e., ultimate energy disposition), the electricity losses are allocated to the final end-use sectors in proportion to their direct kilowatt-hour usage.

Energy Consumption (Continued)

Percent Changes in Energy Consumption for April 1978 by Sources and Economic Sectors

	April 1978 Consumption	Percent Change from April 1977*	Cumulative Percent Change from 1977 (January through April)*
	Quadrillion Btu		
Refined Petroleum Products	2.975	+2.7	+2.3
Motor Gasoline	1.131	-2.2	+1.4
Jet Fuel	0.169	-1.2	+0.9
Distillate	0.539	+4.9	+1.4
Residual	0.561	+4.3	+4.0
Other Petroleum Products	0.573	+11.1	+3.8
Natural Gas (Dry)	1.574	+9.6	+8.5
Coal (Anthracite, bituminous, lignite and net coke imports)	1.053	-0.1	-5.9
Hydroelectric and Nuclear Electric Power and Geothermal Power	0.472	+10.0	+2.9
TOTAL ENERGY USE	6.073	+4.4	+3.6
Economic Sector Consumption			
Residential and Commercial	2.273	+8.0	+5.1
Industrial	2.184	+4.7	+2.9
Transportation	1.616	-0.5	+1.8

*Computed on a daily average basis.

Energy Consumption (Continued)

Energy Consumption by the Residential and Commercial Economic Sector¹

		Coal	Natural Gas (dry)	Petroleum ²	Electricity Distributed	Electrical Energy Loss Distributed	Total Energy Use	Cumulative Total Energy Use
Quadrillion (10 ¹⁵) Btu								
1973	TOTAL	0.295	7.577	7.077	3.445	R8.145	R26.540	
1974	TOTAL	0.297	7.427	6.484	3.424	R8.263	R25.895	
1975	TOTAL	0.253	7.688	6.135	3.538	R8.562	R26.177	
1976	January	0.031	1.254	0.648	0.340	R0.840	R3.113	R3.113
	February	0.019	1.090	0.581	0.315	R0.687	R2.692	R5.805
	March	0.018	0.856	0.571	0.286	R0.703	R2.435	R8.240
	April	0.020	0.671	0.500	0.271	R0.627	R2.089	R10.328
	May	0.016	0.488	0.506	0.265	R0.646	R1.920	R12.249
	June	0.015	0.333	0.488	0.285	R0.749	R1.869	R14.117
	July	0.011	0.281	0.486	0.333	R0.862	R1.974	R16.092
	August	0.015	0.259	0.506	0.347	R0.855	R1.981	R18.073
	September	0.016	0.272	0.518	0.331	R0.706	R1.844	R19.917
	October	0.020	0.395	0.569	0.286	R0.685	R1.955	R21.872
	November	0.025	0.723	0.622	0.288	R0.719	R2.377	R24.250
	December	0.036	1.083	0.730	0.330	R0.832	R3.011	R27.260
	TOTAL	0.243	7.706	6.726	3.676	R8.909	R27.260	
1977	January	0.035	1.376	0.712	0.367	R0.943	R3.434	R3.434
	February	0.024	1.216	0.674	0.347	R0.718	R2.978	R6.412
	March	0.019	0.845	0.608	0.306	R0.731	R2.508	R8.921
	April	0.020	0.623	0.538	R0.278	R0.646	R2.105	R11.026
	May	0.016	0.405	0.529	0.271	R0.705	R1.926	R12.952
	June	0.015	0.315	0.544	0.311	R0.796	R1.981	R14.932
	July	0.014	0.283	0.503	0.366	R0.959	R2.124	R17.057
	August	0.014	0.256	0.551	0.373	R0.924	R2.117	R19.174
	September	0.015	0.264	0.551	0.350	R0.784	R1.964	R21.137
	October	0.018	0.376	0.612	0.306	R0.699	R2.011	R23.148
	November	0.025	0.552	0.611	0.284	R0.699	R2.170	R25.319
	December	0.030	0.952	0.685	0.326	R0.845	R2.838	R28.157
	TOTAL	0.246	7.462	7.117	R3.884	R9.448	R28.157	
1978	January	0.029	1.257	0.674	0.369	R0.961	R3.292	R3.292
	February	0.029	1.283	R0.647	0.361	R0.828	R3.148	R6.440
	March	0.023	1.059	0.645	0.337	R0.811	R2.876	R9.316
	April	0.020	0.697	0.589	0.287	0.680	2.273	11.589
	TOTAL (4 months)	0.102	4.297	2.555	1.355	3.280	11.589	

(See footnotes on page 50)

Energy Consumption by the Industrial Economic Sector¹

		Coal	Natural Gas (dry)	Petroleum ³	Hydro-electric	Electricity Distributed	Electrical Energy Loss Distributed	Total Energy Use	Cumulative Total Energy Use
Quadrillion (10 ¹⁵) Btu									
1973	TOTAL	R4.362	10.493	6.403	0.036	2.341	R5.535	R29.170	
1974	TOTAL	R4.121	10.137	6.305	0.036	2.337	R5.637	R28.572	
1975	TOTAL	R3.812	8.425	5.966	0.035	2.302	R5.573	R26.113	
1976	January	R0.315	0.794	0.630	0.003	0.196	R0.484	R2.422	R2.422
	February	R0.297	0.618	0.565	0.003	0.198	R0.432	R2.112	R4.534
	March	R0.315	0.616	0.556	0.003	0.206	R0.505	R2.200	R6.734
	April	R0.313	0.587	0.487	0.003	0.205	R0.474	2.068	R8.802
	May	R0.320	0.658	0.492	0.003	0.209	R0.509	2.191	R10.993
	June	R0.306	0.670	0.475	0.003	0.214	R0.562	R2.229	R13.223
	July	R0.306	0.734	0.473	0.003	0.213	R0.551	R2.280	R15.503
	August	R0.302	0.709	0.492	0.003	0.218	R0.538	R2.262	R17.764
	September	R0.300	0.716	0.504	0.003	0.220	R0.469	R2.212	R19.976
	October	R0.320	0.951	0.554	0.003	0.218	R0.523	R2.570	R22.546
	November	R0.325	0.905	0.605	0.003	0.215	R0.537	R2.589	R25.135
	December	R0.355	0.900	0.710	0.003	0.214	R0.538	R2.719	R27.854
	TOTAL	3.775	8.859	6.540	0.033	2.525	R6.123	R27.854	
1977	January	R0.317	0.767	0.693	0.001	0.210	R0.540	R2.527	R2.527
	February	0.305	0.349	0.655	0.001	0.206	R0.427	R1.944	R4.472
	March	R0.323	0.591	0.591	0.001	0.216	R0.515	R2.237	R6.708
	April	R0.304	0.541	0.523	0.001	R0.216	R0.501	2.086	R8.795
	May	0.303	0.667	0.514	0.001	0.224	R0.582	R2.292	R11.087
	June	R0.295	0.667	0.529	0.001	0.225	R0.576	R2.293	R13.380
	July	R0.287	0.657	0.489	0.001	0.221	R0.579	R2.234	R15.614
	August	R0.275	0.718	0.536	0.001	0.227	R0.562	R2.320	R17.934
	September	R0.274	0.795	0.536	0.001	0.227	R0.509	R2.342	R20.276
	October	R0.302	0.807	0.595	0.001	0.227	R0.518	R2.450	R22.726
	November	R0.298	0.851	0.594	0.001	0.222	R0.546	R2.512	R25.239
	December	R0.309	0.878	0.666	0.001	0.218	R0.565	R2.637	R27.875
	TOTAL	R3.592	8.288	6.920	0.017	R2.638	R6.421	R27.875	
1978	January	R0.285	0.830	0.656	0.001	0.219	R0.571	R2.562	R2.562
	February	R0.245	0.589	R0.630	0.001	0.208	R0.476	R2.148	R4.710
	March	R0.248	R0.568	0.627	0.001	0.210	R0.505	R2.160	R6.870
	April	0.286	0.599	0.573	0.001	0.215	0.510	2.184	9.054
	TOTAL (4 months)	1.064	2.586	2.485	0.006	0.852	2.061	9.054	

(See footnotes on page 50)

Energy Consumption (Continued)

Energy Consumption by the Transportation Economic Sector¹

		Coal	Natural Gas ⁴ (dry)	Petroleum	Electricity Distributed	Electrical Energy Loss Distributed	Total Energy Use	Cumulative Total Energy Use
Quadrillion (10 ¹⁵) Btu								
1973	TOTAL	0.009	0.733	17.940	0.058	0.137	18.877	
1974	TOTAL	0.009	0.656	17.392	0.060	R0.145	18.261	
1975	TOTAL	0.001	0.602	17.544	0.062	R0.150	R18.359	
1976	January	negl.	0.076	1.556	0.006	0.015	1.653	1.653
	February	negl.	0.064	1.382	0.006	0.012	1.463	3.116
	March	negl.	0.055	1.552	0.005	0.013	1.626	4.741
	April	negl.	0.047	1.516	0.005	0.012	1.580	R6.322
	May	negl.	0.043	1.493	0.005	0.012	1.553	R7.875
	June	negl.	0.037	1.545	0.005	0.012	1.599	9.473
	July	negl.	0.038	1.581	0.005	0.013	1.637	11.110
	August	negl.	0.036	1.538	0.005	0.013	1.592	12.702
	September	negl.	0.037	1.504	0.005	0.011	1.558	R14.260
	October	negl.	0.050	1.531	0.006	0.013	1.600	15.859
	November	negl.	0.061	1.561	0.006	0.014	1.642	R17.501
	December	negl.	0.074	1.699	0.006	0.015	1.794	R19.295
	TOTAL	negl.	0.619	18.457	0.064	R0.155	R19.295	
1977	January	negl.	0.080	1.620	0.006	R0.016	1.722	1.722
	February	negl.	0.058	1.503	0.006	0.012	R1.580	R3.302
	March	negl.	0.054	1.580	0.005	0.012	1.651	4.953
	April	negl.	0.043	1.564	0.005	R0.012	1.624	6.577
	May	negl.	0.040	1.549	0.005	0.013	1.607	R8.185
	June	negl.	0.037	1.594	0.005	0.012	1.648	R9.833
	July	negl.	0.035	1.616	0.005	0.013	1.669	R11.502
	August	negl.	0.036	1.635	0.005	0.012	1.688	R13.190
	September	negl.	0.040	1.557	0.005	0.011	1.613	R14.803
	October	negl.	0.044	1.587	0.005	0.012	1.649	R16.452
	November	negl.	0.052	1.571	0.006	0.014	R1.644	R18.095
	December	negl.	0.068	1.717	0.006	0.015	1.806	R19.901
	TOTAL	negl.	0.588	19.094	0.064	R0.155	R19.901	
1978	January	negl.	0.078	1.600	0.006	0.016	1.700	1.700
	February	negl.	0.070	1.524	0.006	0.013	R1.612	3.312
	March	negl.	0.061	1.691	0.005	0.013	1.770	5.083
	April	negl.	0.048	1.550	0.005	0.012	1.616	6.698
	TOTAL (4 months)	negl.	0.257	6.364	0.023	0.055	6.698	

¹ See Explanatory Note 11 for definitions of the Residential and Commercial, Industrial, and Transportation Sectors. The methodology used for sector calculations is provided in the footnotes of a previous table. Printed totals may differ slightly from the sum of their row/column components due to independent rounding.

² The percentage share used in calculating Residential and Commercial consumption of petroleum was 52.5 percent for 1973 and 50.7 percent for 1974, 1975, 1976, 1977, and 1978.

³ The percentage share used in calculating Industrial consumption of petroleum was 47.5 percent for 1973 and 49.3 percent for 1974, 1975, 1976, 1977, and 1978.

⁴ The percentage share used in calculating Transportation consumption of natural gas was 3.9 percent for 1973 and 3.6 percent for 1974, 1975, 1976, 1977, and 1978. This percentage share is applied to total natural gas minus electric utility consumption.

R=Revised data.

Cooling Degree-Days*

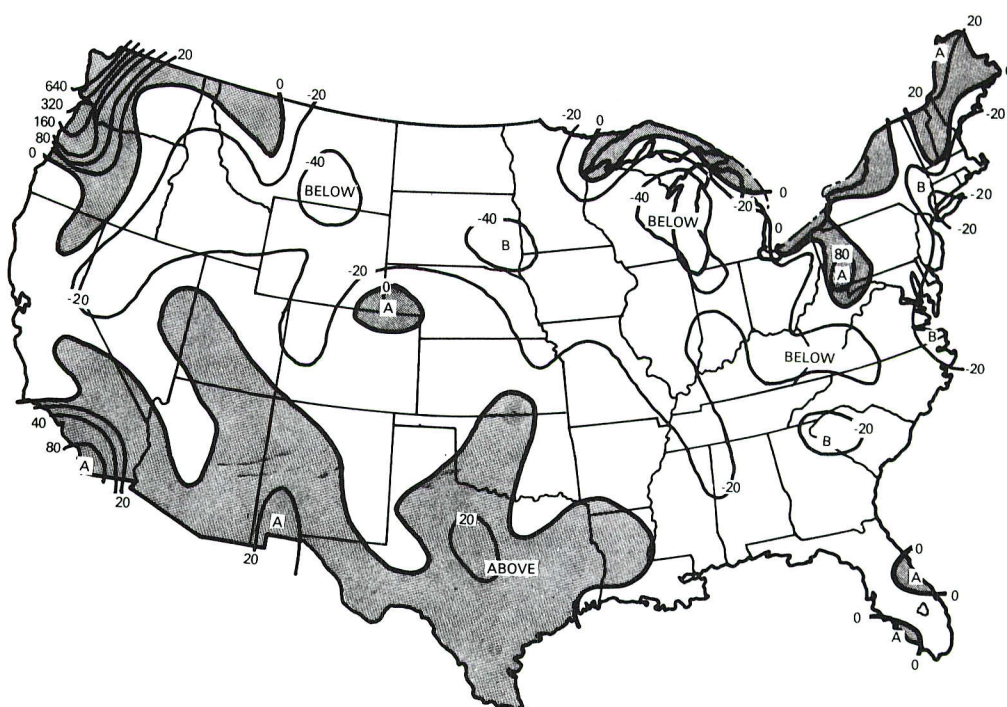
Petroleum Administration For Defense (PAD) Districts:	July 3, 1978-July 30, 1978					Cumulative January 1-July 30, 1978				
	1978	1977**		Normal (1941-70)**		1978	1977**		Normal (1941-70)**	
PAD District I	306.1	352.9	(-13.3)	312.0	(-1.9)	710.0	809.8	(-12.3)	719.5	(-1.3)
New England	217.8	241.8	(-9.9)	212.3	(2.6)	372.8	453.2	(-17.8)	337.4	(10.5)
Conn., Maine, Mass., N.H., R.I., Vt.										
Middle Atlantic	267.4	311.5	(-14.1)	284.6	(-6.0)	510.8	583.8	(-12.5)	527.1	(-3.1)
Del., Md., N.J., N.Y., Pa.										
Lower Atlantic	403.0	463.8	(-13.1)	396.9	(1.5)	1,157.8	1,306.3	(-11.4)	1,176.5	(-1.6)
Fla., Ga., N.C., S.C., Va., W. Va.										
PAD District II	279.8	369.2	(-24.2)	274.6	(1.9)	603.9	790.2	(-23.6)	570.2	(5.9)
Ill., Ind., Iowa, Kans., Ky., Mich., Minn., Mo., Nebr., N. Dak., Ohio, Okla., S. Dak., Tenn., Wisc.										
PAD District III	547.5	527.7	(3.8)	490.1	(11.7)	1,490.1	1,504.4	(-0.9)	1,394.4	(6.9)
Ala., Ark., La., Miss., N. Mex., Tex.										
PAD District IV	263.3	263.9	(-0.3)	246.4	(6.9)	425.5	509.1	(-16.4)	380.3	(11.9)
Colo., Idaho, Mont., Utah, Wyo.										
PAD District V	202.1	194.7	(3.8)	190.9	(5.9)	493.8	422.6	(16.9)	405.9	(21.7)
Ariz., Calif., Nev., Oreg., Wash.										
U.S. AVERAGE	310.6	354.5	(-12.4)	302.4	(2.7)	730.7	823.9	(-11.3)	698.6	(4.6)

*See Explanatory Note 12 for explanation of degree-days.

**Percentage change in parentheses.

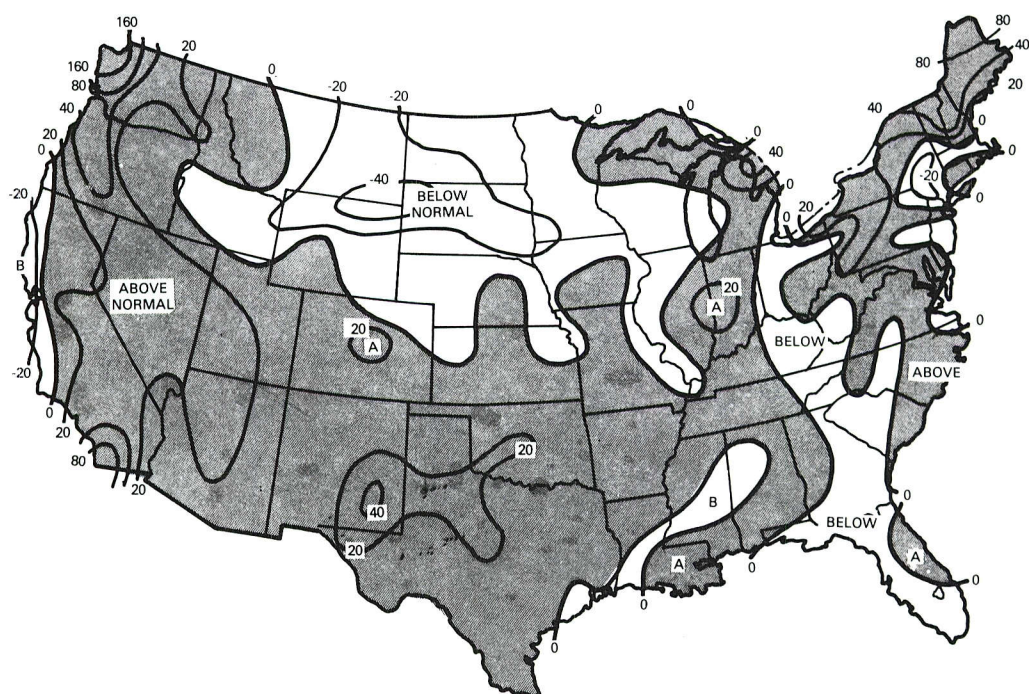
Cooling Degree-Days Accumulated from January 1, 1978, through August 6, 1978

Percent Departure from 1977



A Above (normal)
B Below (normal)

Percent Departure from Normal (1941-70)



Note: Above normal cooling degree-days correspond to above normal temperature
Source: Department of Commerce—NOAA.

Part 8

Oil and Gas Exploration and Development

The rotary rig count climbed to 2,307 in July, the highest July count since 1957.

Well completions rose in June 1978 to 4,372. For the first six months of the year, the number of wells drilled was up 5.8 percent from the number drilled during the corresponding months of 1977. Compared to the first six months of 1977, in 1978 oil well completions were down 5.2 percent, while gas wells increased 17.6 percent and dry holes were up 11.6 percent. Total footage drilled rose 9.4 percent during the period.

Resource Development

Oil and Gas Exploration and Development

		Rotary Rigs in Operation	Exploratory and Development Wells Drilled*					Total Footage of Wells Drilled*
		Monthly Average		Oil	Gas	Dry	Total	Thousands of feet
1972	AVERAGE	1,107	TOTAL	11,306	4,928	11,057	27,291	134,602
1973	AVERAGE	1,194	TOTAL	9,902	6,385	10,305	26,592	136,391
1974	AVERAGE	1,475	TOTAL	12,784	7,240	11,674	31,698	150,551
1975	AVERAGE	1,660	TOTAL	16,408	7,580	13,247	37,235	174,434
1976	January	1,710		1,465	772	1,055	3,292	14,517
	February	1,594		1,341	652	1,159	3,152	14,888
	March	1,540		1,726	821	1,301	3,848	18,126
	April	1,480		1,237	672	994	2,903	13,765
	May	1,496		1,501	658	1,104	3,263	14,196
	June	1,546		1,500	709	1,123	3,332	14,780
	July	1,597		1,312	730	916	2,958	13,716
	August	1,691		1,265	711	1,140	3,116	14,697
	September	1,744		1,474	909	1,199	3,582	16,777
	October	1,794		1,396	750	1,123	3,269	14,542
	November	1,840		1,291	698	1,222	3,211	14,642
	December	1,860		1,512	926	1,414	3,852	17,093
	AVERAGE	1,656	TOTAL**	17,059	9,085	13,621	39,765	181,780
1977	January	1,850		1,391	732	1,096	3,219	14,517
	February	1,856		1,321	705	999	3,025	14,443
	March	1,887		1,817	958	1,297	4,072	19,400
	April	1,907		1,405	818	1,059	3,282	15,523
	May	1,982		1,382	877	1,150	3,409	16,702
	June	2,008		1,720	952	1,270	3,942	18,767
	July	2,023		1,304	724	1,022	3,050	14,529
	August	2,066		1,400	961	1,179	3,540	16,838
	September	2,084		1,924	1,105	1,288	4,317	19,333
	October	2,101		1,562	1,024	1,254	3,840	18,000
	November	2,113		1,785	1,091	1,447	4,323	19,537
	December	2,141		1,875	1,387	1,569	4,831	21,365
	AVERAGE	2,001	TOTAL**	18,912	11,378	14,692	44,982	210,848
1978	January	2,128		1,184	783	1,233	3,200	15,394
	February	2,135		1,486	851	1,239	3,576	16,933
	March	2,158		1,499	1,247	1,420	4,166	20,392
	April	2,198		1,369	971	1,112	3,452	17,559
	May	2,249		1,209	1,004	1,166	3,379	17,189
	June	2,286		1,812	1,071	1,489	4,372	21,115
	July	2,307		NA	NA	NA	NA	NA
	AVERAGE (7 months)	2,209	TOTAL** (6 months)	8,567	5,930	7,671	22,168	108,662

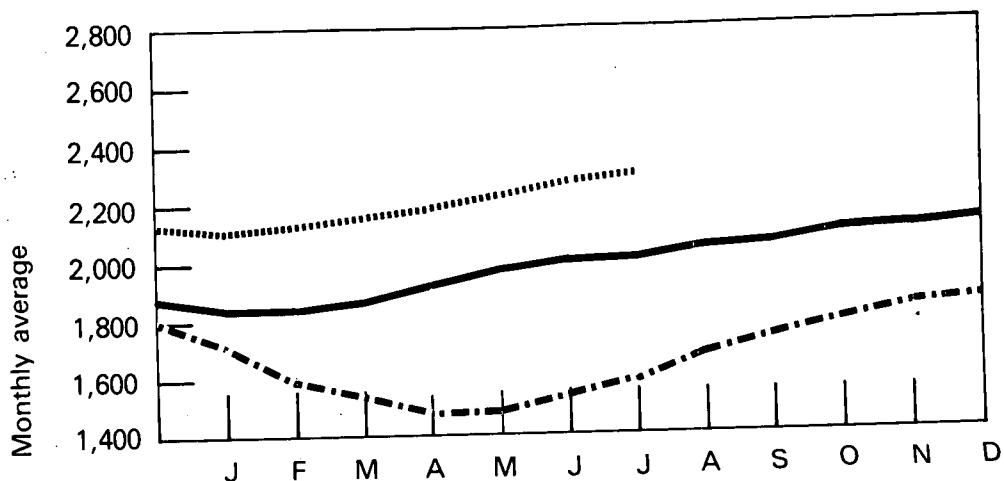
*Excludes service wells and stratigraphic and core tests.

**Totals reflect subsequent data revisions and therefore may not agree with cumulative monthly data.

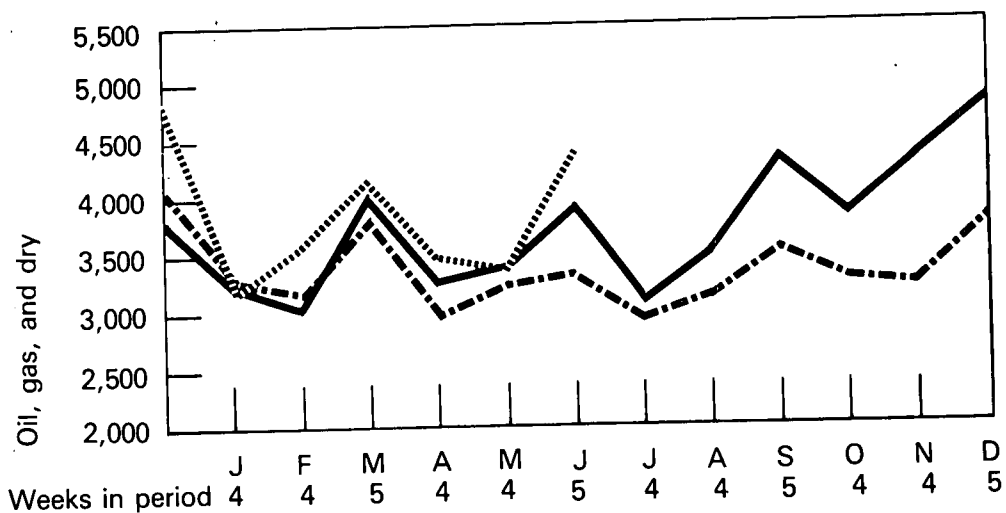
NA=Not available.

Sources: Rotary Rigs: Hughes Tool Company "Rotary Rigs Running - By State;" Wells: American Petroleum Institute "Monthly Drilling Report" and "Quarterly Review of Drilling Statistics for the United States."

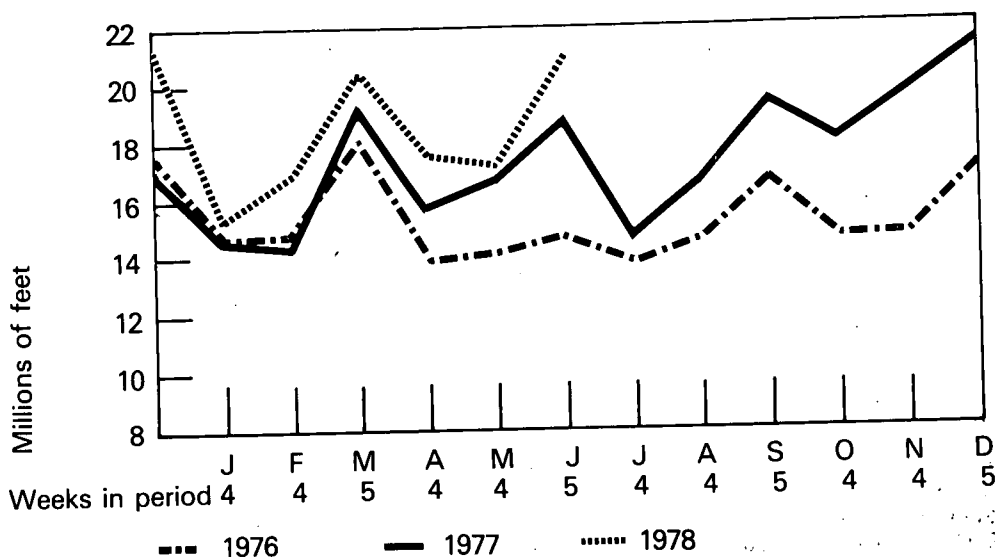
Rotary Rigs in Operation



Total Wells Drilled



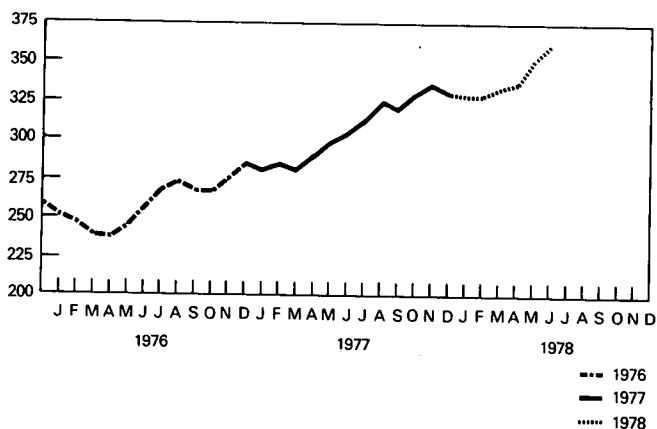
Total Footage of Wells Drilled



Oil and Gas Exploration and Development (Continued)

		Crews Engaged in Seismic Exploration			Line Miles of Seismic Exploration		
		Offshore	Onshore	Total	Offshore	Onshore	Total
		Monthly average			Monthly average		
1972	Year	12	239	251	10,306	9,333	19,639
1973	Year	23	227	250	21,579	10,597	32,175
1974	Year	31	274	305	28,482	13,219	41,701
1975	Year	30	254	284	25,773	12,558	38,331
1976	Year	25	237	262	18,859	11,910	30,769
1977	Year	27	281	308	NA	NA	NA
1976	January	20	232	252			
	February	17	232	249			
	March	18	222	240			
	April	17	221	238			
	May	21	226	247			
	June	29	229	258			
	July	30	240	270			
	August	33	242	275			
	September	28	240	268			
	October	21	246	267			
	November	25	250	275			
	December	27	259	286			
1977	January	26	254	280			
	February	27	259	286			
	March	22	260	282			
	April	26	266	292			
	May	29	272	301			
	June	31	274	305			
	July	30	285	315			
	August	31	295	326			
	September	29	291	320			
	October	28	302	330			
	November	26	309	335			
	December	26	303	329			
1978	January	26	302	328			
	February	23	305	328			
	March	20	314	334			
	April	21	315	336			
	May	21	330	351			
	June	26	336	362			
AVERAGE (6 months)		23	317	340			

Total Seismic Crews



NA=Not available.

Source: Society of Exploration Geophysicists "Monthly Seismic Crew Count" and annual reports published in *Geophysics*.

Price

Crude Oil

The average prices of domestic crude oil purchased by refiners in May 1978 was \$10.60 per barrel (including transportation costs), \$1.39 above the price 1 year earlier.

The average cost of imported crude oil purchased by refiners was \$14.50 per barrel (including transportation costs to U.S. refineries) in May, 12 cents below the average price 1 year earlier.

The composite refiner acquisition cost of domestic and imported crude oil was \$12.36 per barrel (including transportation costs) in May, up 49 cents from the price 1 year earlier.

First sale prices during May for the various categories of crude oil produced domestically remained about the same as their April levels.

Motor Gasoline

Preliminary data from the U.S. Department of Energy retail motor gasoline survey indicate that, nationally, leaded regular gasoline at full serve pumps sold for an average of 62.5 cents per gallon in May 1978, which is 0.6 cent above the price in April. The price for unleaded regular gasoline at full serve pumps increased 0.8 cent to 66.9 cents per gallon, which was 4.4 cents above the price for leaded regular gasoline at full serve pumps. Self serve leaded and unleaded regular gasoline prices were 58.2 and 62.9 cents per gallon, respectively.

On a regional basis, average selling prices for leaded regular gasoline at full serve pumps ranged from 61.0 cents in Region 6 (0.4 cent above the revised April price) to 67.3 cents in Region 9 (0.5 cent above the April price). At self serve pumps leaded regular gasoline prices ranged from 54.9 cents in Region 6 (0.9 cent higher than the revised April price) to 62.9 cents in Region 10 (1.0 cent higher than the April price). The average price for unleaded regular gasoline at full serve pumps ranged from 64.8 cents in Region 6 (0.8 cent higher than the revised April price) to 71.6 cents in Region 9 (1.1 cents higher than the revised April price). At self serve pumps, this price ranged from 59.7 cents in Region 6 (1.1 cents higher than the revised April price) to 66.7

cents in Region 2 (1.0 cent higher than the revised April price).

The average price of full serve major brand leaded regular gasoline was 64.2 cents per gallon compared to 59.8 cents per gallon for full serve nonmajor brand leaded regular gasoline.

Aviation Fuels

The average retail price of kerosene-type aviation fuel increased by 0.1 cent in May to 38.6 cents per gallon. The price has increased a total of 3.5 cents from the price 1 year earlier.

Heating Oil

The average price of heating oil sold to residential customers decreased 0.3 cent in May to 48.3 cents per gallon. This was a 2.6 cent increase over the price a year ago and a 9.3 cent increase from May 1976, the last month this product was subject to price controls.

Residual Fuel Oil

The average retail price for all grades of No. 6 residual fuel oil in May was \$12.79 per barrel, an 8-cent decrease from the April price and a 63-cent decrease from the price 1 year earlier.

Liquefied Petroleum Gases

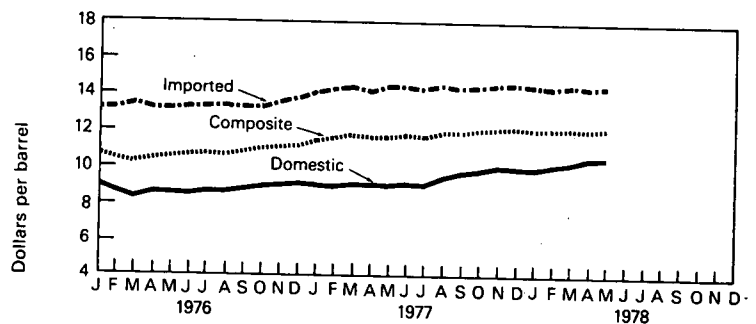
The average wholesale price of butane sold in May continued to decline to 22.8 cents per gallon. This price is 3.0 cents lower than the price 1 year earlier. The average price of propane also dropped in April to 23.7 cents per gallon, which is 0.8 cent lower than the price 1 year earlier.

Crude Oil

Refiner Acquisition Cost of Crude Petroleum*

		Domestic	Imported	Composite
		Dollars per barrel		
1974	AVERAGE	7.18	12.52	9.07
1975	AVERAGE	8.39	13.93	10.38
1976	January	9.14	13.27	10.76
	February	8.67	13.26	10.54
	March	8.48	13.51	10.44
	April	8.66	13.39	10.63
	May	8.62	13.41	10.66
	June	8.60	13.48	10.88
	July	8.72	13.51	10.97
	August	8.65	13.58	10.78
	September	8.95	13.47	11.08
	October	9.13	13.49	11.20
	November	9.23	13.58	11.26
	December	9.25	13.71	11.32
	AVERAGE	8.84	13.48	10.89
1977	January	9.23	14.11	11.64
	February	9.24	14.50	11.80
	March	9.32	14.54	11.88
	April	9.21	14.36	11.75
	May	9.21	14.62	11.87
	June	9.34	14.63	11.98
	July	9.32	14.44	11.90
	August	9.54	14.68	12.01
	September	9.75	14.50	12.01
	October	9.95	14.56	12.12
	November	10.17	14.61	12.18
	December	10.15	14.76	12.27
	AVERAGE	9.55	14.53	11.96
1978	January	10.14	14.52	12.13
	February	10.25	14.41	12.19
	March	10.46	14.57	12.23
	April**	R10.55	14.40	12.20
	May**	10.60	14.50	12.36

Crude Oil Refiner Acquisition Cost



*See Explanatory Note 13.

**Preliminary data.

R=Revised data.

Sources: 1974 through January 1976--Form FEO-96 "Monthly Cost Allocation Report;" February 1976 forward--FEA Form P110-M-1 "Refiners' Monthly Cost Allocation Report."

Domestic Crude Petroleum Prices at the Wellhead¹

[illegible]

¹ See Explanatory Note 14.

² See Definitions.

³ Stripper oil was exempt from price controls beginning September 1, 1976. From February through August 1976 stripper oil was subject to upper tier price ceilings.

⁴ The actual domestic average price represents the average price at which all domestic crude oil is purchased. The imputed domestic average price is the average price used to establish ceiling prices for domestic crude oil in accordance with the provisions of the Energy Conservation and Production Act. It is calculated as the weighted average of lower tier, upper tier, and an imputed stripper crude oil price. The imputed stripper crude oil price is equal to \$11.63 per barrel plus the difference between the composite price of crude oil in August 1976 (excluding stripper oil) and the composite price of crude oil in the month of measurement (excluding stripper oil).

⁵ Alaskan North Slope (ANS) crude oil prices are treated as Upper Tier for determining the applicable wellhead ceiling prices. ANS is included in both the Actual Domestic Average and the Imputed Domestic Average price determinations.

* The Naval Petroleum Reserves (NPR) are exempt from pricing regulations but have been reported here as Upper Tier prior to July 1977. NPR is included in the Actual Domestic Average price determinations, but not in the Imputed Domestic Average.

⁷ Preliminary data based on early reports.

R= Revised data.

Sources: 1974 through January 1976—Form FEA-90 "Crude Petroleum Production Monthly Report;" February 1976 forward—FEA Form P124-M-O "Domestic Crude Oil Purchasers Report."

Crude Oil (Continued)

Percentages of Domestic Production Sold at the Wellhead

		Old Oil	New Oil	Released	Stripper		
1975	January*	58	19	10	12		
	February*	61	17	9	12		
	March	60	18	10	12		
	April	61	17	9	12		
	May	62	17	8	13		
	June	63	16	8	13		
	July	62	16	8	14		
	August	63	16	7	14		
	September*	63	15	7	14		
	October	63	16	7	14		
	November	64	15	7	14		
	December	63	16	7	14		
	AVERAGE	62	16	8	13		
1976	January	54	21	10	15		
		Lower Tier	Upper Tier				
	February	56	30	—	14		
	March	57	29	—	14		
	April	57	29	—	14		
	May	57	29	—	14		
	June	56	29	—	15		
	July	56	30	—	14		
	August	56	30	—	14		
		Lower Tier	Upper Tier		Stripper		
	September	53.4	33.7		12.9		
	October	52.4	34.7		12.9		
	November	49.9	36.6		13.4		
	December	50.1	36.4		13.6		
	AVERAGE	54.4	31.5		14.1		
1977	January	50.6	36.7		12.7		
	February	49.5	37.2		13.3		
	March	49.2	37.2		13.6		
	April	49.5	36.9		13.6		
	May	48.4	37.6		14.0		
	June	48.8	37.0		14.2		
		Lower Tier	Upper Tier		Stripper	Alaskan North Slope**	Naval Petroleum Reserve**
	July	46.75	36.59		13.30	2.58	0.75
	August	43.31	36.65		13.32	5.79	0.91
	September	42.78	34.07		13.14	9.06	0.91
	October	42.23	34.58		12.92	9.09	1.15
	November	41.41	34.67		13.00	9.84	1.05
	December	40.42	34.61		13.00	10.92	1.03
	AVERAGE	45.92	36.11		13.32	4.14	0.51
1978	January	41.73	34.19		12.69	10.17	1.19
	February	40.78	34.35		13.68	9.94	1.23
	March	39.24	34.06		13.98	11.76	0.92
	April	R37.94	R34.04	R13.72	R13.26		1.02
	May***	38.06	34.09	13.78	13.07		.97

*Totals do not add to 100 due to rounding.

**See footnotes 5 and 6 of previous table.

***Preliminary.

R=Revised data.

Sources: January 1975 through January 1976—Form FEA-90 "Crude Petroleum Production Monthly Report;" February 1976 through August 1976—FEA Form P124-M-0 "Domestic Crude Oil Purchasers Report" for Lower Tier percentages and EIA estimates for Upper Tier percentages; September 1976 forward—FEA Form P124-M-0 "Domestic Crude Oil Purchasers Report."

Estimated FOB Cost of Imported Crude Petroleum from Selected Countries*

		Algeria	Canada	Indonesia	Iran	Libya	Nigeria	Saudi Arabia	U.A. Emirates	Venezuela
		Dollars per barrel								
1976	January	12.96	NA	12.77	11.61	12.34	12.85	11.67	11.91	11.15
	February	12.89	NA	12.77	11.48	12.34	12.85	11.64	11.93	11.61
	March	12.93	NA	12.78	11.45	12.34	12.94	11.71	11.91	11.26
	April	12.98	NA	12.74	11.58	12.39	12.95	11.72	11.94	11.38
	May	13.01	NA	12.76	11.58	12.45	12.97	11.61	11.85	11.10
	June	13.02	NA	12.74	11.62	12.40	12.97	11.64	11.92	11.03
	July	13.06	NA	12.79	11.64	12.64	13.11	11.58	11.89	10.87
	August	13.06	NA	12.75	11.61	12.52	13.08	11.58	11.92	11.19
	September	13.12	NA	12.73	11.66	12.66	13.06	11.55	11.97	11.53
	October	13.09	NA	12.79	11.63	12.70	13.25	11.65	11.92	11.41
	November	13.12	NA	12.71	11.62	12.74	13.25	11.62	11.96	11.58
	December	13.21	NA	12.82	11.78	12.83	13.36	11.65	12.16	11.77
1977	January	14.03	NA	13.41	12.03	13.64	14.11	11.92	12.53	12.91
	February	14.31	NA	13.43	12.36	13.89	14.24	12.04	12.33	13.30
	March	14.29	NA	13.58	12.79	13.87	14.32	12.24	12.51	12.98
	April	14.34	NA	13.55	12.79	13.98	14.51	12.23	12.53	12.62
	May	14.31	NA	13.57	12.78	13.93	14.56	12.23	12.56	12.60
	June	14.35	NA	13.55	12.68	13.94	14.55	12.21	12.44	12.53
	July	14.43	NA	13.61	12.78	13.99	14.52	12.40	12.70	12.48
	August	14.48	NA	13.63	12.80	13.95	14.54	12.56	13.15	12.37
	September	14.43	NA	13.64	12.73	13.99	14.56	12.72	13.20	12.55
	October	14.43	NA	13.65	12.79	13.93	14.48	12.70	13.22	12.72
	November	14.37	NA	13.65	12.75	13.88	14.53	12.73	13.33	12.71
	December	14.44	NA	13.61	12.71	13.85	14.45	12.77	13.27	12.56
1978	January	14.29	NA	13.67	12.62	13.77	14.18	12.70	13.23	12.73
	February	14.21	NA	13.62	12.68	13.91	14.18	12.78	13.18	12.61
	March	14.19	NA	13.62	12.68	13.75	14.13	12.80	13.20	12.86
	April	14.09	NA	13.61	12.68	13.62	13.91	12.74	13.23	12.54
	May	13.99	NA	13.51	12.65	13.59	13.90	12.71	13.05	12.13

NA= Not available.

*The FOB cost excludes all costs related to insurance and transportation. See Explanatory Note 15.

Source: FEA Form F701-M-0 "Transfer Pricing Report."

Crude Oil (Continued)

Estimated Landed Cost of Imported Crude Petroleum From Selected Countries*

		Algeria	Canada	Indonesia	Iran	Libya	Nigeria	Saudi Arabia	U.A. Emirates	Venezuela
		Dollars per barrel								
1975	AVERAGE	12.72	12.72	13.79	12.21	12.35	12.62	12.30	12.87	11.65
1976	January	13.56	12.95	13.89	13.01	13.52	13.61	13.18	13.50	11.60
	February	13.57	13.24	13.94	12.87	13.45	13.52	13.21	13.36	12.09
	March	13.83	13.30	13.94	12.77	13.36	13.62	13.18	13.37	11.71
	April	13.73	13.61	13.78	12.91	13.38	13.60	13.11	13.18	11.95
	May	13.47	13.62	13.84	12.82	13.59	13.62	13.05	13.39	11.61
	June	13.75	14.19	13.84	13.00	13.38	13.78	13.14	13.09	11.55
	July	13.77	13.79	13.80	12.76	13.53	13.81	13.02	13.45	11.44
	August	13.91	13.78	13.78	13.09	13.51	13.87	13.03	13.23	11.77
	September	14.03	13.70	13.80	12.78	13.72	13.82	12.87	13.44	11.98
	October	13.81	13.71	13.84	12.73	13.83	13.99	12.87	13.22	11.84
	November	13.84	13.59	13.77	12.58	13.73	13.95	13.01	13.18	12.01
	December	14.14	13.52	13.75	12.69	13.79	14.11	13.02	13.29	12.19
	AVERAGE	13.81	13.57	13.82	12.82	13.58	13.80	13.04	13.30	11.80
1977	January	14.80	13.92	14.42	13.16	14.64	14.97	13.22	13.56	13.29
	February	15.18	13.74	14.57	13.56	15.12	15.12	13.32	13.46	13.76
	March	15.08	14.34	14.64	13.94	14.88	15.13	13.50	13.80	13.41
	April	15.21	14.02	14.70	13.95	15.12	15.37	13.41	13.78	13.19
	May	15.20	14.94	14.59	13.94	14.91	15.40	13.49	13.85	13.10
	June	15.34	14.49	14.63	13.81	14.92	15.37	13.39	13.72	13.06
	July	15.29	13.91	14.75	13.84	14.88	15.39	13.64	14.20	13.02
	August	15.24	14.24	14.65	13.99	14.70	15.25	13.72	14.36	12.82
	September	15.29	14.14	14.62	13.77	14.99	15.34	14.01	14.41	13.08
	October	15.41	14.00	14.67	13.83	14.81	15.31	13.85	14.56	13.16
	November	15.05	14.52	14.73	13.88	14.73	15.23	13.94	14.19	13.11
	December	15.25	14.27	14.58	13.95	14.81	15.21	R13.99	14.48	12.99
1978	January	15.01	14.37	14.60	13.91	14.63	14.88	13.93	14.40	13.00
	February	14.91	14.31	14.53	13.75	14.85	14.90	13.96	14.07	12.93
	March	14.74	13.56	14.56	14.06	14.62	14.89	14.07	14.44	13.22
	April	14.91	13.50	14.61	13.90	14.43	14.63	13.85	14.42	12.89
	May	14.70	14.39	14.50	13.94	14.56	14.72	13.86	14.20	12.49

*See Explanatory Note 16.

R=Revised data.

Source: FEA Form F701-M-O "Transfer Pricing Report."

		Entitlement Price* (Dollars)	National Old Oil (or Domestic Crude Oil) Supply Ratio	Crude Oil Entitlement Benefit* (Dollars)
1976	January	8.09	.309	2.50
	February	7.85	.352	2.76
	March	7.89	.358	2.82
	April	7.85	.356	2.79
	May	7.82	.356	2.78
	June	7.91	.328	2.59
	July	7.80	.314	2.45
	August	8.02	.319	2.56
	September	7.80	.296	2.31
	October	7.84	.293	2.30
	November	7.90	.273	2.16
	December	7.97	.263	2.10
1977	January	8.30	.266	2.21
	February	8.53	.267	2.28
	March	8.71	.273	2.38
	April	8.69	.285	2.48
	May	8.77	.280	2.46
	June	8.65	.273	2.36
	July	8.68	.258	2.24
	August	8.75	.266	2.33
	September	8.75	.250	2.19
	October	8.78	.250	2.20
	November	8.61	.239	2.06
	December	8.65	.233	2.02
1978	January	8.61	.240	2.07
	February	8.48	.230	1.95
	March	8.47	.225	1.91
	April	8.35	.218	1.82
	May	8.26	.197	1.63

*See Definitions.
Source: DOE.

Unrecouped Costs for Refined Products for 30 Largest Refiners¹

		Distillate ²	Motor Gasoline	Aviation Jet Fuel ³	Other Products	Total
Millions of dollars						
1975	January	254	431	—	672	1,357
	February	300	418	—	790	1,508
	March	282	452	—	966	1,700
	April	302	485	—	807	1,594
	May	292	370	—	771	1,433
	June	284	266	—	785	1,334
	July	233	219	—	624	1,075
	August	280	344	—	583	1,208
	September	347	335	—	661	1,342
	October	338	245	—	673	1,255
	November	426	275	—	796	1,497
	December	446	211	—	826	1,483
1976	January	336	242	131	515	1,224
	February	279	336	145	456	1,216
	March	263	316	163	456	1,198
	April	237	398	180	524	1,339
	May	264	632	161	446	1,503
	June	—	628	135	349	1,112
	July	—	587	129	384	1,100
	August	—	679	125	352	1,156
	September	—	619	134	340	1,093
	October	—	733	151	372	1,256
	November	—	796	168	368	1,332
	December	—	723	139	317	1,179
1977	January	—	901	166	325	1,392
	February	—	1,038	187	303	1,528
	March	—	956	180	287	1,423
	April	—	1,029	194	343	1,566
	May	—	967	224	351	1,542
	June	—	957	234	344	1,535
	July	—	869	210	391	1,470
	August	—	764	279	455	1,498
	September	—	784	186	500	1,470
	October	—	879	248	511	1,638
	November	—	904	218	538	1,660
	December	—	818	185	470	1,473
1978	January	—	1,055	191	420	1,666
	February	—	1,265	198	435	1,898
	March	—	1,065	175	378	1,618
	April	—	R1,013	R170	R400	R1,583
	May ⁴	—	846	181	503	1,530

R=Revised data.

¹Beginning with February 1977, data for only 29 refiners are included in this table due to the merger between Skelly Oil Company and Getty Oil Company.

²Includes No. 2 heating oil and No. 2 diesel fuel only. After May 1976, reporting of the distillate bank is no longer required due to decontrol of middle distillates.

³Prior to January 1976 refiners were not required to maintain separate banks for aviation jet fuel.

⁴Preliminary.

Source: FEA Form P110-M-1 "Refiners' Monthly Cost Allocation Report."

Motor Gasoline

Leaded Regular Gasoline—Full Serve

		Average Retail Dealer Selling Price	Average Retail Dealer Margin
		Cents per gallon, including tax	
1975	January	52.4	9.0
	February	52.5	9.0
	March	52.6	8.8
	April	53.5	8.6
	May	54.3	8.3
	June	55.6	8.1
	July	58.7	8.4
	August	59.2	8.4
	September	59.3	8.2
	October	58.9	8.2
	November	58.4	8.2
	December	58.0	8.1
	AVERAGE	56.2	8.4
1976	January	57.7	8.1
	February	57.1	8.3
	March	56.6	8.3
	April	56.6	8.0
	May	57.4	7.4
	June	59.0	7.4
	July	59.6	7.4
	August	60.1	7.4
	September	60.2	7.6
	October	60.2	7.6
	November	60.0	7.8
	December	59.9	7.9
	AVERAGE	58.7	7.8
1977	January	59.9	7.9
	February	60.7	7.9
	March	61.3	7.8
	April	62.2	8.1
	May	62.9	7.9
	June	63.4	8.1
	July	63.4	8.3
	August	63.4	8.4
	September	63.3	8.6
	October	63.2	8.8
	November	63.1	8.7
	December	63.3	9.0
	AVERAGE	62.6	8.3
1978	January	61.7	NA
	February	61.6	NA
	March	61.7	NA
	April	R61.9	NA
	May*	62.5	NA

Leaded Regular Gasoline—Self Serve

	Average Retail Dealer Selling Price	Average Retail Dealer Margin
	Cents per gallon, including tax	
	NA	NA
	NA	NA
	NA	NA
	NA	NA
	NA	NA
	NA	NA
	NA	NA
	NA	NA
	NA	NA
	55.4	5.5
	54.9	5.3
	55.1	5.4
	54.7	5.4
	53.8	5.4
	53.2	5.3
	53.2	4.9
	54.4	4.5
	56.3	4.8
	56.6	4.6
	56.7	4.4
	56.5	4.3
	56.5	4.4
	56.4	4.5
	56.1	4.5
	55.4	4.8
	56.2	4.5
	57.1	4.4
	57.7	4.4
	58.4	4.4
	58.9	4.2
	59.3	4.3
	59.2	4.4
	58.8	4.2
	58.5	4.2
	58.2	4.2
	58.1	4.0
	58.2	4.2
	58.2	4.3
	57.2	NA
	57.1	NA
	57.0	NA
	R57.2	NA
	58.2	NA

*Preliminary data.

NA = Not available.

Sources: Lundberg Survey, Inc. for 1975 through 1977; EIA-8, "Retail Motor Fuels Service Station Survey" for January 1978 forward.

Motor Gasoline (Continued)

Unleaded Regular Gasoline—Full Serve

Unleaded Regular Gasoline—Self Serve

		Average Retail Dealer Selling Price	Average Retail Dealer Margin		
		Cents per gallon, including tax			
1975	January	NA	NA	NA	NA
	February	56.1	NA	NA	NA
	March	56.2	NA	NA	NA
	April	57.1	NA	NA	NA
	May	57.9	NA	NA	NA
	June	58.8	NA	NA	NA
	July	61.5	NA	NA	NA
	August	62.0	NA	NA	NA
	September	62.1	NA	NA	NA
	October	62.1	NA	NA	NA
	November	62.0	NA	NA	NA
	December	61.4	NA	NA	NA
	AVERAGE	59.8	NA	NA	NA
1976	January	61.2	NA	NA	NA
	February	60.6	NA	NA	NA
	March	60.1	NA	NA	NA
	April	60.4	NA	NA	NA
	May	61.1	NA	NA	NA
	June	62.9	NA	NA	NA
	July	63.2	NA	NA	NA
	August	63.9	NA	NA	NA
	September	64.0	NA	NA	NA
	October	64.0	NA	NA	NA
	November	63.9	NA	NA	NA
	December	63.9	NA	NA	NA
	AVERAGE	62.5	NA	NA	NA
1977	January	64.0	NA	NA	NA
	February	65.0	NA	NA	NA
	March	65.4	NA	NA	NA
	April	66.1	NA	NA	NA
	May	66.7	NA	NA	NA
	June	67.2	NA	NA	NA
	July	67.3	NA	NA	NA
	August	67.0	9.5	63.7	6.5
	September	67.0	9.5	63.7	6.5
	October	67.0	9.7	63.6	6.6
	November	67.0	9.6	63.4	6.4
	December	67.2	9.9	63.6	6.7
	AVERAGE	66.4	9.6	63.6	6.5
1978	January	65.8	NA	61.6	NA
	February	65.7	NA	61.8	NA
	March	65.8	NA	61.8	NA
	April	66.1	NA	62.0	NA
	May	66.9	NA	62.9	NA

*Preliminary data.

NA = Not available.

R = Revised data.

Sources: Lundberg Survey, Inc. for 1975 through 1977; EIA-8, "Retail Motor Fuels Service Station Survey" for January 1978 forward.

Leaded Premium Gasoline—Full Serve

Average
Retail
Dealer
Selling
Price

Average
Retail
Dealer
Margin

Cents per gallon, including tax

1975	January	57.1	NA
	February	57.3	NA
	March	57.5	NA
	April	58.2	NA
	May	59.0	NA
	June	60.3	NA
	July	63.1	NA
	August	63.6	NA
	September	63.8	NA
	October	63.4	NA
	November	63.2	NA
	December	62.9	NA

AVERAGE 60.9 NA

1976	January	62.7	NA
	February	62.1	NA
	March	61.6	NA
	April	61.6	NA
	May	62.4	NA
	June	63.9	NA
	July	64.6	NA
	August	65.2	NA
	September	65.3	NA
	October	65.2	NA
	November	65.2	NA
	December	65.0	NA

AVERAGE 63.8 NA

1977	January	65.2	NA
	February	66.1	NA
	March	66.8	NA
	April	67.6	NA
	May	68.4	NA
	June	68.9	NA
	July	68.9	NA
	August	68.9	9.9
	September	68.9	10.0
	October	68.9	10.1
	November	68.9	10.1
	December	69.1	10.2

AVERAGE 68.1 10.1

1978	January	67.7	NA
	February	67.7	NA
	March	68.0	NA
	April	68.3	NA
	May	69.0	NA

Leaded Premium Gasoline —Self Serve

Average
Retail
Dealer
Selling
Price

Average
Retail
Dealer
Margin

Cents per gallon, including tax

NA	NA
NA	NA
NA	NA
NA	NA
NA	NA
NA	NA
NA	NA
NA	NA
NA	NA
NA	NA
NA	NA
NA	NA

NA NA

59.6	NA
58.9	NA
58.4	NA
58.5	NA
59.6	NA
61.4	NA
61.8	NA
62.0	NA
61.9	NA
61.9	NA
61.9	NA
61.6	NA

60.7 NA

61.7	NA
62.7	NA
63.3	NA
64.1	NA
64.8	NA
65.2	NA
65.2	NA
65.8	7.2
65.8	7.3
65.7	7.3
65.6	7.3
65.8	7.4

64.7 7.3

63.5	NA
64.0	NA
63.9	NA
R64.3	NA
65.3	NA

*Preliminary data.
NA = Not available.
R=Revised data.

Sources: Lundberg Survey, Inc. for 1975 through 1977; EIA-8, "Retail Motor Fuels Service Station Survey" for January 1978 forward.

Motor Gasoline (Continued)

Average Retail Dealer Selling Prices for Major and Nonmajor Retail Dealers—April and May 1978

Leaded Regular Gasoline—Full Serve

Cents per gallon, including tax

	Selling Price	
	Apr	May*
Major	R63.5	64.2
Nonmajor	R59.3	59.8
National Average	R61.9	62.5

Unleaded Regular Gasoline—Full Serve

Cents per gallon, including tax

	Selling Price	
	Apr	May*
Major	67.3	68.1
Nonmajor	R62.9	63.5
National Average	66.1	66.9

Leaded Regular Gasoline—Self Serve

Selling Price

	Apr	May*
Major	R58.5	59.3
Nonmajor	R56.2	57.0
National Average	R57.2	58.2

Unleaded Regular Gasoline—Self Serve

Selling Price

	Apr	May*
Major	R63.8	64.5
Nonmajor	R59.7	60.3
National Average	62.0	62.9

Leaded Premium Gasoline—Full Serve

Selling Price

	Apr	May*
Major	69.5	70.2
Nonmajor	R65.1	65.8
National Average	68.3	69.0

Unleaded Premium Gasoline—Full Serve

Selling Price

	Apr	May
Major	R70.4	**
Nonmajor	70.5	**
National Average	R70.4	**

Leaded Premium Gasoline—Self Serve

Selling Price

	Apr	May*
Major	R66.6	67.3
Nonmajor	61.8	62.5
National Average	R64.3	65.3

Unleaded Premium Gasoline—Self Serve

Selling Price

	Apr	May
Major	**	**
Nonmajor	**	**
National Average	**	**

*Preliminary data.

**Insufficient data.

R = Revised data.

Source: EIA-8 "Retail Motor Fuels Service Station Survey."

Average Regional Retail Dealer Selling Prices for Full Serve Leaded Regular and Unleaded Regular Gasoline—April and May 1978

DOE Region**	Leaded Regular		Unleaded Regular	
	Cents per gallon, including tax		Cents per gallon, including tax	
	Apr	May*	Apr	May*
1	R61.1	61.8	65.3	66.0
2	60.8	61.4	R65.1	65.8
3	62.0	62.6	R65.9	66.5
4	R61.6	62.1	65.9	66.9
5	61.5	62.1	65.7	66.6
6	R60.6	61.0	R64.0	64.8
7	R60.8	61.6	R64.9	65.7
8	R64.0	64.9	67.3	68.3
9	66.8	67.3	R70.5	71.6
10	R64.7	65.6	R68.6	69.3
National Average	R61.9	62.5	66.1	66.9

Average Regional Retail Dealer Selling Prices for Self Serve Leaded Regular and Unleaded Regular Gasoline—April and May 1978

DOE Region**	Leaded Regular		Unleaded Regular	
	Cents per gallon, including tax		Cents per gallon, including tax	
	Apr	May*	Apr	May*
1	57.3	58.3	62.4	63.4
2	60.3	60.9	65.7	66.7
3	57.6	58.5	63.6	64.4
4	56.4	57.5	61.1	62.1
5	57.4	58.2	61.0	62.2
6	54.0	54.9	58.6	59.7
7	57.2	58.3	60.8	62.3
8	57.3	58.3	60.4	61.3
9	60.7	62.0	65.4	66.4
10	61.9	62.9	65.5	66.3
National Average	57.2	58.2	62.0	62.9

Average Regional Retail Dealer Buying Prices for Leaded Regular and Unleaded Regular Gasoline—April and May 1978

DOE Region**	Leaded Regular		Unleaded Regular	
	Cents per gallon, including tax		Cents per gallon, including tax	
	Apr	May*	Apr	May*
1	54.7	55.7	R57.9	58.7
2	53.9	54.5	56.5	57.5
3	R54.1	55.2	R57.0	57.9
4	53.3	54.0	56.2	57.1
5	R53.5	54.6	R56.7	57.8
6	50.4	51.3	R53.4	54.2
7	R53.1	53.9	56.0	56.8
8	R53.4	54.2	56.4	57.1
9	R55.2	56.2	R57.6	58.6
10	R56.3	57.2	R58.9	59.9
National Average	R53.5	54.4	R56.5	57.4

*Preliminary data.

**DOE regions are defined in Explanatory Note 17.

R = Revised data.

Source: EIA-8 "Retail Motor Fuels Service Station Survey."

Motor Gasoline (Continued)

Average Refiner Retail Gasoline Selling Prices*

		Regular	Premium	Unleaded
		Cents per gallon, including tax		
1975	July	55.7	NA	57.4
	August	55.9	59.8	58.0
	September	55.6	59.5	57.6
	October	55.0	59.1	57.1
	November	54.1	58.5	56.3
	December	53.7	58.1	56.0
1976	January	53.5	57.9	55.8
	February	53.4	57.8	55.9
	March	52.3	56.6	54.6
	April	52.7	56.8	55.0
	May	54.1	58.2	56.3
	June	55.7	60.1	57.9
	July	55.9	60.3	58.4
	August	55.7	60.3	58.5
	September	55.6	60.1	58.1
	October	55.4	59.9	58.1
	November	55.2	59.8	57.9
	December	55.0	59.6	57.8
1977	January	54.9	59.5	57.7
	February	55.5	60.2	58.9
	March	56.0	61.0	59.5
	April	57.1	61.9	60.6
	May	57.7	62.7	61.4
	June	58.0	62.7	61.8
	July	58.2	63.2	61.8
	August	57.9	63.1	61.8
	September	57.6	62.9	61.5
	October	57.2	62.7	61.2
	November	57.0	62.6	61.1
	December	56.9	62.7	61.0
1978	January	56.8	62.6	60.9
	February	56.5	R62.4	60.7
	March**	56.5	R62.5	R60.7
	April**	56.8	62.9	61.0

NA = Not available.

*Retail refers to the price at which refiner-owned and operated retail stations sell gasoline to the consumer.

**Preliminary data.

Source: FEA Form P302-M-1.

Aviation Fuels

AVIATION FUELS (Cents per gallon)

		Aviation Gasoline		Naphtha-Type*	Kerosene-Type	
		Wholesale	Retail	Retail	Wholesale	Retail
1975	July	40.6	40.6	31.4	29.8	29.2
	August	41.3	42.1	30.8	32.1	29.5
	September	41.2	39.9	30.3	31.5	29.6
	October	41.1	41.2	30.2	31.7	30.0
	November	39.7	42.1	30.6	31.6	30.2
	December	40.9	40.9	30.7	31.9	30.5
1976	January	41.4	41.2	31.0	30.6	31.3
	February	41.2	42.0	31.1	31.1	31.2
	March	41.1	41.9	30.9	31.2	30.7
	April	41.2	42.5	30.5	31.9	30.5
	May	42.1	43.1	30.6	33.0	30.2
	June	42.6	42.3	31.5	32.1	30.3
	July	43.6	44.2	31.3	32.9	30.8
	August	43.7	44.1	31.7	32.1	31.1
	September	43.6	44.7	32.1	32.5	31.4
	October	43.6	43.8	32.1	32.5	31.9
	November	43.4	43.9	32.8	33.4	32.4
	December	43.5	43.7	32.9	34.7	32.2
1977	January	43.4	44.1	33.4	34.6	33.2
	February	44.7	45.0	34.0	37.1	34.1
	March	45.0	45.7	34.5	35.9	34.6
	April	46.0	47.2	34.3	35.9	34.9
	May	46.6	47.8	34.3	36.3	35.1
	June	46.7	47.6	35.1	36.8	35.7
	July	47.0	48.7	35.6	37.1	35.8
	August	47.9	50.1	35.5	36.6	36.0
	September	47.9	49.1	35.6	37.1	37.0
	October	48.1	49.0	35.7	37.3	37.3
	November	48.3	47.8	35.8	37.9	37.5
	December	47.8	48.1	36.2	37.2	37.8
1978	January	47.8	49.1	36.9	37.9	38.5
	February	48.3	48.4	36.5	38.3	38.2
	March	49.1	49.4	36.9	37.8	38.4
	April**	49.5	51.5	36.8	38.1	38.5
	May**	50.1	50.0	37.3	38.3	38.6

*Nearly all naphtha-type fuels are sold directly to the Defense Fuel Supply Center. Consequently, wholesale prices are not applicable.

**Preliminary data.

Note: Wholesale refers to the price of aviation fuel sold to refiners and resellers, including bulk plants, branded and unbranded jobbers, and aviation fuel distributors. Retail refers to the price of aviation fuel sold to ultimate consumers, including commercial airline and military accounts.

Source: FEA Form P302-M-1 "Petroleum Industry Monthly Report for Product Prices."

Heating Oil

Residential Heating Oil Prices*

		Average Selling Price**	Average Purchase Price**	Average Distributor Margin**
		Cents per gallon		
1974	AVERAGE	34.7	26.9	
1975	January	37.4	29.1	8.3
	February	37.0	28.7	8.3
	March	36.6	28.4	8.2
	April	36.1	29.3	6.8
	May	36.7	30.0	6.7
	June	37.1	30.3	6.8
	July	37.2	30.6	6.6
	August	38.0	31.2	6.8
	September	38.4	31.0	7.4
	October	39.3	31.8	7.5
	November	39.4	32.1	7.3
	December	40.1	32.4	7.7
	AVERAGE	37.7	31.2	
1976	January	40.2	32.0	8.8
	February	40.2	32.0	8.8
	March	39.4	31.5	9.2
	April	39.0	31.3	9.1
	May	39.0	31.4	8.6
	June	39.3	31.8	8.6
	July	39.3	32.3	8.0
	August	39.8	32.2	8.5
	September	40.2	32.6	8.7
	October	40.7	33.1	8.6
	November	41.9	33.4	9.1
	December	43.0	34.5	9.2
1977	January	44.4	35.8	9.3
	February	45.3	36.7	9.4
	March	45.8	37.0	9.5
	April	45.9	37.1	9.6
	May	45.7	37.1	9.5
	June	45.7	37.1	9.3
	July	45.8	37.2	9.3
	August	46.0	37.3	9.2
	September	46.2	37.4	9.4
	October	46.7	37.5	9.8
	November	47.6	37.3	10.2
	December	47.9	37.2	10.4
1978	January	48.5	38.1	10.5
	February	48.6	37.8	11.0
	March	48.6	37.6	11.1
	April	48.6	37.6	11.1
	May***	48.3	37.6	11.0

*See Explanatory Note 18.

**Average selling prices, purchase prices, and dealer margins represent sales for residential heating oil only.

***Preliminary data.

NA = Not available.

Sources: 1974 through December 1975—Form CLC-92 "No. 2 Heating Oil Monthly Price Adjustment Report;" January 1976 forward—FEA Form P112-M-1 "No. 2 Heating Oil Supply/Price Monitoring Report."

Heating Oil (Continued)

Refiners' Average Selling Prices to Resellers and Retailers

1976	January	31.1
	February	30.9
	March	30.4
	April	30.1
	May	30.3
	June	30.5
	July	30.9
	August	31.0
	September	31.2
	October	31.7
	November	32.5
	December	33.6
	ANNUAL	31.4
1977	January	34.7
	February	35.4
	March	35.9
	April	35.8
	May	35.7
	June	35.7
	July	35.8
	August	35.7
	September	35.5
	October	36.0
	November	36.3
	December	36.6
	ANNUAL	35.7
1978	January	36.8
	February	36.4
	March	36.2
	April	36.0
	May*	36.2

*Preliminary.

Residential Heating Oil Prices by Region

		Census Region									
		New England	Mid-Atlantic	South Atlantic	East North Central	East South Central	West North Central	West South Central	Mountain	Pacific	
		Cents per gallon									
1976	January	41.5	40.0	39.6	38.3	37.8	38.2	35.0	41.2	41.6	
	February	41.4	40.3	39.4	38.0	37.7	38.3	34.4	41.0	42.1	
	March	41.5	39.8	39.2	37.0	36.7	37.6	34.5	40.4	41.9	
	April	41.2	40.0	38.9	37.1	35.9	37.3	34.6	40.3	40.8	
	May	41.1	39.7	38.2	37.1	35.6	37.3	34.0	40.4	42.1	
	June	40.9	41.1	39.1	37.7	37.2	37.3	34.3	40.3	42.8	
	July	40.7	39.8	39.1	37.9	36.9	37.3	34.4	40.1	45.0	
	August	41.5	40.3	39.5	38.2	37.2	37.7	34.3	39.7	44.7	
	September	41.9	40.8	37.5	38.3	38.0	38.8	34.8	41.1	46.0	
	October	42.3	41.4	40.4	39.0	38.5	38.7	35.1	42.1	46.0	
	November	43.3	42.4	42.1	40.1	39.8	39.5	36.3	42.8	46.5	
	December	44.4	43.6	42.9	41.5	41.0	41.9	36.3	42.7	43.8	
1977	January	45.8	44.9	44.2	43.2	43.1	43.0	36.9	43.4	44.6	
	February	46.6	45.8	45.7	43.9	43.4	44.0	38.8	44.2	45.2	
	March	47.1	46.3	45.5	44.4	43.8	44.6	40.2	44.7	45.9	
	April	47.2	46.5	45.5	44.8	43.3	44.2	40.8	44.8	46.4	
	May	47.0	46.4	45.6	44.7	43.7	43.7	40.7	44.8	46.5	
	June	47.1	46.4	45.7	44.7	44.0	43.3	41.2	45.8	46.8	
	July	47.1	46.4	45.7	44.7	44.2	44.2	41.2	44.2	47.9	
	August	47.4	46.6	45.6	44.7	43.7	44.5	41.0	44.9	48.2	
	September	47.7	46.7	45.8	45.0	44.2	44.9	41.1	44.9	47.2	
	October	48.0	47.3	46.4	45.3	43.9	45.4	41.1	45.4	47.4	
		DOE Region*									
		1	2	3	4	5	6	7	8	9	10
1978	November	48.5	48.1	47.0	46.1	45.7	NA	44.2	45.4	44.9	47.4
	December	48.9	48.6	47.5	46.6	46.1	NA	44.5	45.7	44.5	47.3
	January	49.4	49.2	48.1	47.5	46.4	NA	44.5	45.2	44.7	47.4
	February	49.5	49.3	48.4	47.6	46.4	NA	45.2	45.5	45.6	47.5
	March	49.4	49.3	48.4	47.7	46.5	NA	44.4	45.0	47.0	47.8
	April	49.3	49.2	48.2	47.1	46.4	NA	44.6	45.0	45.1	47.6
	May**	49.3	49.1	47.7	46.7	46.3	NA	44.7	45.0	44.4	47.4

*DOE regions are defined in Explanatory Note 17.

NA=Not available. Data for Region 6 are based on a sample of less than four reporting firms.

R=Revised data.

Note: Average regional distributor purchase prices for heating oil for the period January 1975 through February 1976 are published on page 70 of the October 1977 issue of the *Monthly Energy Review*.

Source: FEA Form P112-M-1 "No. 2 Heating Oil Supply/Price Monitoring Report."

**Preliminary Data.

Diesel Fuel

Average Selling Prices and Margins for No. 2 Diesel Fuel*

		Selling Price		Margin	
		Truckstops	Service Stations	Truckstops	Service Stations
Cents per gallon, including tax					
1975	January	NA	50.6	NA	6.8
	February	49.7	50.2	7.0	7.3
	March	50.1	50.2	7.5	7.4
	April	50.5	50.6	7.4	7.5
	May	50.3	51.0	7.0	7.7
	June	51.4	51.4	7.5	7.9
	July	51.2	52.4	7.3	8.2
	August	52.1	52.6	8.1	8.9
	September	52.1	52.7	7.4	8.7
	October	51.8	53.0	6.2	7.7
	November	52.0	53.0	5.3	6.5
	December	51.7	52.4	5.3	6.7
1976	January	52.0	52.5	5.6	7.2
	February	52.1	52.0	6.0	7.3
	March	51.4	52.4	5.6	7.1
	April	51.1	52.8	5.8	7.8
	May	51.4	52.9	6.9	7.8
	June	52.0	53.3	7.0	7.7
	July	52.1	53.1	6.4	7.1
	August	52.3	53.2	6.0	7.0
	September	52.2	53.1	5.7	6.8
	October	52.4	53.1	5.8	6.5
	November	52.9	53.3	6.1	6.4
	December	53.1	53.5	5.7	5.9
1977	January	53.9	54.3	4.9	5.3
	February	55.3	55.6	5.5	5.9
	March	56.0	56.4	5.7	6.2
	April	56.6	56.7	6.5	6.7
	May	56.9	57.1	6.5	6.8
	June	57.3	57.4	7.1	7.2
	July	57.3	57.3	7.2	7.2
	August	57.0	57.2	6.7	7.2
	September	56.8	57.3	6.5	7.1
	October	56.9	57.2	6.4	6.9
	November	56.9	57.3	6.5	6.7
	December	57.4	57.5	6.6	6.9

*See Explanatory Note 19.

NA=Not available.

Source: Lundberg Survey, Inc.

No. 1 Diesel Fuel Prices

		Wholesale	Retail
		Cents per gallon, excluding tax	
1975	July	30.1	37.7
	August	30.8	38.2
	September	31.5	36.9
	October	33.1	35.4
	November	33.3	35.0
	December	34.2	35.5
1976	January	33.8	37.1
	February	33.6	35.3
	March	33.9	34.8
	April	34.2	35.4
	May	34.5	37.5
	June	34.7	37.9
	July	35.0	38.1
	August	36.0	38.2
	September	35.3	37.7
	October	36.3	36.4
	November	35.7	37.0
	December	35.5	36.7
1977	January	37.1	37.8
	February	38.4	39.2
	March	39.0	39.6
	April	39.7	40.6
	May	39.5	41.7
	June	40.2	41.2
	July	40.3	41.3
	August	40.9	41.3
	September	39.0	41.1
	October	40.1	39.8
	November	40.9	40.4
	December	39.5	41.4
1978	January	39.8	41.3
	February	39.6	41.6
	March	39.6	41.0
	April*	R40.2	42.5
	May*	40.3	42.3

*Preliminary.

R=Revised data.

Note: Wholesale refers to the price of diesel fuel sold to other refiners and resellers, including branded jobbers, unbranded jobbers, and commercial accounts. Retail refers to the price at which company-owned and -operated retail dealers sell to consumers.

Source: FEA Form P302-M-1 "Petroleum Industry Monthly Report for Product Prices."

RESIDUAL FUEL OIL
(Dollars per barrel)

BUNKER "C"

NO. 5				NO. 6								BUNKER "C"	
				0.0 to 0.3 percent sulfur		0.31 to 1.0 percent sulfur		Greater than 1.0 percent sulfur		Total			
				Whole- sale	Retail	Whole- sale	Retail	Whole- sale	Retail	Whole- sale	Retail	Whole- sale	Retail
1975	July	10.19	11.28	11.57	12.86	10.90	12.05	10.25	10.59	10.66	11.70	7.88	10.54
	August	10.19	11.04	11.53	13.22	10.85	12.34	9.72	10.53	10.49	11.89	8.76	10.43
	September	10.58	11.07	11.75	12.94	10.63	11.65	9.87	10.52	10.48	11.52	8.93	10.29
	October	10.15	11.12	11.50	12.98	10.37	12.09	9.75	10.38	10.30	11.69	8.88	10.31
	November	10.90	11.27	12.21	12.96	10.33	12.03	9.90	10.34	10.47	11.68	9.01	10.43
	December	10.83	11.64	11.89	12.87	10.37	11.83	9.65	10.06	10.24	11.42	9.07	10.15
1976	January	11.08	11.63	12.13	12.39	10.62	11.61	9.57	10.23	10.53	11.35	8.75	10.35
	February	10.55	11.57	12.42	12.78	10.87	11.84	9.70	10.35	10.73	11.52	8.53	10.27
	March	10.41	11.89	12.36	12.81	11.05	11.80	9.56	10.21	10.74	11.43	8.59	10.35
	April	10.21	11.58	11.44	12.34	10.86	11.77	9.53	10.28	10.38	11.43	8.66	10.12
	May	9.87	11.49	11.71	11.87	10.80	11.40	9.47	9.89	10.11	10.95	8.75	10.65
	June	9.91	11.23	11.71	12.24	10.33	11.36	9.73	10.03	10.12	11.04	8.57	10.10
	July	10.06	11.70	11.73	12.12	10.22	11.36	9.83	10.04	10.25	11.04	9.23	10.34
	August	9.78	11.48	11.85	12.29	10.45	11.46	9.61	10.22	10.20	11.20	8.93	9.98
	September	10.36	11.37	11.85	12.50	10.33	11.55	10.04	10.28	10.35	11.30	9.22	10.05
	October	10.40	11.86	11.96	12.85	11.08	11.99	10.00	10.73	10.75	11.82	9.57	10.81
	November	11.04	12.04	12.41	13.15	11.57	12.21	10.40	10.99	11.16	11.95	10.31	10.88
	December	11.49	12.64	13.18	13.29	11.80	12.76	11.04	11.48	11.87	12.44	9.95	11.24
1977	January	12.00	13.20	14.06	14.34	12.79	13.68	11.51	12.32	12.45	13.32	10.34	11.89
	February	12.28	13.63	14.00	14.60	12.91	14.06	12.04	12.74	12.69	13.71	10.24	12.00
	March	12.15	13.76	14.00	14.58	13.47	14.51	11.62	12.70	12.68	13.84	9.97	11.74
	April	11.62	13.26	12.88	14.63	13.05	14.10	11.27	12.50	12.04	13.61	10.14	11.75
	May	11.54	12.69	13.56	14.48	11.90	13.73	11.05	12.15	11.64	13.42	9.97	11.41
	June	11.25	13.10	13.12	14.28	11.88	13.27	11.10	11.93	11.72	13.02	10.30	11.39
	July	11.24	12.67	13.31	14.38	11.73	13.12	11.02	12.06	11.62	13.01	10.91	11.44
	August	11.61	12.75	13.32	14.15	11.83	13.08	11.89	12.01	12.06	13.00	11.08	11.58
	September	11.70	12.84	13.35	14.33	11.79	13.11	11.78	12.19	12.03	12.94	11.20	11.72
	October	11.52	13.14	13.38	14.30	11.69	13.15	11.71	12.33	12.10	13.15	10.98	11.87
	November	11.29	13.16	12.85	14.24	11.66	12.93	11.44	12.15	11.76	12.96	10.42	11.66
	December	11.64	13.53	12.87	13.95	11.38	12.60	10.77	11.95	11.28	12.70	11.27	11.37
1978	January	11.45	13.36	12.72	14.19	11.56	12.70	10.71	12.00	11.33	12.79	9.73	11.15
	February	11.75	13.35	12.20	14.05	11.64	12.42	10.58	11.75	11.25	12.53	9.66	10.84
	March	R11.41	13.62	R12.73	13.99	R11.94	12.75	10.48	11.70	11.36	12.63	R8.95	10.47
	April*	R10.77	13.52	R12.72	14.51	R12.26	12.97	R10.78	11.85	11.57	12.87	R8.90	10.83
	May*	11.20	13.66	12.60	14.21	11.96	12.92	10.86	11.74	11.70	12.79	9.66	11.07

*Preliminary.

R=Revised data.

Note: Wholesale refers to the price of residual fuel sold to other refiners and resellers, including bulk plants, branded and unbranded jobbers, and other residual dealers. Retail refers to the price at which residual fuel oil is sold to ultimate consumers such as utility, industrial, institutional, commercial, and residential accounts.

Source: FEA Form P302-M-1 "Petroleum Industry Monthly Report for Product Prices."

Propane and Butane

Wholesale Propane and Butane Prices*

		Propane	Butane
		Cents per gallon	
1975	July	17.9	17.5
	August	18.8	18.2
	September	19.8	19.7
	October	19.9	20.4
	November	20.2	20.5
	December	20.6	20.2
	AVERAGE (6 months)	19.7	19.4
1976	January	21.2	20.6
	February	21.0	21.6
	March	20.1	21.3
	April	19.4	20.9
	May	19.0	21.6
	June	19.5	21.4
	July	19.9	22.2
	August	20.2	22.3
	September	20.6	22.0
	October	20.9	22.7
	November	21.4	22.4
	December	22.1	23.6
	AVERAGE	20.6	21.9
1977	January	22.9	23.0
	February	24.0	24.3
	March	23.7	24.9
	April	23.6	24.2
	May	24.5	25.8
	June	24.5	25.6
	July	24.9	26.2
	August	25.5	26.1
	September	25.9	27.4
	October	26.8	26.3
	November	26.5	25.8
	December	26.7	25.8
1978	January	27.0	25.9
	February	26.5	25.1
	March	25.6	24.9
	April**	24.4	23.9
	May**	23.7	22.8

*Wholesale refers to the price at which refiners, resellers, retailers, and gas plants sell to one another, including sales to agricultural and industrial accounts. Excludes butane/propane mixtures.

**Preliminary data.

Source: FEA Form P302-M-1.

Natural Gas

Natural Gas Prices Reported by Major Interstate Pipeline Companies

		PURCHASES			SALES		
		From Domestic Producers	From Canadian and Mexican Sources	Total Purchases	To Industrial Users*	To Resellers**	Total Sales
Cents per thousand cubic feet							
1975	January	30.4	104.0	35.8	67.8	70.9	71.2
	February	29.5	105.9	35.2	70.1	74.0	74.3
	March	33.5	102.5	38.8	70.4	77.7	77.8
	April	32.8	102.8	38.3	71.1	82.3	81.9
	May	34.7	100.6	39.8	71.1	83.7	82.8
	June	35.3	98.9	40.2	72.2	85.1	83.9
	July	36.7	101.1	41.7	73.9	84.6	83.6
	August	35.5	141.0	43.3	73.4	86.5	85.1
	September	36.5	141.1	44.4	72.8	85.9	84.7
	October	36.0	140.1	44.3	77.2	85.9	85.4
	November	36.5	162.5	46.7	77.8	86.7	86.4
	December	35.8	161.8	45.9	80.7	87.6	87.5
1976	January	38.3	164.0	48.7	88.2	90.1	90.6
	February	39.7	165.3	50.1	88.2	93.8	94.1
	March	39.4	164.5	49.9	86.8	92.0	92.2
	April	40.5	164.3	51.5	89.0	96.5	96.4
	May	42.2	165.0	52.7	87.4	99.2	98.5
	June	43.7	166.6	54.0	89.8	99.4	98.8
	July	43.8	168.4	53.8	94.6	102.7	102.0
	August	56.4	167.7	65.7	98.2	105.3	104.6
	September	68.6	183.7	77.9	103.9	93.1	94.7
	October	57.6	190.1	69.3	106.7	105.8	106.2
	November	52.6	182.4	63.6	113.5	106.7	107.5
	December	54.0	189.4	65.7	133.1	117.8	118.6
1977	January	59.4	201.8	71.6	143.2	124.3	125.4
	February	63.4	199.7	76.4	130.6	130.4	131.0
	March	69.8	200.4	83.4	129.3	132.1	132.5
	April	R65.3	190.7	R76.5	R128.1	R131.0	131.1
	May	69.1	191.3	80.4	128.4	133.9	133.6
	June	69.2	189.1	79.6	125.6	135.1	134.2
	July	72.1	187.7	81.8	134.5	135.9	135.8
	August	71.1	185.5	81.5	133.9	134.0	134.0
	September	71.8	194.7	84.0	131.8	135.7	135.4
	October	74.2	211.9	87.4	133.9	135.6	135.6
	November	74.3	214.2	87.1	134.9	141.7	141.5
	December	73.9	216.5	86.8	138.5	132.2	133.1
1978	January	74.0	211.1	86.4	150.4	138.2	139.2
	February	76.3	212.7	89.3	158.2	141.5	142.8
	March	79.3	212.5	90.1	149.7	144.9	145.7
	April	80.3	222.0	92.5	149.9	147.7	148.2

*Represents direct sales by pipeline companies to industrial users. Does not include sales to industrial users by resellers.

**Includes the cost of gas to the distributing utility at entrance of distribution system or point of receipt.

R=Revised data.

Source: Federal Power Commission Form 11, "Natural Gas Pipeline Company Monthly Statement."

Natural Gas (Continued)

Intrastate Natural Gas Prices for Selected States by Type of Contract*

	California		Kansas		Louisiana		Oklahoma		Texas	
	New Contracts	Renegotiated or Amended	New Contracts	Renegotiated or Amended	New Contracts	Renegotiated or Amended	New Contracts	Renegotiated or Amended	New Contracts	Renegotiated or Amended
Cents per thousand cubic feet										
1975										
January	75.00	76.89	55.30	—	98.04	102.96	95.99	76.03	139.90	164.04
February	—	—	—	—	128.68	113.06	97.30	64.49	154.72	163.11
March	—	—	—	—	115.78	125.89	107.70	55.05	96.66	97.50
April	—	—	64.65	45.24	149.78	134.81	132.58	87.79	160.09	176.32
May	—	—	—	—	126.80	123.53	129.31	106.56	156.72	158.59
June	—	53.68	65.00	—	130.91	129.57	94.22	120.29	165.00	187.54
July	—	65.51	—	—	117.22	125.63	133.87	114.62	183.22	178.22
August	—	75.00	198.24	—	132.87	114.20	136.77	121.21	151.87	132.50
September	—	86.00	152.89	70.38	121.89	141.23	143.73	106.69	169.87	180.77
October	135.53	—	—	—	75.16	117.60	143.09	144.14	168.10	187.30
November	—	—	157.95	139.02	138.42	71.65	140.61	133.15	149.43	182.17
December	—	—	—	80.00	139.64	131.92	132.50	153.86	187.20	140.90
1976										
January	—	83.97	103.81	84.54	138.75	131.23	149.87	109.39	181.05	193.31
February	—	40.00	—	109.68	125.00	145.30	133.72	146.71	176.63	191.54
March	—	—	150.36	—	145.66	155.39	162.83	168.57	178.70	176.44
April	195.00	—	150.00	—	142.99	154.05	162.12	148.30	202.60	152.95
May	122.00	60.39	180.39	149.84	125.54	106.05	156.35	164.02	154.00	197.22
June	—	—	114.45	150.82	147.11	137.67	169.56	168.14	178.01	192.98
July	—	117.15	137.57	150.83	127.55	141.71	148.20	95.00	151.19	176.23
August	—	97.38	—	—	138.70	164.23	151.81	171.49	157.98	198.81
September	—	—	—	125.68	164.10	156.39	164.85	172.00	184.07	197.66
October	—	—	—	111.72	144.64	149.91	163.48	161.16	196.58	188.80
November	—	—	150.82	144.21	—	131.91	162.57	90.73	186.80	182.82
December	—	97.47	160.73	—	194.51	152.45	167.55	175.98	198.71	202.54
1977										
January	—	105.58	155.49	—	155.82	137.65	172.35	167.49	193.36	204.06
February	—	107.27	121.66	—	141.33	120.84	147.86	131.27	185.55	203.22
March	119.79	116.28	148.18	—	219.43	208.97	168.57	168.28	197.14	190.83
April	—	—	137.10	156.38	216.41	150.35	165.61	167.89	192.22	205.44
May	—	107.20	119.00	—	197.53	158.97	156.52	171.09	204.06	201.27
June	—	112.21	91.49	—	180.21	169.61	166.69	169.51	194.54	206.41
July	—	139.02	88.57	174.53	174.90	169.64	172.95	168.25	206.96	202.46
August	—	—	131.97	90.49	177.99	166.66	164.33	158.46	188.96	183.57
September	—	—	—	136.66	163.72	162.49	171.78	172.70	167.14	212.44
October	—	—	—	75.63	201.26	142.88	148.44	175.01	202.73	204.08
November	135.00	136.15	150.39	105.80	—	182.97	166.26	174.78	186.94	199.11
December	—	124.40	147.09	166.59	196.42	154.23	160.2	173.49	207.65	203.32
1978										
January	—	173.80	137.50	184.32	194.38	202.88	169.22	180.65	168.54	211.52
February	—	—	—	163.54	180.37	181.40	165.35	178.74	163.94	211.32
March	—	—	—	203.60	198.62	182.35	175.48	177.37	170.64	196.60

*Prices are for FERC jurisdictional natural gas companies selling more than 1 billion cubic feet per year in interstate commerce. Source: Federal Power Commission Form 45, "Summary of Intrastate Natural Gas Prices."

Natural Gas (Continued)

Average Retail Prices for Natural Gas Sold to Residential Customers for Heating Use

		Cents per thousand cubic feet
1975	January	141.2
	February	144.7
	March	146.1
	April	150.6
	May	153.7
	June	155.7
	July	154.7
	August	155.4
	September	159.4
	October	160.6
	November	166.2
	December	170.2
1976	January	171.4
	February	175.2
	March	177.0
	April	178.4
	May	180.8
	June	183.2
	July	184.5
	August	185.8
	September	191.2
	October	195.0
	November	198.3
	December	208.3
	AVERAGE	185.8
1977	January	213.8
	February	217.0
	March	219.9
	April	223.7
	May	227.0
	June	227.3
	July	229.9
	August	230.1
	September	230.4
	October	235.1
	November	238.4
	December	237.3
1978	January	241.6
	February	243.0
	March	247.0
	April	248.7
	May	255.2
	June	254.2

Source: Bureau of Labor Statistics.

Utility Fossil Fuels

U.S. Average Delivered Prices of Coal at Utilities

		Contract	Spot
		Dollars per short ton	
1975	January	14.57	28.12
	February	15.71	25.93
	March	15.68	25.02
	April	15.88	24.52
	May	16.45	23.78
	June	16.40	23.36
	July	16.06	22.35
	August	16.65	22.39
	September	16.76	22.46
	October	16.72	22.52
	November	16.79	22.50
	December	16.90	22.40
1976	January	16.53	21.75
	February	17.04	21.23
	March	17.65	21.36
	April	17.76	21.43
	May	18.12	21.17
	June	18.05	20.88
	July	17.93	21.00
	August	18.19	21.35
	September	18.55	21.46
	October	18.49	21.28
	November	18.26	21.56
	December	18.15	21.49
1977	January	17.87	21.93
	February	18.28	22.71
	March	18.75	23.27
	April	18.82	22.41
	May	18.97	23.73
	June	19.03	24.62
	July	19.35	25.13
	August	18.95	24.73
	September	19.75	26.14
	October	20.31	26.83
	November	20.51	27.01
	December	20.49	28.01
1978	January	16.94	30.27
	February	16.50	30.50

Source: Federal Power Commission Form 423.

Utility Fossil Fuels (Continued)

COST OF FOSSIL FUELS DELIVERED TO STEAM ELECTRIC UTILITY PLANTS

All Fossil Fuels*

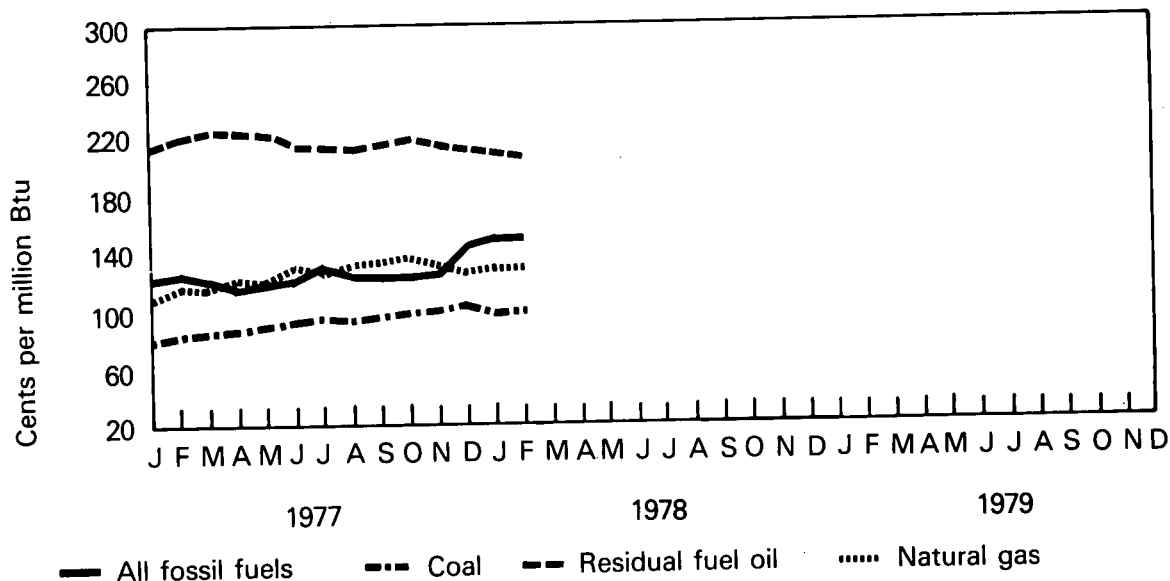
Region	1977												1978	
	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB
	Cents per million Btu													
New England	207.7	211.4	225.3	213.9	215.1	213.3	209.9	206.7	206.8	205.2	202.1	R198.9	196.5	196.5
Middle Atlantic	161.8	162.1	152.2	149.9	149.4	152.1	167.9	158.8	151.3	144.8	142.5	180.2	203.6	199.5
East North Central	104.1	102.7	104.0	102.6	103.9	107.3	109.7	105.2	106.5	108.8	111.6	134.8	172.2	184.6
West North Central	85.4	85.3	82.0	79.0	82.5	84.0	87.9	86.2	86.5	89.2	R87.4	99.1	102.4	110.9
South Atlantic	146.5	142.5	137.3	132.7	133.8	137.9	148.9	146.6	143.7	137.6	137.1	R156.2	169.0	172.8
East South Central	99.8	101.8	100.1	100.3	102.3	104.5	110.4	106.6	109.9	112.0	113.0	125.5	140.6	147.1
West South Central	113.6	119.8	116.9	117.5	117.2	124.3	123.2	122.5	123.2	121.3	R119.8	R120.9	129.4	130.9
Mountain	53.0	55.2	60.4	64.3	68.8	69.9	71.8	72.6	73.7	74.7	68.4	73.3	67.6	64.8
Pacific	219.2	213.6	209.8	217.6	219.0	212.6	221.2	223.8	221.2	238.7	221.9	R226.8	221.4	216.8
NATIONAL AVG.	126.8	128.4	123.5	122.0	123.1	125.1	133.2	129.4	128.6	127.5	125.6	R144.0	153.4	154.3

*See Explanatory Note 20.

R=Revised data.

Source: Federal Power Commission Form 423.

National Average



Coal

Region	1977												1978	
	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB
Cents per million Btu														
New England	127.6	126.8	127.5	127.9	128.1	130.1	130.6	133.1	134.0	122.4	136.6	137.5	143.2	143.5
Middle Atlantic	105.9	101.2	100.8	102.5	103.1	107.4	111.7	107.0	106.0	104.6	105.0	127.1	122.4	116.2
East North Central	90.7	91.5	94.1	93.9	94.3	95.5	99.8	97.3	99.5	101.7	104.7	116.3	134.9	138.5
West North Central	66.5	68.4	71.5	72.5	75.5	77.0	77.9	77.4	78.5	84.3	81.2	88.7	88.5	94.0
South Atlantic	105.4	106.5	108.1	108.4	110.9	113.9	119.2	115.9	121.1	122.0	122.8	133.0	129.4	129.4
East South Central	91.2	94.1	93.6	96.5	95.8	95.0	99.9	98.4	103.1	104.3	107.8	114.0	118.3	131.5
West South Central	58.8	61.1	64.3	60.2	60.3	63.9	59.2	62.1	64.4	65.2	72.0	68.7	74.0	83.5
Mountain	37.6	38.9	41.1	42.4	46.3	47.4	43.0	50.1	47.5	51.4	48.8	47.9	42.2	45.6
Pacific	77.6	80.5	74.0	70.8	70.9	71.2	71.7	71.1	71.3	71.4	70.6	70.5	71.5	71.2
NATIONAL AVG.	85.9	88.0	89.9	90.1	91.8	93.3	96.2	94.3	98.0	100.5	101.7	106.8	99.6	102.1

Residual Fuel Oil*

Region	1977												1978	
	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB
Cents per million Btu														
New England	213.6	223.5	231.7	218.5	223.4	216.2	212.5	211.3	210.2	210.8	R206.8	202.3	199.0	193.5
Middle Atlantic	220.5	235.8	237.2	230.8	227.7	223.1	220.5	218.5	220.8	225.8	213.2	R209.7	208.4	207.4
East North Central	247.5	267.7	257.8	256.3	250.9	248.6	247.1	241.6	264.7	256.5	R247.5	R248.3	256.4	254.1
West North Central	201.0	210.3	205.5	298.7	193.6	186.6	179.0	185.0	186.9	185.3	R187.2	R174.3	177.8	183.0
South Atlantic	212.4	213.7	222.8	217.8	211.7	210.1	207.2	199.2	211.0	211.4	R209.3	R205.1	203.6	198.7
East South Central	166.2	182.7	180.4	180.5	175.7	177.7	175.9	178.3	177.7	186.5	183.8	R185.2	180.7	182.0
West South Central	192.0	198.1	201.9	200.3	198.3	194.3	187.6	188.5	184.2	192.6	R192.2	R191.6	184.7	183.2
Mountain	201.0	210.9	220.9	220.6	224.9	215.3	232.5	230.7	216.4	214.3	R222.9	R223.3	218.9	221.3
Pacific	231.3	231.0	232.1	235.8	235.2	235.7	240.0	240.1	240.6	241.6	R241.3	242.2	243.4	242.7
NATIONAL AVG.	217.2	223.3	228.0	226.2	227.7	217.8	217.0	213.0	218.3	220.3	R217.2	R215.0	211.3	207.8

Natural Gas**

Region	1977												1978	
	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB
Cents per million Btu														
New England	200.1	200.1	200.1	200.1	195.9	193.9	185.8	187.2	188.1	185.3	187.9	198.2	222.1	222.1
Middle Atlantic	211.3	349.8	155.9	155.4	154.7	144.2	165.5	162.4	165.1	162.6	154.0	155.0	153.9	159.8
East North Central	186.5	174.7	170.6	184.7	176.7	177.3	183.5	185.9	183.7	182.3	168.4	176.2	168.4	269.3
West North Central	86.1	93.4	88.8	96.0	102.9	104.8	106.7	106.8	109.0	103.8	110.3	117.3	109.4	119.4
South Atlantic	80.4	112.1	93.6	85.7	76.2	74.4	91.1	100.9	91.7	94.2	102.5	94.6	93.9	98.4
East South Central	165.1	170.3	157.8	154.7	139.7	134.3	148.5	149.9	135.7	138.6	156.0	145.9	139.1	150.1
West South Central	108.1	114.6	111.2	113.7	116.5	122.1	122.5	123.7	123.7	122.5	120.1	120.2	129.0	128.5
Mountain	133.3	115.0	129.1	134.9	134.4	132.9	133.3	130.7	149.8	136.9	155.5	159.2	133.8	139.2
Pacific	196.8	189.2	181.0	204.5	208.9	200.5	211.0	218.8	217.9	219.7	220.6	225.4	212.4	208.6
NATIONAL AVG.	111.1	123.5	121.1	125.6	125.6	130.5	131.7	135.4	138.4	139.4	134.9	130.6	133.3	135.1

*See Explanatory Note 20.

**Includes small quantities of coke oven gas, refinery gas, and blast furnace gas.

R=Revised data.

Source: Federal Power Commission Form 423.

International

Petroleum Consumption

Total International Energy Agency petroleum consumption during February and March 1978 was 3.1 percent and 5.7 percent respectively, higher than during February 1977 and March 1977. This reflects primarily the severe weather conditions in both the United States and Western Europe.

During the first quarter of 1978, combined petroleum consumption in Western Europe's four major industrialized countries (West Germany, France, Great Britain, and Italy) was 8.8 million barrels per day compared to 8.3 million barrels per day during the first quarter of 1977, a 5.6 percent increase.

Crude Oil Production

Petroleum production by the Organization of Petroleum Exporting Countries (OPEC) averaged 28.2 million barrels per day in May 1978, about 800,000 barrels per day less than the April 1978 rate. Saudi Arabia accounted for much of the reduced OPEC production, falling from 8.0 million barrels per day in April to 7.3 million barrels per day in May. Most of the remaining decline in production came from other Arab members of OPEC. Arab OPEC production was 9.2 percent below the May 1977 production, continuing a downward trend that began in October 1977.

Total world production was 58.4 million barrels per day in May, nearly 1.0 million barrels per day less than in April, but only slightly less than the 58.8 million barrels per day produced in May 1977.

Petroleum Consumption

Petroleum Consumption for Major Free World Industrialized Countries

		Total IEA*	Japan	West Germany	France**	United Kingdom	Canada	Italy***
Thousands of barrels per day								
1973	AVG.	33,600	5,000	2,693	2,219	1,974	1,597	1,525
1974	AVG.	32,390	4,872	2,408	2,094	1,857	1,630	1,521
1975	AVG.	31,235	4,568	2,319	1,925	1,633	1,595	1,468
1976	Jan	35,100	4,941	2,464	2,436	1,679	1,785	1,775
	Feb	34,400	5,246	2,497	2,486	1,865	1,754	1,743
	Mar	34,300	5,165	2,747	2,381	1,879	1,747	1,641
	Apr	31,500	4,526	2,339	2,100	1,716	1,518	1,423
	May	29,900	4,218	2,320	1,796	1,417	1,509	1,253
	June	31,300	4,429	2,393	1,593	1,416	1,560	1,236
	July	31,100	4,416	2,624	1,629	1,346	1,531	1,355
	Aug	31,100	4,461	2,515	1,668	1,296	1,585	1,372
	Sept	32,200	4,517	2,521	1,974	1,501	1,514	1,604
	Oct	32,300	4,523	2,391	1,904	1,568	1,560	1,464
	Nov	35,900	5,160	2,700	2,236	1,750	1,822	1,393
	Dec	39,100	5,846	2,571	2,712	1,869	2,008	1,779
	AVG.	33,180	4,786	2,507	2,075	1,627	1,658	1,503
1977	Jan	37,700	5,433	2,393	2,519	1,830	1,797	1,696
	Feb	38,600	6,025	2,446	2,386	1,844	1,919	1,823
	Mar	35,000	5,539	2,523	2,109	1,818	1,664	1,573
	Apr	32,800	4,714	2,431	2,043	1,670	R1,523	1,326
	May	31,300	4,314	2,364	1,846	1,545	1,520	1,268
	June	32,900	4,484	2,475	1,715	1,477	R1,631	1,340
	July	31,800	4,716	2,382	1,349	1,321	1,499	1,251
	Aug	32,700	4,709	2,469	1,390	1,371	1,689	1,140
	Sept	33,400	4,742	2,567	1,783	1,580	1,539	1,502
	Oct	33,300	4,664	2,324	1,882	1,570	1,631	1,405
	Nov	34,300	5,093	2,649	2,181	1,925	1,683	1,605
	Dec	37,900	R5,800	2,719	2,512	1,903	1,896	1,817
	AVG.	34,300	5,015	2,478	1,973	1,665	1,665	1,476
1978	Jan	R36,700	R5,271	2,461	2,646	R1,852	R1,815	1,755
	Feb	39,800	R5,979	R3,013	2,601	R1,929	1,976	1,859
	Mar	37,000	5,657	2,610	2,237	1,867	1,697	1,570
	Apr	NA	NA	NA	2,055	NA	NA	1,328

*The 19 signatory nations of the International Energy Agency (IEA) are: Austria, Belgium, Canada, Denmark, Federal Republic of Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States.

**Not a member of IEA.

***Principal products only.

NA=Not available.

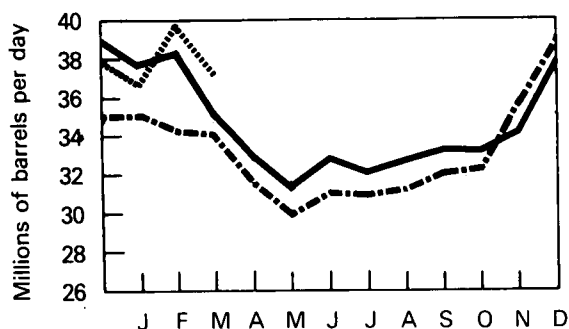
R=Revised data.

Note: Total IEA data represent domestic demand in the United States and sales of petroleum products for all other members. Sales exclude refinery fuel, refinery losses, and ocean bunkers. Experience has shown that this total IEA quantity is between 93 and 95 percent of total IEA consumption.

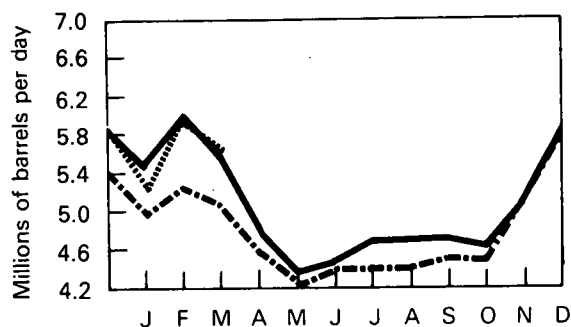
Source: Central Intelligence Agency, National Foreign Assessment Center, *International Energy Statistical Review*, 12 July 1978.

Petroleum Consumption

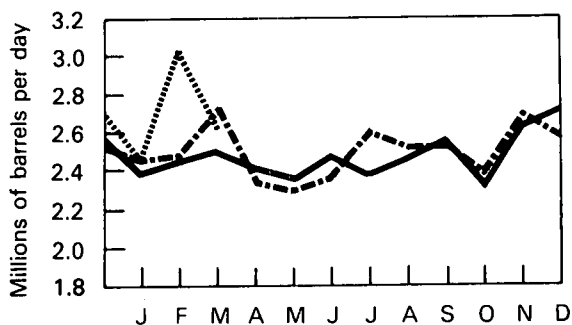
Total IEA



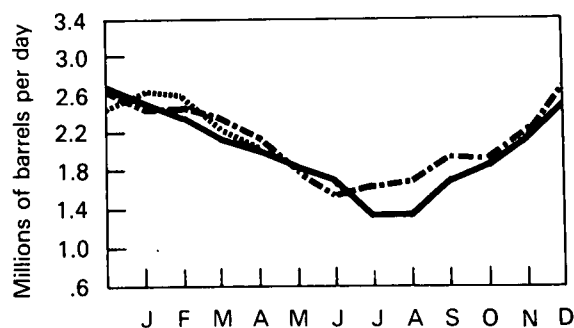
Japan*



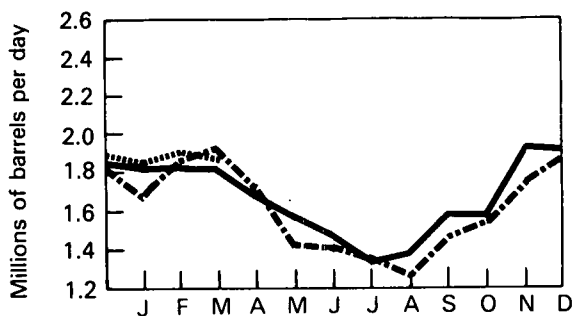
West Germany



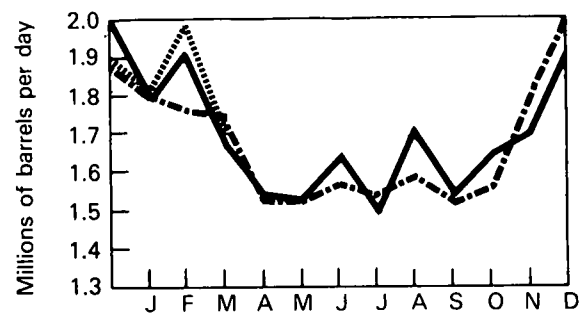
France**



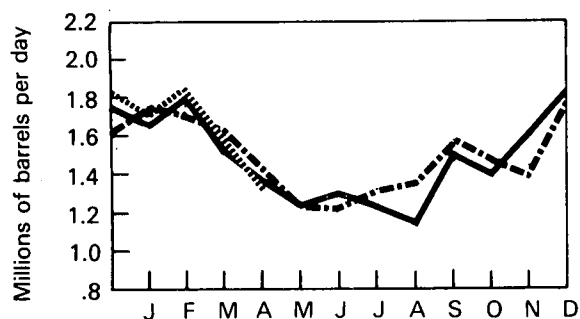
United Kingdom



Canada



Italy***



*Excludes liquefied petroleum gases and condensates.

**Not a member of IEA.

***Principal products only.

†Excludes the United States.

--- 1976
— 1977
..... 1978

Crude Oil Production

Crude Oil Production for Major Petroleum Exporting Countries—May 1978

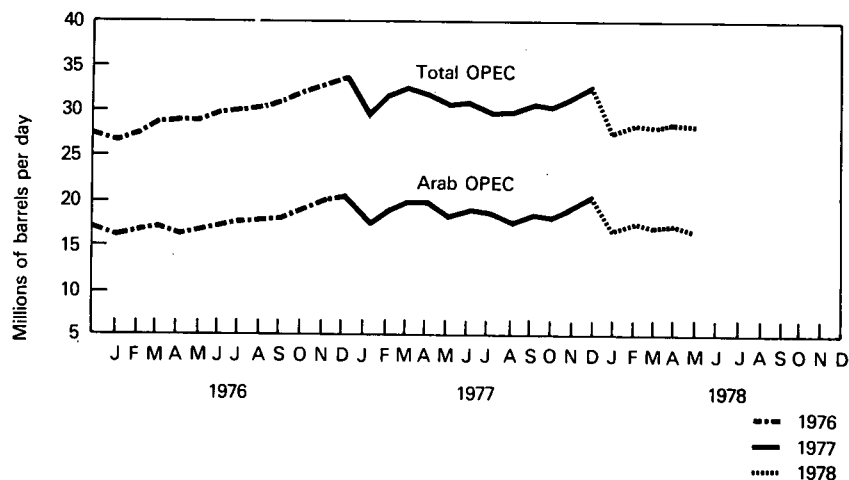
Country	Production							Maximum Sustainable Production Capacity	Production Shut in
	1972 Year	1973 Year	1974 Year	1975 Year	1976 Year	1977 Year	1978 May**	1978 May	1978 May
Thousands of barrels per day									
Algeria	1,040	1,070	960	960	990	1,040	1,000	1,080	7.4
Iraq	1,465	2,020	1,970	2,260	2,415	2,330	2,400	3,000	20.0
Kuwait*	3,283	3,020	2,545	2,085	2,145	1,970	1,810	3,300	45.2
Libya	2,239	2,175	1,520	1,480	1,935	2,080	1,900	2,300	17.4
Qatar	482	570	520	440	495	430	340	600	43.3
Saudi Arabia*	6,016	7,595	8,480	7,075	8,575	9,200	7,260	10,400	30.2
United Arab Emirates	1,202	1,535	1,680	1,665	1,935	2,010	1,880	2,375	20.8
Subtotal: Arab OPEC	15,727	17,985	17,675	15,965	18,490	19,060	16,590	23,055	28.3
Ecuador	78	210	175	160	185	180	210	225	6.7
Gabon	125	150	200	225	225	230	220	225	2.2
Indonesia	1,080	1,340	1,375	1,305	1,505	1,690	1,700	1,700	—
Iran	5,023	5,860	6,020	5,350	5,885	5,660	5,700	6,500	12.3
Nigeria	1,815	2,055	2,255	1,785	2,070	2,100	1,720	2,300	25.2
Venezuela	3,219	3,365	2,975	2,345	2,295	2,240	2,020	2,600	22.3
Subtotal: Non-Arab OPEC	11,340	12,980	13,000	11,170	12,165	12,100	11,570	13,550	14.6
TOTAL OPEC	27,067	30,965	30,675	27,135	30,655	31,160	28,160	36,605	23.1
Canada	1,540	1,800	1,695	1,460	1,300	1,320	1,200	1,800	33.3
Mexico	440	465	580	720	850	980	1,150	1,500	23.3
TOTAL OPEC, Canada, Mexico	29,047	33,230	32,950	29,315	32,805	33,460	30,510	39,905	23.5
TOTAL WORLD	50,550	55,755	55,875	52,990	57,340	59,520	58,420		

*Includes about one-half of the former Kuwait-Saudi Arabia Neutral Zone. Production in May 1978 amounted to approximately 320,000 barrels per day.

**Estimated.

Sources: Central Intelligence Agency, National Foreign Assessment Center, *International Energy Statistical Review*, 12 July 1978, National Energy Board of Canada, and U.S. Department of Energy.

OPEC Countries Crude Oil Production



Definitions

Base Production Control Level

1. Prior to February 1, 1976: the total number of barrels of domestic crude oil produced and sold from a particular property in the same month of 1972. If domestic crude oil was not produced and sold from that property in every month of 1972, the total number of barrels of domestic crude oil produced and sold from that property in 1972, divided by 12.

2. Effective February 1, 1976: the total number of barrels of old crude oil produced and sold from the property during calendar year 1975, divided by 365, and multiplied by the number of days in the particular month during 1975. A producer may elect to use the total number of barrels of crude oil produced and sold from the property during calendar year 1972, divided by 366, and multiplied by the number of days in the particular month during 1972.

Ceiling Price

The maximum permissible selling price, prior to February 1, 1976, for a particular grade of domestic crude oil in a particular field is the May 15, 1973, posted price plus \$1.35 per barrel.

Controlled Crude Oil

Crude oil that was domestically produced prior to February 1, 1976, subject to the ceiling price for crude oil. For a particular property which is not a stripper well lease, the volume of controlled oil equals the base production control level minus an amount of released oil equal to the new oil production from that property.

Crude Oil Domestic Production

Domestic crude oil production is measured at the wellhead and includes lease condensate, which is a natural gas liquid recovered from lease separators or field facilities.

Crude Oil Entitlement Value

The average value a refiner receives from the entitlement program for each incremental barrel of imported crude oil. It is calculated by multiplying the entitlement price by the National Old Oil Supply Ratio for November 1974 through January 1976 and by the National Domestic Crude Oil Supply Ratio for February 1976 forward.

Crude Oil Imports

The volume of crude oil imported into the 50 States and the District of Columbia, including imports from U.S. territories, but excluding imports of crude oil into the Hawaiian Foreign Trade Zone.

Crude Oil Input to Refineries

Total crude oil input to crude oil distillation units and other units for processing.

Crude Oil Stocks

Stocks of crude oil and lease condensate held at refineries, pipeline terminals, and on leases.

Cumulative Deficiency

A measure of the cumulative deficit of production below the base production control level after the first month in which new oil was produced and sold from a specific property.

Dealer Tankwagon (DTW) Price

The price at which a dealer purchases gasoline from a distributor or a jobber.

Distillate Fuel Oil

The lighter fuel oils distilled off during the refining process. Included are products known as ASTM grades Nos. 1 and 2 heating oils, diesel fuels, and No. 4 fuel oil. The major uses of distillate fuel oils include heating, fuel for on- and off-highway diesel engines, and railroad diesel fuel. Minor quantities of distillate fuel oils produced and/or held as stocks at natural gas processing plants are not included in this series.

Domestic Demand for Specific Refined Petroleum Products

A calculated value, computed as domestic production plus net imports (imports less exports), less the net increase in primary stocks. It, therefore, represents the total disappearance of refined products from primary supplies. (See definition for Domestic Demand for Total Refined Petroleum Products.)

Domestic Demand for Total Refined Petroleum Products

Total domestic demand for petroleum products is calculated as inputs to refineries, plus estimated refinery gain, plus hydrogen input, plus natural gas plant liquids production, plus direct use of crude as fuel, plus product imports, less product exports, plus or minus stock change of products. (See definition for Domestic Demand for Specific Refined Petroleum Products.)

Electricity Production

Production at electric utilities only. Does not include industrial electricity generation.

Entitlement Position

The monthly entitlement position of a refiner indicates whether he bought or sold entitlements in that month. An entitlement is the right to process "deemed old oil," which is the sum of a refiner's receipts of "old" oil and a fraction of his receipts of "upper tier" crude oil. This fraction is set monthly by ERA. A refiner must purchase entitlements for the amount of his "deemed old oil" receipts in excess of the national domestic crude oil supply ratio (NDCOSR). The NDCOSR, as calculated by ERA, reflects the differences in costs to refiners of "old" oil, "upper tier" crude oil, and imported crude oil.

Entitlement Price

The price of an entitlement, fixed by ERA, is the exact differential as reported for the month between the weighted average delivered cost per barrel to refiners of both imported crude oil and stripper crude oil, and the weighted average delivered cost per barrel to refiners of "old oil," less 21 cents.

Firm Natural Gas Service

High priority gas service in which the pipeline company is under contract to deliver a specified volume of gas to the customer on a non-interruptible basis. Residential and small commercial facilities usually fall into this category.

Full Serve

Motor vehicle services are provided by an attendant, such as: pumping gas, washing windows, checking under the hood, checking tire pressure, etc.

Full Service Station

A service station selling motor fuels and oils, tires, batteries and accessories (TBA), and performing motor vehicle repairs.

Interruptible Natural Gas Service

Low priority gas service in which the pipeline company has the contractual option to temporarily terminate deliveries to customers by reason of claim of firm service customers or higher priority users. Large commercial facilities, industrial users, and electric utilities usually fall into this category.

Jet Fuel

Includes both naphtha-type and kerosene-type fuels meeting standards for use in aircraft turbine engines. Although most jet fuel is used in aircraft, some is used for other purposes, such as for generating electricity in gas turbines.

Landed Cost

The cost of imported crude oil equal to actual cost of the crude oil at point of origin plus transportation cost to the United States.

Limited Work Authorization

A Limited Work Authorization (LWA) may be granted by the Atomic Safety and Licensing Board of the Nuclear Regulatory Commission to an applicant who wants to construct a nuclear powerplant providing that the project has been cleared for all requirements of the National Environmental Protection Act and that the geologic and topographic suitability of the reactor site has been found satisfactory. The LWA allows an applicant to proceed with site excavation, install temporary construction and service facilities, construct service roads, and erect structures and components not subject to normal quality assurance inspections. It may save a utility from 6 to 8 months in total construction time. However, because the ultimate approval of a construction permit is based on all evidence

revealed during the licensing hearings, the successful award of an LWA is no guarantee that a construction permit will also be granted.

Line Miles of Seismic Exploration

The distance along the earth's surface that is covered by seismic traverses.

Lower Tier Crude Oil

Old crude oil.

Lower Tier Ceiling Price Determination

The lower tier ceiling price for a particular grade of domestic crude oil in a particular field is the sum of (1) the highest posted price at 6 a.m., local time, May 15, 1973, for transactions in that grade of crude oil in that field; or if there was no posted price in that field for that grade of domestic crude oil, the related price for that grade of domestic crude oil which is most similar in kind and quality in the nearest field for which prices were posted; and (2) the amount mandated in the Monthly Price Adjustment Schedules published by ERA in the *Federal Energy Guidelines* (Part 212.77-13847 Appendix).

Major Brand

Lundberg Survey, Inc., defines major brand as an integrated company that produces, refines, transports, and markets in Interstate Commerce under its own brand(s) in 10 or more States.

Motor Gasoline Production

Total production of motor gasoline by refineries, measured at the refinery outlet. Relatively small quantities of motor gasoline are produced at natural gas processing plants, but these quantities are not included.

Motor Gasoline Stocks

Primary motor gasoline stocks held by gasoline producers. Stocks at natural gas processing plants are not included.

National Domestic Crude Oil Supply Ratio

Old oil receipts adjusted for upper-tier receipts, small refiner bias, and other minor adjustments, divided by crude runs to stills adjusted for residual fuel entitlements.

National Old Oil Supply Ratio

Old oil receipts, adjusted for small refiner bias and exemptions, divided by crude runs to stills adjusted for entitlements issued for imported refined products.

Natural Gas Liquids (NGL)

Products obtained from natural gasoline plants, cycling plants and fractionators after processing the natural gas. Included are ethane, liquefied petroleum (LP) gases (propane, butane, and propane-butane mixtures), natural gasoline, plant condensate, and minor quantities of finished products such as gasoline, special naphthas, jet fuel, kerosene, and distillate fuel oil.

New Crude Oil

1. Prior to February 1, 1976: the total number of barrels of domestic crude oil produced and sold in a specific month, less the base production control for that month and less the current cumulative deficiency.
2. Effective February 1, 1976: the total number of barrels of domestic crude oil produced and sold in a specific month, less the property's base production control level for that month and less the current cumulative deficiency since February 1, 1976.

Nonbranded Independent Marketer

A firm which is engaged in the marketing or distribution of refined petroleum products, but which (1) is not a refiner, (2) is not a firm which controls, is controlled by, is under common control with, or is affiliated with a refiner (other than by means of a supply contract), and (3) is not a branded independent marketer.

Old Crude Oil

1. Prior to February 1, 1976: the total number of barrels of crude oil produced and sold from a property in a specific month, less the total number of barrels of new crude oil for that property in that month and less the total number of barrels of released crude oil for that property in that month.
2. Effective February 1, 1976: the total number of barrels of crude oil produced and sold from a property in a specific month, less the total number of barrels of new crude oil for that property in that month.

Primary Stocks of Refined Petroleum Products

Stocks held at refineries, bulk terminals, and pipelines. They do not include stocks held in secondary storage facilities, such as those held by jobbers, dealers, independent marketers, and consumers.

Property

Prior to August 26, 1976, a property was defined as the right to produce domestic crude oil, which arises from a lease or from a fee interest. This definition was interpreted to apply only to a surface lease. In August 1976 the definition of a property was changed so that a producer may treat as a separate property each separate and distinct producing reservoir subject to the same right to produce crude oil, provided that such reservoir is recognized by the appropriate governmental regulatory authority as a producing formation that is separate and distinct from, and not in communication with, any other producing formation. Although this new definition was not implemented until August 26, 1976, it was made effective retroactively to February 1, 1976. (F.R. 36171, August 26, 1976)

Refined Petroleum Products Imports

Imports (into the 50 States and the District of Columbia) of motor gasoline, naphtha-type jet fuel, kerosene type jet fuel, kerosene, distillate fuel oil, residual fuel oil, liquefied petroleum gases, petrochemical feedstocks, special naphtha, lubricants, waxes, asphalt, plant condensate, and

unfinished oils. Included are imports of refined products for bonded and military use, and imports from U.S. territories and the Hawaiian Foreign Trade Zone.

Refiner Acquisition Cost

The cost to the refiner, including transportation and fees, of crude petroleum. The composite cost is the average of domestic and imported crude costs and represents the amount of crude cost which refiners may pass on to their customers.

Released Crude Oil

An amount of crude oil produced from a property in a particular month prior to February 1, 1976, which is equal to the total number of barrels of new crude oil produced and sold from that property in that month. The amount of released crude oil for a property in a particular month shall not exceed the base production control level for that property in that month.

Residual Fuel Oil

The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are boiled off in refinery operations. Included are products known as ASTM grades Nos. 5 and 6 oil, heavy diesel oil, Navy Special Oil, Bunker C oil, and acid sludge and pitch used as refinery fuels. Residual fuel oil is used for the production of electric power, for heating, and for various industrial purposes.

Rotary Rig

Machine used for drilling wells that employs a rotating tube attached to a bit for boring holes through rock.

Self Serve

Motor vehicle services are not provided by attendants.

Separative Work Unit (SWU)

The measure of work required to produce enriched uranium from natural uranium. Enrichment plants separate natural uranium feed material into two groups, an enriched product group with a higher percentage of U-235 than the feed material and a depleted tails group with a lower percentage of U-235 than the feed material. To produce 1 kilogram of enriched uranium containing 2.8 percent U-235, and a depleted tails assay containing 0.3 percent U-235, it requires 6 kilograms of natural uranium feed and 3 kilograms of separative work units (3 SWU).

Startup Test Phase of Nuclear Powerplant

A nuclear powerplant that has been licensed by the Nuclear Regulatory Commission to operate, but that is in the initial testing phase during which 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 powerplant in the rate base calculation.

Stripper Well Property

A property whose average daily production of crude oil per well (excluding condensate recovered in nonassociated production) did not exceed 10 barrels per day during any preceding consecutive 12-month period beginning after December 31, 1972.

Synthetic Natural Gas (SNG)

A product resulting from the manufacture, conversion, or reforming of petroleum hydrocarbons which may be easily substituted for or interchanged with pipeline quality natural gas.

Uncontrolled Crude Oil

That portion of domestic crude oil production including new, released, and stripper oil which, before February 1, 1976, could be sold at a price exceeding the ceiling price.

Unrecouped Costs

Costs which have not been recovered in the current month's product prices but which have been "banked" for later use.

Upper Tier Crude Oil

Effective February 1, 1976, upper tier crude oil included new crude oil and crude oil produced from a stripper well lease. Effective September 1, 1976, upper tier crude oil includes new crude oil only.

Upper Tier Ceiling Price Determination

The upper tier ceiling price for a particular grade of domestic crude oil in a particular field is (1) the highest posted price on September 30, 1975, for transactions in that grade of crude oil in that field in September 1975, or if there was no posted price in that field for that grade of domestic crude oil, the related price for that grade of domestic crude oil which is most similar in kind and quality in the nearest field for which prices were posted; less (2) the amount mandated in the Monthly Price Adjustment Schedules published by ERA in the *Federal Energy Guidelines* (Part 212.77 .13847 Appendix).

Well

A hole drilled for the purpose of finding or producing crude oil or natural gas or providing services related to the production of crude oil or natural gas. Wells are classified as oil wells, gas wells, dry holes, stratigraphic tests, or service wells. This is a standard definition of the American Petroleum Institute.

Explanatory Notes

1. Domestic production of energy includes production of crude oil and lease condensate, natural gas (wet), coal (anthracite, bituminous, and lignite), electricity output from hydroelectric and nuclear powerplants and industrial hydroelectric power production as well as geothermal power. The volumetric data were converted to approximate heat contents (Btu-values) of the various energy sources using conversion factors listed in the Units of Measure.

2. U.S. imports of fossil fuels include imports of crude oil, refined petroleum products, natural gas (dry), coal (bituminous and lignite) and coke. Does not include imports of petroleum for the Strategic Petroleum Reserve.

3. Domestic consumption includes domestic demand for refined petroleum products, consumption of coal (anthracite, bituminous, and lignite, and net coke imports) and natural gas (dry), electricity output from hydroelectric and nuclear powerplants, industrial hydroelectric power production, net imports of electric power, and production of geothermal power. Approximate heat contents (Btu-values) were derived using conversion factors listed in the Units of Measure. Electricity net imports were converted using the Btu-content of hydroelectric power. 1978 electricity net imports were estimated on the basis of the net import level for 1977.

4. U.S. exports of fossil fuels include exports of coal (bituminous and lignite), coke, crude oil, refined petroleum products, and natural gas (dry).

5. Domestic demand figures for natural gas liquids (NGL) as reported by BOM and reproduced in this publication do not include amounts utilized by refineries for blending purposes in the production of finished products, principally gasoline. Use of NGL at refineries is reported in a separate column. The production series cited in this publication shows both NGL produced at processing plants and liquefied gases produced at refineries (LRG). NGL produced at refineries is extracted from crude oil and hence, to avoid double counting, should not be included in calculations of total U.S. production of petroleum liquids. The stock series shown in this volume includes natural gas liquids held as stocks at both natural gas processing plants and at refineries and LRG held at refineries.

6. Domestic consumption of natural gas includes the quantities sold to consumers plus the gas used for plant and pipeline fuel, after the natural gas liquids have been extracted. All monthly consumption data are estimated. Marketed production of natural gas includes gross withdrawals from the ground less the quantities used for repressuring and the amount vented and flared, before the natural gas liquids have been extracted.

7. The Federal Energy Administration and Federal Power Commission began the coordinated collection and compilation of monthly underground storage information from all underground storage operators in the United States in October 1975. Initial storage information reported was for the month of September 1975. Comparable

monthly information for total U.S. storage operations is not available for prior periods.

The total gas in storage is the total volume of gas (base gas plus working gas) in storage reservoirs as of the end of the month. Base gas is the volume of gas, including all native gas in place at the time of conversion to storage, needed as a permanent inventory to maintain adequate reservoir pressures and deliverability rates throughout the withdrawal season. Base gas includes the volumes which will not be recoverable upon termination of storage operations. Working gas is the volume of gas above the designated base gas level available for withdrawal.

8. Bituminous coal and lignite consumption is calculated by EIA from information provided by the Federal Energy Regulatory Commission, Department of Commerce, and reports from selected manufacturing industries and retailers. Domestic consumption data in this series, therefore, approximate actual consumption. This is in contrast to domestic demand reported for petroleum products, which is a calculated value representing total disappearance from primary supplies.

Bituminous coal and lignite production is calculated from the number of railroad cars loaded at mines, based on the assumption that approximately 60 percent of the coal produced is transported by rail. Production data are estimated by EIA from Association of American Railroads reports of carloadings.

9. Quantities of uranium are measured by various units at different stages in the fuel cycle. At the mill, quantities are usually expressed as pounds or short tons of U_3O_8 . After the conversion stage, the units of measure are either metric tons (MT) of UF_6 or metric tons of uranium (MTU). The later designation expresses only the elemental uranium content of UF_6 .

Following the enrichment stage, the same units are used, but the U-235 content has been enhanced at the expense of loss of material. At the fabrication stage, UF_6 is changed to UO_2 , and the standard unit of measure is the MTU. We have chosen to present all uranium quantities as MTU; conversion factors to other units are given in the Units of Measure section.

10. The units used to describe power generation at nuclear plants are based on the watt, which is a unit of power. (Power is energy produced per unit of time.) As with fossil-fueled plants, nuclear plants have three design power ratings. The thermal rating (expressed in thermal megawatts) is the rate of heat production by the reactor core. The gross electrical rating (expressed in electrical megawatts, MWe) is the generator capacity at the stated thermal rating of the plant. The net electrical rating (also expressed in MWe) is the power available as input to the electrical grid after subtracting the power needed to operate the plant. (A typical nuclear plant needs 5 percent of its generated electricity for its own operation.)

The electrical energy produced by a plant is expressed either as megawatt hours (MWh) or kilowatt hours (KWh). Tables in the nuclear section show generated electricity as average electrical power. This enables a more direct comparison to design capacity and to previous

months' performances. To obtain the quantity of electricity generated during a given time period (in kilowatt hours), multiply the average power level (in kilowatts) by the number of hours during that period.

The energy extracted from uranium fuel is expressed as thermal megawatt days per metric ton of uranium (MWD/MTU). The production of plutonium in the fuel rods is expressed as kilograms of plutonium per metric ton of discharged uranium (kg/MTU).

11. The Residential and Commercial Sector consists of housing units, non-manufacturing business establishments (e.g., wholesale and retail businesses), health and educational institutions, and government office buildings. The Industrial Sector is made up of construction, manufacturing, agriculture, and mining establishments. The Transportation Sector consists of both private and public passenger and freight transportation, as well as government transportation, including military operations. The Electric Utilities Sector is made up of privately- and publicly-owned establishments which generate electricity primarily for resale.

12. Degree-days relate demand for energy to outdoor air temperature. Cooling degree-days are defined as deviations of the mean daily temperature at a sampling station above a base temperature equal to 65°F by convention. Heating degree-days are deviations of the mean daily temperature below 65°F. For example, if a weather station recorded a mean daily temperature of 78°F, cooling degree-days for that station would be 13 (and heating degree-days, 0). A weather station recording a mean daily temperature of 40°F would report 25 heating degree-days (and 0 cooling degree-days).

There are two degree-day data bases maintained by the National Oceanic and Atmospheric Administration. Weekly degree-day information is based on mean daily temperatures recorded at about 200 major weather stations around the country. Monthly data are based on readings at more than 8,000 weather stations. The temperature information recorded at these weather stations is used to calculate statewide degree-day averages based on population. The State figures are then aggregated into Petroleum Administration for Defense (PAD) Districts and into the national average, also using a population weighting method.

Weekly weather reports are available much sooner than the monthly reports, and therefore the degree-day information published in the *Monthly Energy Review* is normally derived from the weekly source.

13. The refiner acquisition cost of domestic crude petroleum is the price paid by refiners for domestic crude petroleum, unfinished oils, and natural gas liquids and includes transportation costs from the well head to the refinery. The refiner acquisition cost of imported crude petroleum is the average landed cost of imported crude petroleum to the refiner and represents the amount which may be passed on to the consumer. It incorporates transportation costs and fees (including the supplemental import fees) and any other costs incurred in purchasing and shipping crude oil to the United States.

14. Prior to February 1976, the domestic crude petroleum wellhead price represented an estimate of the average of posted prices; after February 1976, the wellhead price represents an average of first sale prices. For the 2-year period January 1974 through January 1976, the old oil price at the wellhead was originally estimated to be \$5.25 per barrel based on representative postings. This estimate was revised in July 1976 after a survey of crude oil purchasers was implemented and more complete data became available. Estimates of the average old oil price given in the table for months prior to February 1976 are based on prices for old oil reported on new oil leases, and were not derived from a statistically valid sample of old oil leases.

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

16. The estimated landed cost of imported crude petroleum from selected countries does not represent the total cost of all imported crude. Prior to March 1975, imported crude costs to U.S. company-owned refineries in the Caribbean were not included in the landed cost, and costs of crude petroleum from countries which 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.

17. The U.S. Department of Energy Regions are defined as follows:

- Region 1—Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island;
- Region 2—New York, New Jersey, Puerto Rico, Virgin Islands;
- Region 3—Pennsylvania, Maryland, West Virginia, Virginia, District of Columbia, Delaware;
- Region 4—Kentucky, Tennessee, North Carolina, South Carolina, Mississippi, Alabama, Georgia, Florida, Canal Zone;
- Region 5—Minnesota, Wisconsin, Michigan, Illinois, Indiana, Ohio;
- Region 6—Texas, New Mexico, Oklahoma, Arkansas, Louisiana;
- Region 7—Kansas, Missouri, Iowa, Nebraska;
- Region 8—Montana, North Dakota, South Dakota, Wyoming, Utah, Colorado;
- Region 9—California, Nevada, Arizona, Hawaii, Trust Territory of the Pacific Islands, American Samoa, Guam;
- Region 10—Washington, Oregon, Idaho, Alaska.

18. The sample survey and method used to derive data for March 1976 forward differ from those used for prior months. Data for January 1974 through February 1976 are derived from a survey of distributors, and prices and margins are computed as unweighted averages. The average distributor purchase price and average dealer margin for March 1976 forward are for distributors only, whereas the average selling price includes both refiners and distributors. Data for March 1976 forward are computed as sales weighted averages.

19. Prior to January 1975, diesel fuel prices were obtained from retail gasoline dealers that also sold diesel fuel. Beginning in January 1975, the diesel fuel survey was expanded to include selected truckstops plus additional retail gasoline dealers that sold diesel fuel. Selling price estimates are based on a survey of 31 cities. Margins are based on a survey of 10 cities.

20. The weighted average utility fuel cost for the total United States includes distillate fuel oil delivered to utilities whereas the regional breakdown for residual fuel oil prices represents only No. 6 fuel oil prices.

Units of Measure

Weight

1 metric ton	<i>contains</i>	1,000 kilograms or 2,204.62 pounds
1 long ton	<i>contains</i>	2,240 pounds
1 short ton	<i>contains</i>	2,000 pounds

Conversion Factors for Crude Oil

1 barrel	<i>contains</i>	42 gallons
1 barrel	<i>weighs</i>	0.136 metric tons (0.150 short tons)
1 metric ton	<i>contains</i>	7.33 barrels
1 short ton	<i>contains</i>	6.65 barrels

Conversion Factors for Uranium

1 short ton (U ₃ O ₈)	<i>contains</i>	0.769 metric tons of uranium
1 short ton (UF ₆)	<i>contains</i>	0.613 metric tons of uranium
1 metric ton (UF ₆)	<i>contains</i>	0.676 metric tons of uranium

Approximate Heat Content of Various Fuels

		1972	1973	1974	1975	1976	1977-78
Bituminous coal and lignite							
Production	Btu/short ton	24,050,000	24,010,000	23,730,000	23,200,000	23,150,000	22,900,000
Exports	Btu/short ton	27,000,000	27,000,000	27,000,000	27,000,000	27,000,000	27,000,000
Imports	Btu/short ton	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000
Consumption	Btu/short ton	23,750,000	23,650,000	23,070,000	22,800,000	22,750,000	22,565,000
Coke	Btu/short ton	26,000,000	26,000,000	26,000,000	26,000,000	26,000,000	26,000,000
Anthracite	Btu/short ton	25,400,000	25,400,000	25,400,000	25,400,000	25,400,000	25,400,000
Crude petroleum, production	Btu/barrel	5,800,000	5,800,000	5,800,000	5,800,000	5,800,000	5,800,000
Petroleum products							
Consumption, average	Btu/barrel	5,503,200	5,517,000	5,506,100	5,495,900	5,495,900	5,495,900
Imports	Btu/barrel	6,028,349	6,001,364	5,975,463	5,938,220	5,975,452	5,903,173
Exports	Btu/barrel	5,700,739	5,724,014	5,809,824	5,713,363	5,696,315	5,779,516
Natural gas liquids	Btu/barrel	4,049,256	4,032,483	4,024,000	3,997,000	3,997,000	3,997,000
Natural gas, wet	Btu/cubic foot	1,100	1,093	1,097	1,095	1,094	1,094
Natural gas, dry	Btu/cubic foot	1,027	1,021	1,024	1,021	1,020	1,020
Hydropower	Btu/kWh	10,379	10,389	10,442	10,406	10,406	10,406
Nuclear power	Btu/kWh	10,660	10,660	10,660	10,660	10,660	10,660
Geothermal power	Btu/kWh	21,690	21,690	21,690	21,690	21,690	21,690
Petroleum Products:	Btu/barrel						
Natural gasoline		4,620,000					
Liquefied gases		4,011,000					
Gasoline (incl. aviation)		5,248,000					
Special naphtha		5,248,000					
Jet fuel, naphtha-type		5,355,000					
Jet fuel, kerosene-type		5,670,000					
Kerosene		5,670,000					
Distillate fuel oil		5,825,000					
Residual fuel oil		6,287,000					
Still gas		6,000,000					
Lubricants		6,065,000					
Waxes		5,537,000					
Petroleum coke		6,024,000					
Asphalt and road oil		6,636,000					

U.S. DEPARTMENT OF COMMERCE
National Technical Information Service
Springfield, VA 22161

OFFICIAL BUSINESS

PRINTED MATTER

An Equal Opportunity Employer

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF COMMERCE
COM-211



Charles Everett
FED 4447

11

CRN780809-00341
DAR-M764/M(7808)

Monthly Energy Review