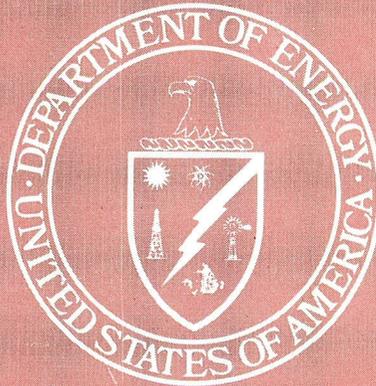


DOE/EIA-0035/7
NTISUB/D/127-007

July 1978

Monthly Energy Review



Survey Issue

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.

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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.

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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 Fore-
casting at FEA—October 1975

Curtailments of Natural Gas Service—January
1976

Home Heating Conservation Alternatives and the
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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

Dear Subscriber,

On the following page is a survey questionnaire soliciting information that will help us to give you a better publication.

We are asking you to tell us your energy information needs and interests. This questionnaire is being distributed just one time in the Monthly Energy Review (MER) of this month. We do not need to identify the respondents, so you may answer with complete anonymity. The information received will be tabulated and used only as a guide to improving the MER.

Please help us in this effort by taking just a few minutes to answer the questions.

The page can be torn out, folded, stapled, and mailed. It is self addressed and the postage is paid. We would appreciate a response at your earliest convenience.

Sincerely yours,

A handwritten signature in cursive script that reads "Judy Gaynor".

Judy Gaynor
Editor

DEPARTMENT OF ENERGY

Monthly Energy Review Survey

The Department of Energy (DOE) publishes the Monthly Energy Review (MER) as its principal report to the President, the Congress and the Nation. The DOE wishes to improve the MER by providing the most useful data available and by staying abreast of reader interests. This survey will help in those objectives. We thank you for your assistance.

1. (A) Currently, what are your two major sources of energy-related statistics and information?

1. _____ 2. _____

(B) What is the annual cost to you for obtaining the above data?

1. \$ _____ 2. \$ _____

2. The matrix presented below has been developed to ascertain your energy information needs. Please place a 1, 2, or 3 in the boxes shown. A blank box will indicate "no interest." The numbers represent the following:

1 = Where information is needed by you 2 = Where information is of interest to you 3 = Both

	Production	Price	Consumption	Resource Develop.	International
Crude Oil					
Refined Petroleum Products					
Electricity					
Nuclear					
Natural Gas					
Coal					
Solar					
Geothermal					
Organic Waste					
Tar Sand					
Other (Specify)					

3. Using the same 1, 2, 3 indicators, please mark the appropriate number in each of the boxes below.

Financial Reporting		Resources & Reserves		Conservation Energy Savings		State & Local		End Use Consumption	
Profits	()	U.S. Proved	()	Public Bldgs.	()	Consumption	()	Residential	()
Investment	()	U.S. Probable	()	Gov't. Agencies	()	Prices	()	Commercial	()
Assets	()	World Proved	()	Home Construction	()	Supply	()	Industrial	()
R&D \$	()	World Probable	()	Commercial Bldgs.	()	Facilities	()	Agricultural	()

Other Energy Data Desires: _____

4. Would you be interested in summaries of the following: (Please check each one that you have interest in.)

New Forms of the EIA	()	Federal Energy Regulatory	()	Proposed DOE Regulations	()
Recent Publications of the EIA	()	Commission Decisions	()	Key Individuals in the DOE	()
Schedule of Current DOE Events	()	New DOE Regulations	()	Major DOE Contract Awards	()

5. (A) Please check those financial statistics which are of particular interest to you. The statistics will be broken out by each major energy source. (Check all that apply.)

Volume produced (\$) () Volume shipped (\$) ()
Volume sold (\$) () Reserves, inventories, stockpiles (\$) ()

(B) Would you like to see the combinations checked above presented:

By Region () By State () U.S. Totals () Other (Specify) _____

6. (A) Would it be helpful to see other periods of coverage?

Yes () No ()

(B) If Yes, should the data cover the most recent:

(Please check one)

1 Year () 2 Years () 3 Years () 4 Years () 5 Years () Other (Specify) _____

7. Please circle the price you consider to be realistic for a one year subscription to the MER. The consensus of opinion on this question may effect the resources allotted for the MER publication and thus could impact the degree of coverage.

\$25 \$50 \$100 \$200

8. General Comments: (Such as: What would improve the MER, what type of feature articles would be of value, what factors should be highlighted in the introductions to the various sections, etc.)

9. Please check the type of organization you represent:

Federal Government () Petroleum Industry () Solar Energy Industry ()
State/Local Government () Natural Gas Industry () Electricity Industry ()
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Thank you for your cooperation.

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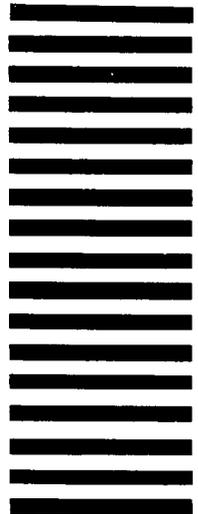
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Overview

Energy production in the United States during May totaled 5.5 quadrillion Btu (or 30.4 million barrels per day of crude oil equivalent*), surpassing production for the corresponding month in 1977 by 6.2 percent, by far the largest increase of the year. The bulk of the increase can be attributed to significant growths in both crude oil and coal production of about 10.5 percent. For the first 5 months of 1978, however, total domestic energy production was down 3.6 percent compared to the same period of 1977, with most of the difference attributable to a 24.1-percent decline in coal production as a result of the coal miners' strike.

Imports of fossil fuels into the United States during May continued to be lower than last year, totaling 1.5 quadrillion Btu (or 8.2 million barrels per day of crude oil equivalent*), down 10.5 percent from the May 1977 level. Imports for the January-May 1978 period were 13.4 percent lower than for the same period of 1977, with the following declines noted: crude oil, -13.6 percent; refined products, -14.4 percent; and natural gas, -5.0 percent.

Domestic consumption of energy during April was 3.1 percent higher than in April 1977 and for the January-April 1978 period was 3.2 percent higher. The increase in consumption reflects, to a large extent, colder weather. Heating degree-days for the April 1978 period were 32 percent greater than for April 1977, and for the first 4 months of the year were 12 percent greater.

It is interesting to note that domestic energy consumption patterns have changed only slightly since the 1973-1974 Arab oil embargo. Refined petroleum products continue to satisfy approximately one-half of domestic energy requirements (45.2 percent during the first 4 months of 1973 versus a current figure of 47.4 percent). Natural gas dropped from a 32.8-percent share in 1973 to 29.4 percent this year. Coal's contribution fell slightly from 16.8 percent of total demand to 15.9 percent (an anomaly caused by the strike). The combined share of nuclear and hydroelectric showed the

largest growth over the 5-year period, increasing from 5.2 to 7.3 percent of total energy demand.

Production of electricity by utilities totaled 175.2 billion kilowatt hours in May 1978, 3.4 percent above the May 1977 level. For the January-May period total electricity generation was 2.9 percent higher than the previous year's total.

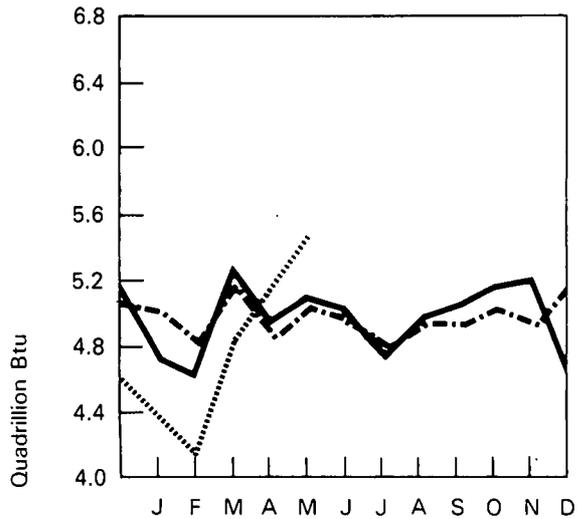
During June, the beginning of the air conditioning season, there were 1.9 percent more cooling degree-days than in June 1977, indicating relatively warmer weather. For the period January-June 1978, however, there were 10.5 percent fewer cooling degree-days than in 1977, denoting cooler weather. Compared with normal cooling degree-day accumulations, both June and the January-June period were 6.0 percent above normal.

World crude oil production averaged 59.5 million barrels per day in April 1978, 49 percent of which was produced by OPEC nations. For comparison, in April 1977 60.1 million barrels per day were produced with the OPEC nations accounting for 54 percent of the total.

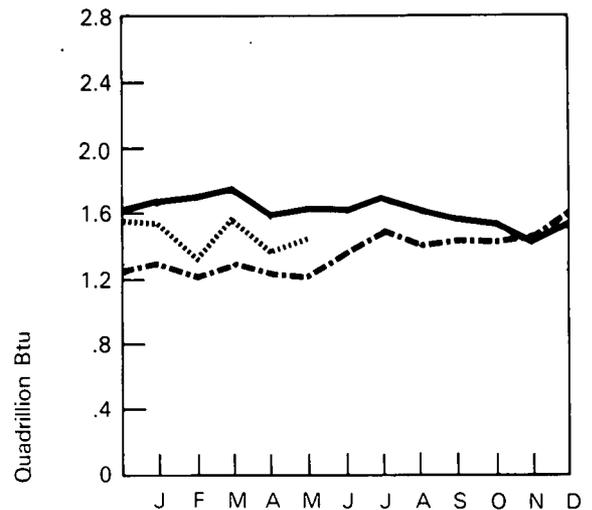
*One barrel of crude oil contains approximately 5.8 million Btu.

	Domestic Production of Energy*	Imports of Fossil Fuels**	Domestic Consumption of Energy***
	Quadrillion Btu		
1972 TOTAL	62.937	11.563	71.610
1973 TOTAL	62.373	14.519	74.551
1974 TOTAL	61.154	14.114	72.617
1975 TOTAL	59.946	13.935	70.564
1976			
January	5.071	1.306	7.183
February	4.853	1.223	6.262
March	5.207	1.301	6.256
April	4.934	1.246	5.732
May	5.042	1.231	5.661
June	5.036	1.389	5.692
July	4.796	1.505	5.884
August	4.951	1.417	5.827
September	4.946	1.467	5.606
October	5.025	1.453	6.113
November	4.949	1.498	6.599
December	5.170	1.619	7.515
TOTAL	59.982	16.655	74.330
1977			
January	4.780	1.700	7.671
February	4.637	1.718	6.488
March	5.312	1.786	6.385
April	4.995	1.604	5.804
May	5.142	1.638	5.811
June	5.059	1.632	5.907
July	4.824	1.714	6.012
August	5.025	1.638	6.109
September	5.181	1.583	5.897
October	5.243	1.560	6.092
November	5.238	1.498	6.311
December	R4.607	R1.585	R7.261
TOTAL	R60.045	R19.656	75.750
1978			
January	R4.446	R1.547	R7.538
February	R†4.123	†1.321	R†6.880
March	R†4.842	R†1.593	R†6.790
April	R†5.094	R†1.391	†5.984
May	††5.459	†1.466	NA
TOTAL (Year to date)	23.964	7.318	27.191

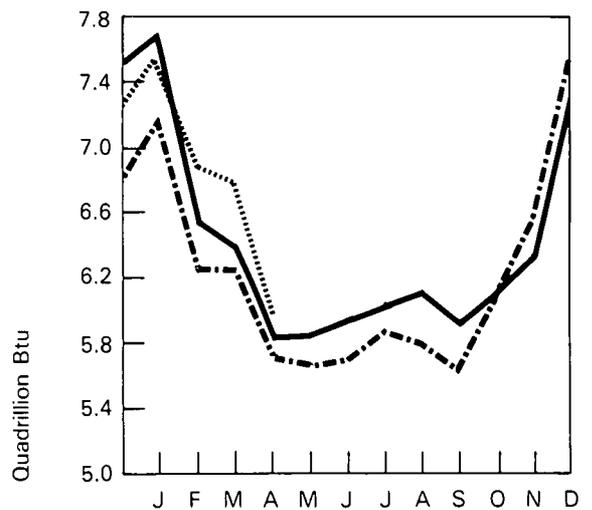
Domestic Production of Energy



Imports of Fossil Fuels



Domestic Consumption of Energy



--- 1976 — 1977 1978

*See Explanatory Note 1.
 **See Explanatory Note 2.
 ***See Explanatory Note 3.
 †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 8.8 million barrels per day during May 1978,* 10.4 percent above the May 1977 production rate. The January through May 1978 production average was 8.6 million barrels per day, 7.2 percent higher than the average for the first 5 months of 1977.

Total petroleum imports averaged 7.6 million barrels per day in May 1978,** 11.4 percent below the rate for May 1977. Imports averaged 7.8 million barrels per day over the first 5 months of 1978, 13.8 percent below the average for the same period in 1977.

Total domestic demand for petroleum products averaged 18.2 million barrels per day in May, 7.0 percent higher than the rate in May 1977. The major components of domestic demand in May were: motor gasoline (42.4 percent), distillate fuel oil (16.4 percent), and residual fuel oil (15.0 percent). Total domestic demand averaged 19.2 million barrels per day during the January through May 1978 period, 3.1 percent above demand during the corresponding months a year ago.

Preliminary statistics indicate that motor gasoline demand averaged 7.7 million barrels per day in May, 9.5 percent above last May's rate. The January through May 1978 average was 7.1 million barrels per day, 3.2 percent higher than the average for the first 5 months of 1977. Motor gasoline stocks measured 238.6 million barrels at the end of May 1978, 9.1 percent below the level a year earlier.

Distillate fuel oil demand in May 1978 averaged 3.0 million barrels per day, 7.3 percent above the May 1977 demand. Distillate fuel oil demand averaged 3.9 million barrels per day in the first 5 months of 1978, 2.6 percent higher than the rate during the corresponding period of 1977.

Residual fuel oil demand averaged 2.7 million barrels per day in May 1978, 0.1 percent higher than the May 1977 demand. The January through May 1978 residual fuel oil demand was 3.3 million barrels per day, 1.7 percent above the average for January through May 1977.

Strategic Petroleum Reserve

Sixteen crude oil shipments totaling 4.1 million barrels were delivered in May 1978 for the Strategic Petroleum Reserve (SPR) at an average cost of \$15.28 per barrel (including transportation fees). Cumulative SPR deliveries since July 1977 now total 25.6 million barrels.

*May 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	4246,395	
1973	AVERAGE	12,431	9,208	3,244		2	4242,478	
1974	AVERAGE	12,133	8,774	3,477		3	4265,020	
1975	AVERAGE	12,442	8,375	4,105		6	4271,354	
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	R14,749	R8,423	R6,049	79	69	R339,813	7,826
	AVERAGE	R14,608	R8,179	R6,548	21	50		
1978	January	R14,139	R8,347	R5,974	114	98	R340,082	11,106
	February	13,974	8,241	5,532	109	NA	326,699	14,276
	March	14,154	R8,699	R5,984	132	NA	R338,638	R18,437
	April	R13,943	R8,696	R5,331	108	NA	R333,436	21,826
	May	14,725	8,839	5,800	NA	NA	334,463	NA
	AVERAGE (Year to date)	14,193	8,570	5,731	116	NA		

¹See Definitions.

²Excludes SPR imports.

³Excludes SPR stocks.

⁴Total as of December 31.

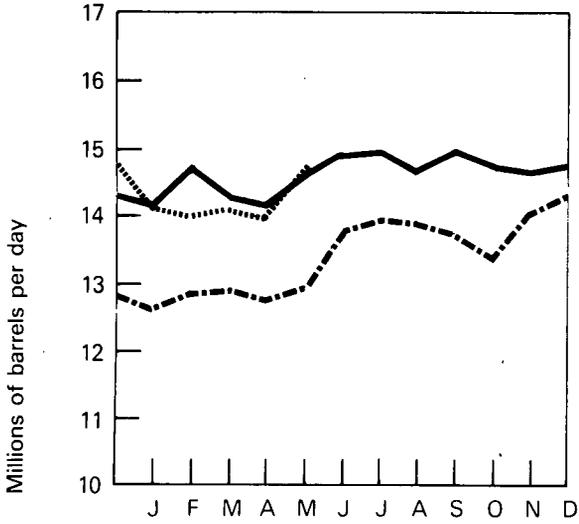
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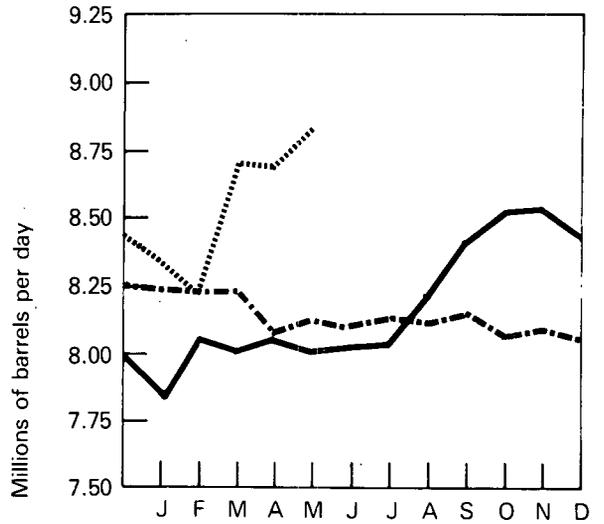
Sources: 1972 through 1976: Bureau of Mines (BOM) *Mineral Industry Surveys*, "Petroleum Statement, Annual;" January 1977 through April 1977: Bureau of Mines *Mineral Industry Surveys*, "Petroleum Statement, Monthly;" May 1977 through January 1978: Energy Information Administration (EIA) *Energy Data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

Crude Oil

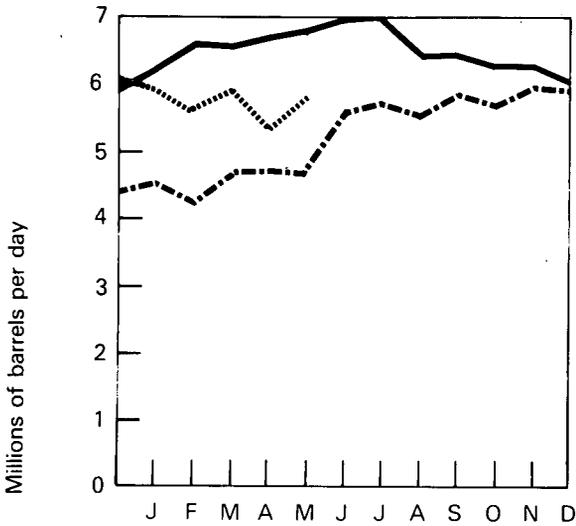
Crude Input to Refineries



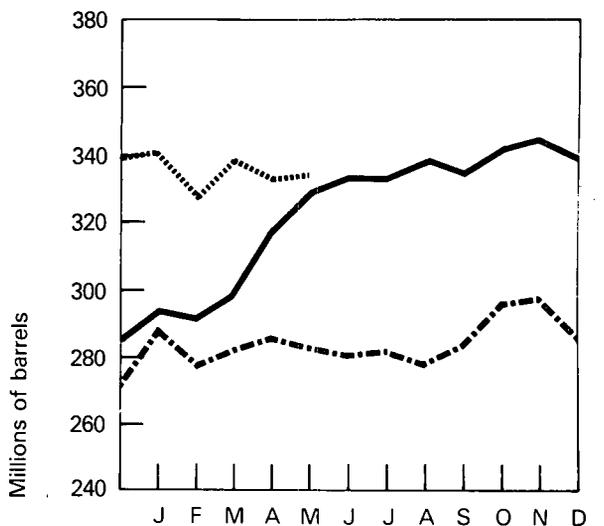
Domestic Production



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	R20,046	R2,183	206
	AVERAGE	18,418	R2,176	193
1978	January	R19,692	R2,065	157
	February	20,778	2,047	NA
	March	R19,687	R2,308	NA
	April	R18,041	R2,102	NA
	May	18,155	1,799	NA
	AVERAGE	19,249	2,064	NA
	(Year to date)			

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
R8,232	79	R8,311
R8,696	21	R8,744
R8,040	114	R8,154
7,579	109	7,688
R8,292	132	R8,424
R7,433	108	R7,541
7,599	NA	NA
7,795	116	7,962

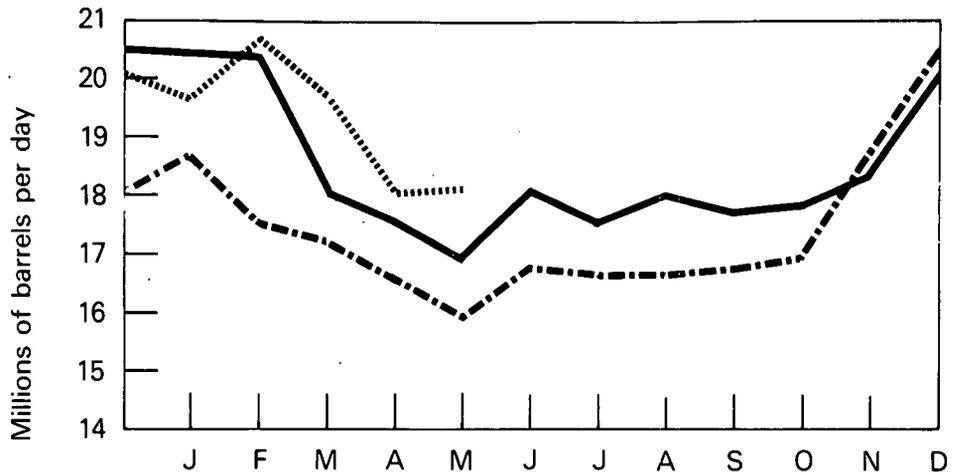
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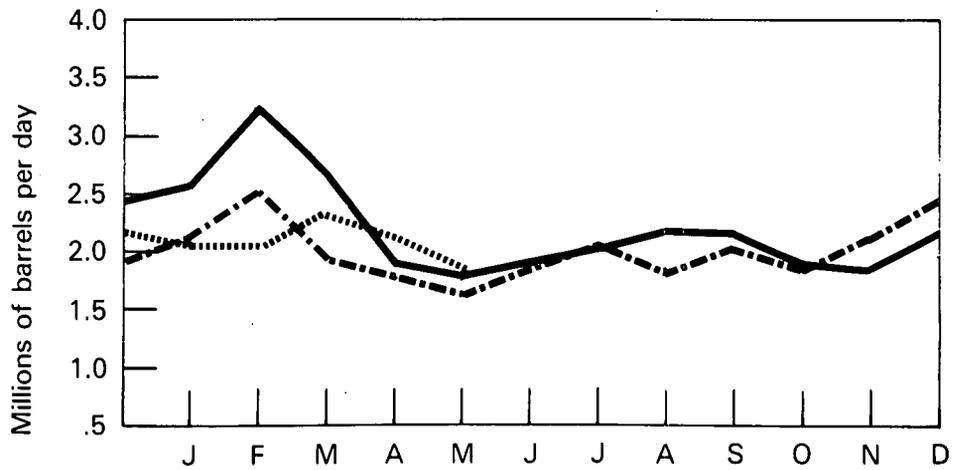
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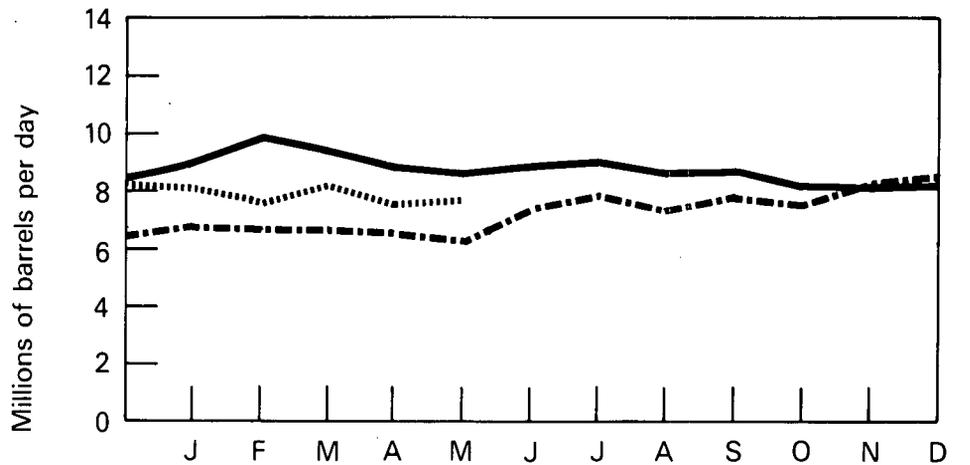
Total Refined Product Domestic Demand



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	273.0	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	R652.8	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	R492.7	549.0	R604.4	R987.2	R1,064.8	R390.5	R724.2	R289.1	R5,654.9	R2,835.4
Total Direct	552.0	R532.8	530.2	R714.7	1,135.1	R1,377.0	333.4	R687.0	R288.3	R6,150.5	R3,162.7
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	R585.0	828.1	R848.5	1,240.8	R1,585.1	431.9	R908.0	R388.8	R7,379.3	R3,693.5
1978											
Direct											
January	682.3	453.2	659.3	545.9	822.9	1,200.3	348.7	630.6	212.1	5,555.3	2,646.2
February	617.0	383.2	526.2	575.8	757.0	980.1	485.8	626.1	251.3	5,202.5	2,771.1
March	R709.5	R574.8	547.3	R590.8	R944.8	R1,127.5	296.2	R889.0	R240.4	R5,920.3	R2,886.7
April	597.6	503.7	408.6	601.8	584.3	986.7	435.0	631.5	220.1	4,969.3	2,732.2
Total Direct	652.9	480.9	536.6	578.5	779.4	1,076.7	388.7	696.5	230.6	5,420.8	2,759.0
Indirect	R9.4	R59.0	R350.7	R131.8	R109.9	R186.9	R94.2	R220.4	R72.8	R1,235.1	R469.6
TOTAL	662.3	539.9	887.3	710.3	889.3	1,263.6	482.9	916.9	303.4	6,655.9	3,228.6
(4 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 through December 1977; EIA "Monthly Petroleum Statistics Report" for January 1978 through April 1978; Indirect Imports—EIA estimates.

U.S. Petroleum Imports from Non-OPEC Sources

	Bahamas	Canada	Netherlands Antilles	Puerto Rico	Trinidad and Tobago	Virgin Islands	Mexico	Other	Total
Thousands of barrels per day									
1973	170.8	1,312.9	573.6	99.3	250.6	329.2	15.2	523.5	3,274.2
1974	159.3	1,067.6	509.6	90.4	241.2	391.7	8.4	384.2	2,852.4
1975	152.0	845.2	323.6	89.7	240.9	406.5	71.4	306.1	2,435.4
1976									
January	134.1	681.7	291.7	71.0	343.2	468.4	58.7	321.5	2,370.3
February	127.6	644.9	262.4	122.2	326.3	462.3	70.0	251.7	2,267.4
March	90.4	590.2	328.7	114.0	315.6	424.5	108.0	367.5	2,338.9
April	131.9	578.4	274.9	68.5	291.9	341.2	112.0	404.5	2,203.3
May	95.2	614.9	214.1	70.6	257.5	388.5	89.3	316.4	2,046.5
June	104.2	653.3	190.4	54.3	319.3	427.5	79.5	373.5	2,202.0
July	112.8	581.7	259.1	77.9	279.2	386.5	79.4	434.0	2,210.6
August	98.5	580.9	268.7	81.5	163.6	437.2	88.1	428.5	2,147.0
September	143.1	564.8	273.3	104.1	182.6	408.5	84.8	453.1	2,214.3
October	78.3	562.0	239.0	92.2	215.2	460.5	79.2	422.8	2,149.2
November	140.4	561.8	267.6	104.1	254.3	454.4	132.1	333.2	2,247.9
December	141.5	578.3	400.3	98.5	324.2	408.4	65.5	405.0	2,421.3
TOTAL	116.5	599.3	274.6	88.1	272.6	422.3	87.1	373.5	2,234.0
1977									
January	170.0	505.9	304.1	82.5	316.2	619.6	97.9	549.8	2,646.0
February	289.5	605.1	406.6	86.3	406.3	548.8	168.1	947.8	3,458.5
March	200.4	561.7	257.3	97.4	286.5	505.5	171.5	810.4	2,890.7
April	130.7	506.1	110.1	85.3	210.5	409.0	155.2	662.4	2,269.3
May	138.5	437.8	153.7	105.8	308.1	376.2	173.6	647.6	2,341.3
June	137.7	493.0	196.2	89.4	271.1	322.0	180.7	616.0	2,306.1
July	169.8	482.9	239.0	129.7	275.8	477.7	158.7	540.1	2,473.7
August	168.8	501.5	224.5	88.4	281.2	461.6	213.6	586.9	2,526.5
September	140.2	528.5	201.1	156.7	250.9	433.9	167.6	750.1	2,629.0
October	122.3	487.0	197.4	114.1	288.4	451.9	246.6	612.9	2,520.6
November	184.4	504.6	93.3	98.7	237.2	462.8	230.7	654.7	2,466.4
December	R159.8	R580.1	R191.9	97.8	305.5	555.6	186.5	R579.2	R2,656.4
TOTAL	R166.9	R515.5	R213.7	R105.3	286.0	R466.2	179.3	R660.7	R2,593.6
1978									
January	170.5	453.6	253.5	98.0	295.0	466.0	236.4	594.8	2,567.8
February	215.6	487.9	98.1	92.9	295.7	490.6	211.2	593.2	2,485.2
March	211.5	R438.7	238.1	R63.6	274.4	492.8	230.9	R553.6	R2,503.6
April	140.9	408.2	255.9	95.0	302.1	371.9	231.4	625.9	2,572.2
TOTAL (4 months)	184.2	446.4	213.9	87.2	291.6	455.1	227.8	591.6	2,533.0

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 December 1977; and EIA "Monthly Petroleum Statistics Report" for January 1978 through April 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	R7,373	2,400	R32.6	R7,146	196	1	R257,578
	AVERAGE	R7,176	1,976	27.5	7,033	215	2	
1978	January	R6,670	2,097	R31.4	R6,932	R211	1	R272,287
	February	6,914	2,162	31.3	6,620	210	NA	270,181
	March	R7,244	2,425	33.5	6,749	R142	NA	259,214
	April	R7,186	2,391	33.3	R6,668	R179	NA	R248,986
	May	7,703	NA	NA	7,099	207	NA	238,589
	AVERAGE (Year to date)	7,148	2,270	NA	6,818	189	NA	

*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.

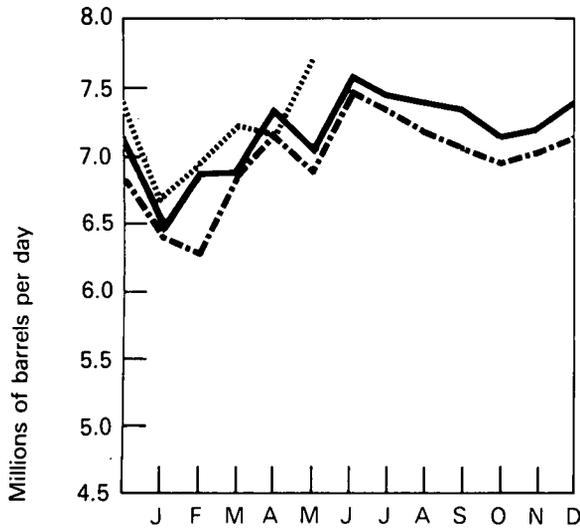
R=Revised data.

NA=Not available.

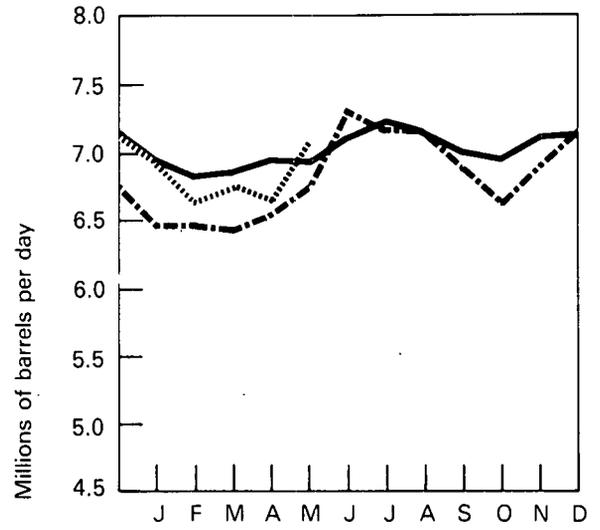
Sources: Data other than unleaded—1972 through 1976: Bureau of Mines (BOM) *Mineral Industry Surveys*, "Petroleum Statement, Annual;" January 1977 through April 1977: Bureau of Mines *Mineral Industry Surveys*, "Petroleum, Statement, Monthly;" May 1977 through January 1978: Energy Information Administration (EIA) *Energy Data Reports*, "Petroleum Statement, Monthly;" February 1978 through April 1978: "Monthly Petroleum Statistics Report;" May 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

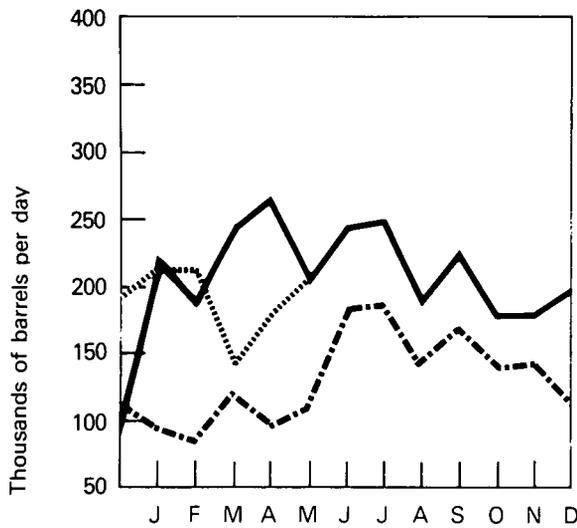
Domestic Demand



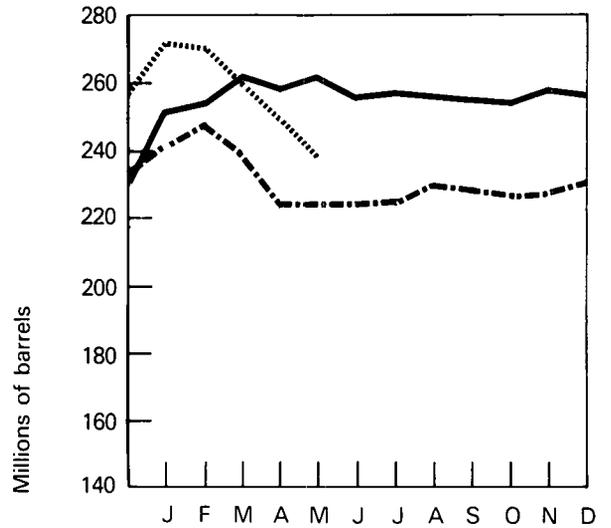
Production



Imports



Stocks



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

Jet Fuel

		Domestic Demand	Production	Imports	Exports	Stocks
						Thousands of barrels
						Thousands of barrels per day
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	R1,089	978	R85	2	R34,568
	AVERAGE	R1,040	974	74	2	
1978	January	R980	922	R60	1	R34,603
	February	1,091	994	53	NA	33,332
	March	R1,100	972	R86	NA	32,011
	April	R1,007	R983	R113	NA	R34,627
	May	1,003	1,032	74	NA	37,802
	AVERAGE (Year to date)	1,035	980	77	NA	

*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.

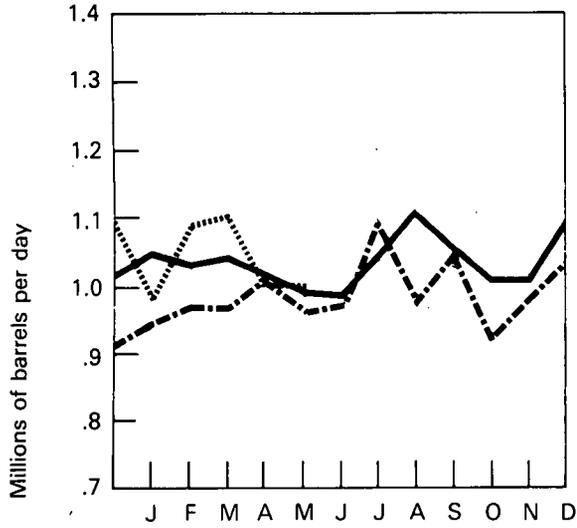
R=Revised data.

NA=Not available.

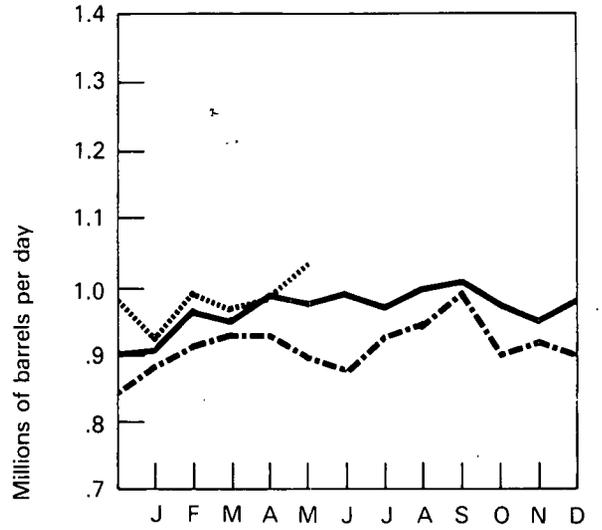
Sources: 1972 through 1976: Bureau of Mines (BOM) *Mineral Industry Surveys*, "Petroleum Statement, Annual;" January 1977 through April 1977: Bureau of Mines *Mineral Industry Surveys*, "Petroleum Statement, Monthly;" May 1977 through January 1978: Energy Information Administration (EIA) *Energy Data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

Jet Fuel

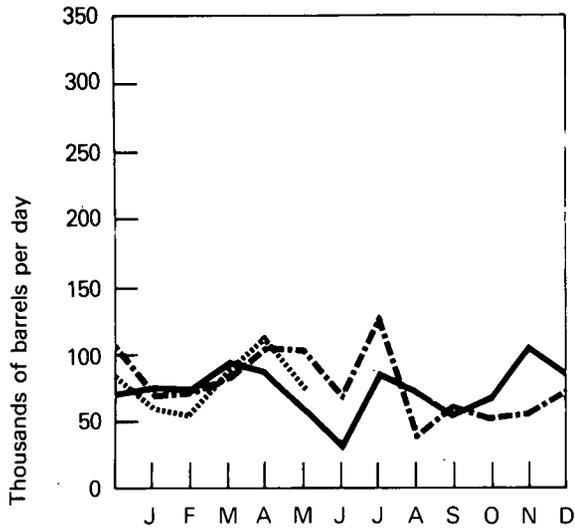
Domestic Demand



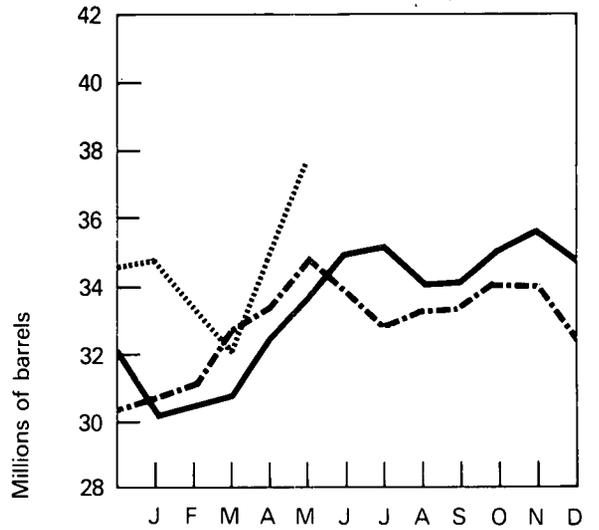
Production



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	R4,205	R3,324	R226	2	R250,280
		AVERAGE	R3,352	R3,279	R248	1
1978	January	R4,439	R3,054	R194	1	R213,411
	February	4,889	2,923	210	NA	165,847
	March	R4,066	2,982	R183	NA	137,897
	April	R3,087	R2,933	R100	NA	R136,234
	May	2,981	3,162	142	NA	147,076
		AVERAGE (Year to date)	3,878	3,013	165	NA

*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.

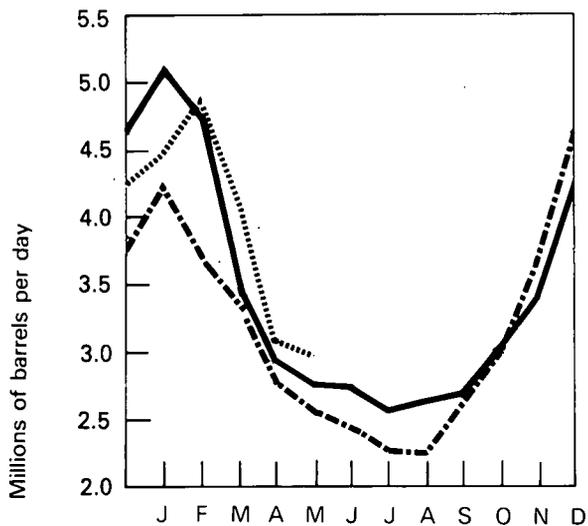
R=Revised data.

NA=Not available.

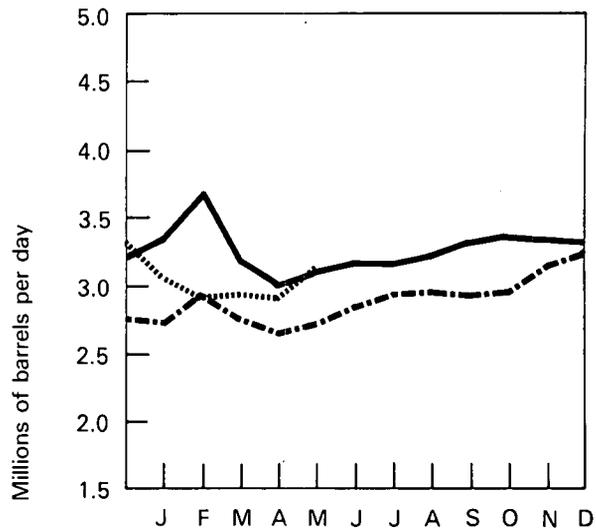
Sources: 1972 through 1976: Bureau of Mines (BOM) *Mineral Industry Surveys*, "Petroleum Statement, Annual;" January 1977 through April 1977: Bureau of Mines *Mineral Industry Surveys*, "Petroleum Statement, Monthly;" May 1977 through January 1978: Energy Information Administration (EIA) *Energy Data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

Distillate Fuel Oil

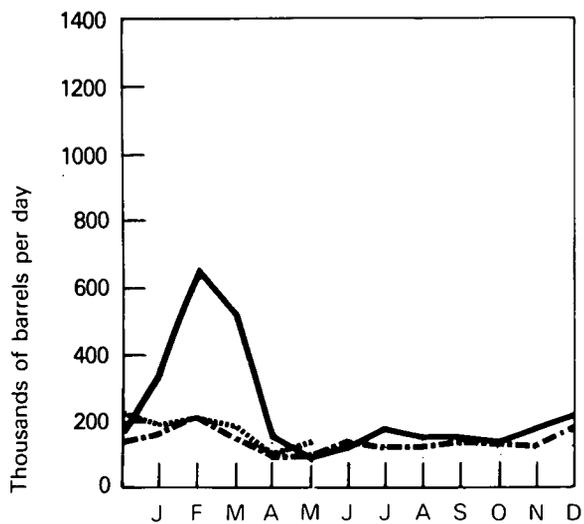
Domestic Demand



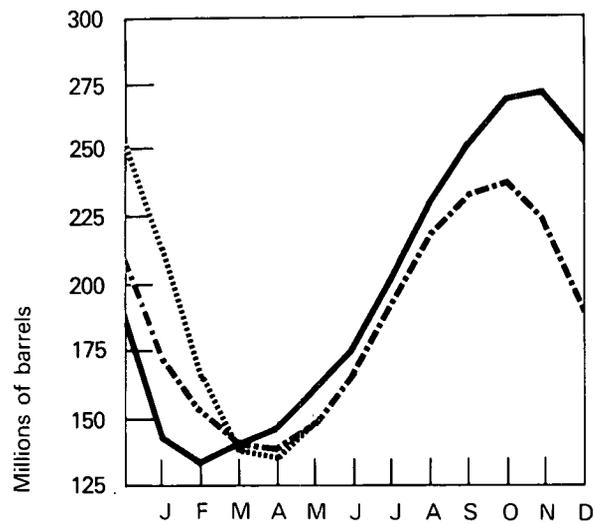
Production



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	R3,364	R1,839	R1,348	12	R89,673
		AVERAGE	R3,059	R1,751	1,350	6
1978	January	R3,496	R1,872	R1,358	13	R81,434
	February	3,694	1,787	1,317	NA	64,758
	March	R3,517	R1,747	R1,700	NA	R62,193
	April	R2,977	R1,549	R1,565	NA	R65,928
	May	2,721	1,627	1,233	NA	75,221
	AVERAGE (Year to date)	3,275	1,716	1,436	NA	

*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.

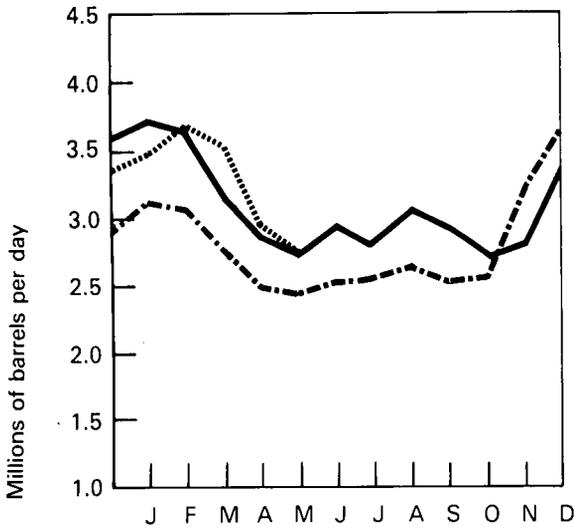
R=Revised data.

NA=Not available.

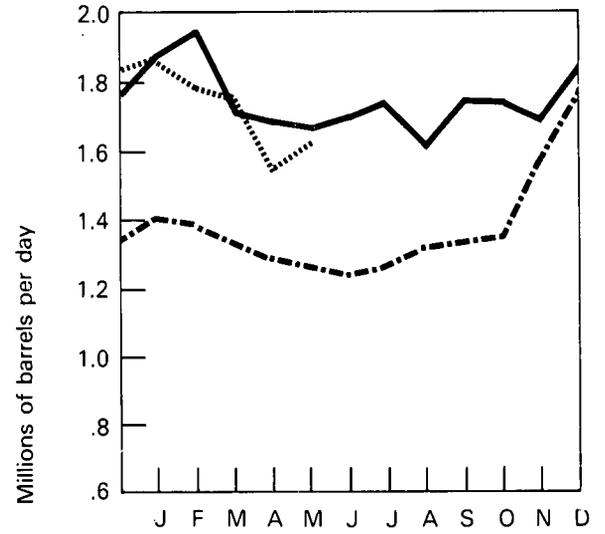
Sources: 1972 through 1976: Bureau of Mines (BOM) *Mineral Industry Surveys*, "Petroleum Statement, Annual;" January 1977 through April 1977: Bureau of Mines *Mineral Industry Surveys*, "Petroleum Statement, Monthly;" May 1977 through January 1978: Energy Information Administration (EIA) *Energy Data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

Residual Fuel Oil

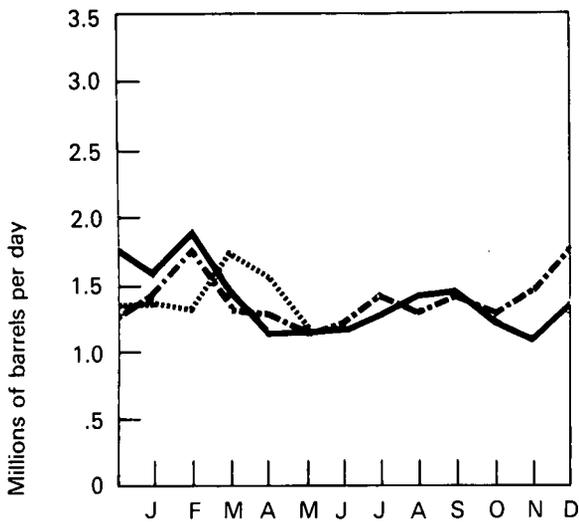
Domestic Demand



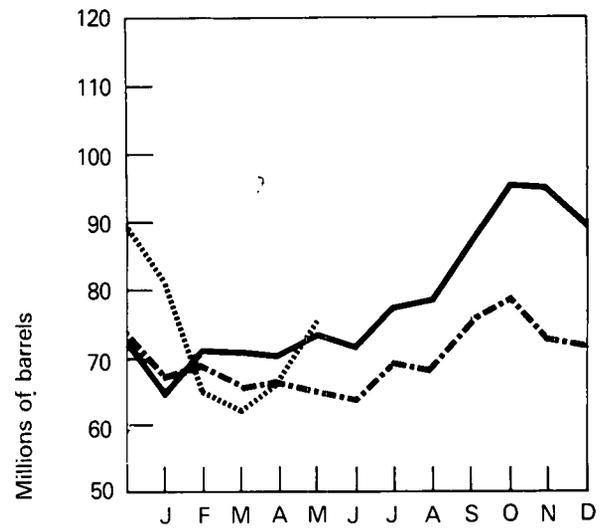
Production



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	R1,867	1,557	327	R645	R201	130,797	
	February***	1,748	1,578	340	640	211	123,066	
	March***	1,607	1,589	347	636	232	120,220	
	April***	1,395	1,584	338	624	217	123,300	
	May***	1,163	1,565	378	582	184	134,600	
	AVERAGE (5 months)	1,553	1,574	346	625	209		

*See Explanatory Note 4.

**Total as of December 31.

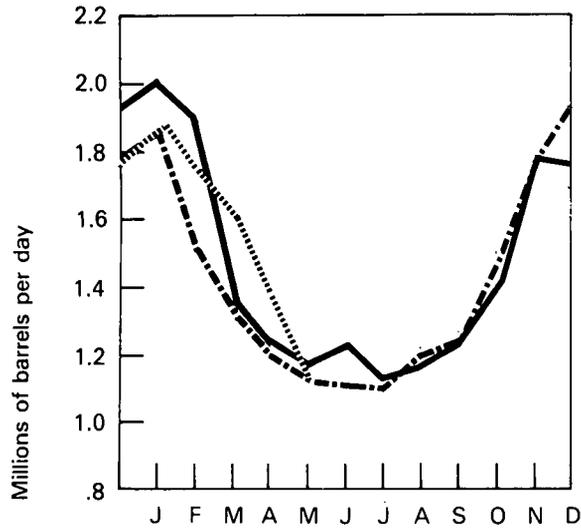
***Estimated.

R=Revised data.

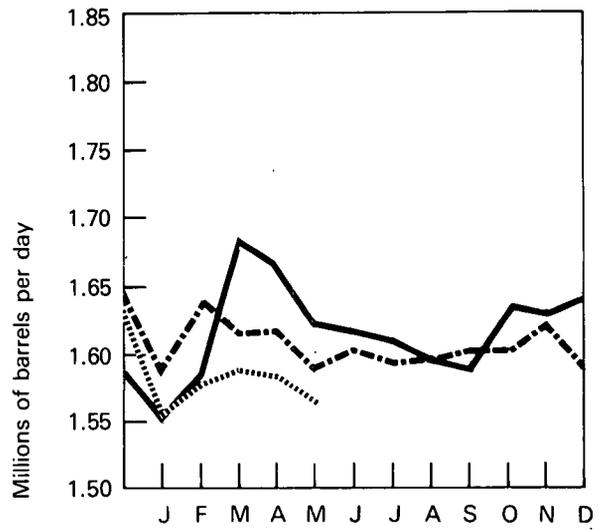
Source: Bureau of Mines *Mineral Industry Surveys*, "Petroleum Statement, Monthly" through April 1977; EIA *Energy Data Reports*, "Petroleum Statement, Monthly" for May 1977 through January 1978; and EIA estimates for February 1978 forward.

Natural Gas Liquids

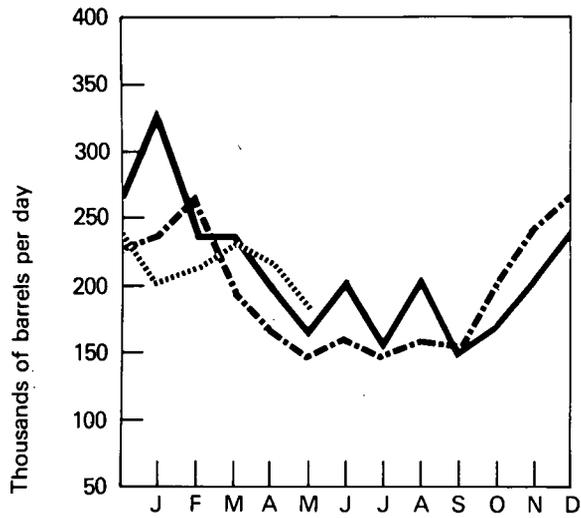
Domestic Demand



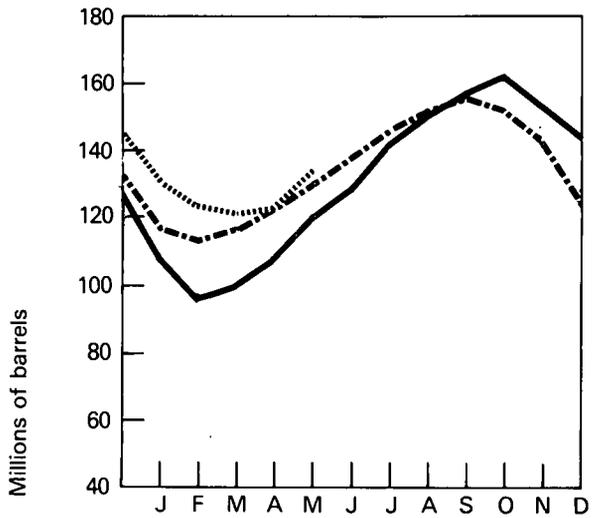
Production at Processing Plants



Imports



Stocks



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

U.S. Petroleum Supply and Demand

	1977 Actual					1978 Actual
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Year	1st Qtr.
Thousands of barrels per day						
Supply						
Crude oil and lease condensate production	7,956	8,042	8,231	R8,481	R8,179	8,435
Natural gas plant liquids production	1,609	1,633	1,596	R1,632	R1,618	1,575
Other hydrocarbon supply	43	54	52	R52	50	59
Crude oil imports ¹	6,520	6,867	6,624	R6,182	R6,548	5,840
Refined products imports ²	2,813	1,836	2,110	R1,955	R2,176	2,143
Total new supply	18,941	18,432	18,613	R18,302	R18,571	18,052
Processing gain	521	450	543	R569	R521	497
Stock change—all oils ³	-278	+1,190	+1,177	R+12	R+528	-1,825
Total net supply	19,740	17,692	17,979	R18,859	R18,564	20,374
Unaccounted for crude oil ⁴	+114	+88	+59	R+172	R+113	-74
Demand						
Crude oil and refined products exports	210	245	259	R255	R243	257
Crude oil losses	15	15	16	16	16	15
Domestic demand for refined products ⁵	19,629	17,520	17,764	R18,776	18,418	20,028
Total demand	19,854	17,780	18,039	R19,047	R18,677	20,300

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: 1st Quarter 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 Quarter 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

*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 May 1978 was an estimated 1.3 percent higher than in May 1977. Estimated consumption during January-May 1978 was 6.7 percent higher than for the corresponding 1977 period, largely as a result of colder weather and substitution of gas in place of coal.

Marketed production of natural gas in May 1978 was an estimated 2.8 percent less than for the previous May, and production during January-May 1978 was an estimated 2.2 percent lower than during the first 5 months of 1977.

Imports of natural gas in May were estimated to be 3.6 percent higher than in May 1977, but for the first 5 months of 1978, were an estimated 5.0 percent less than during the comparable 1977 period.

Net injections of natural gas into underground storage reservoirs in May 1978 totaled 261 billion cubic feet, 16.3 percent less than the net injections in May 1977. Working gas* in storage at the end of May 1978 was 13.9 percent less than that available a year earlier.

Domestic producer sales of natural gas to major interstate pipeline companies in March 1978 were 5.4 percent lower than during March 1977. Sales during the first 3 months of 1978 were 3.4 percent below those for the January-March 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	R2,116	R1,618	756	77	4
	March	R1,892	R1,717	861	R86	4
	April	1,480	**1,600	NA	**83	4
	May	1,370	**1,640	NA	**87	5
	TOTAL (Year to date)	9,211	8,282	2,479	420	22

*See Explanatory Note 5.

**Preliminary data.

R=Revised data.

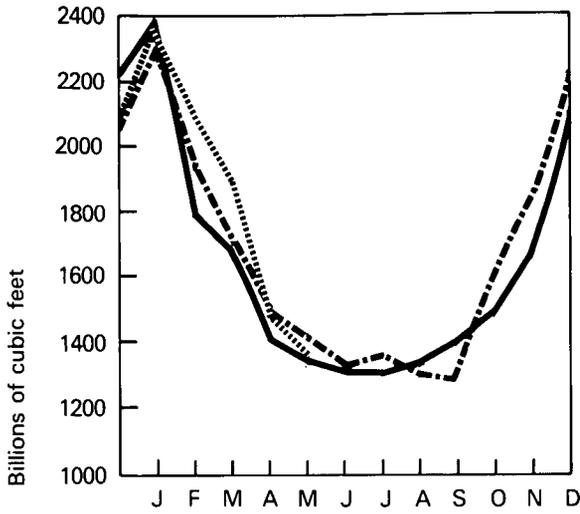
NA=Not available.

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

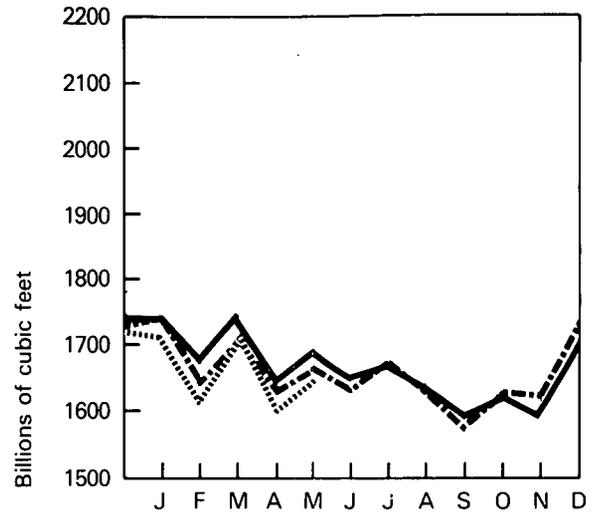
Sources: Domestic Consumption—EIA estimates; Marketed Production, Imports, and Exports—Bureau of Mines *Mineral Industry Surveys*, "Natural Gas, Monthly" through June 1977 and EIA *Energy Data Reports*, "Natural Gas, Monthly" for July 1977 forward; Domestic Producer Sales—Federal Power Commission Form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

Natural Gas

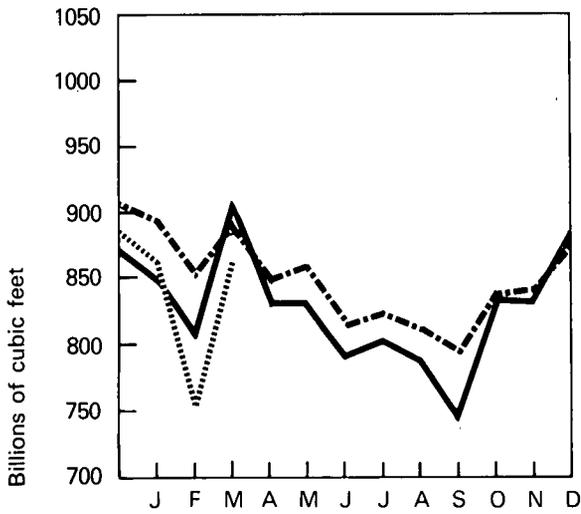
Domestic Consumption



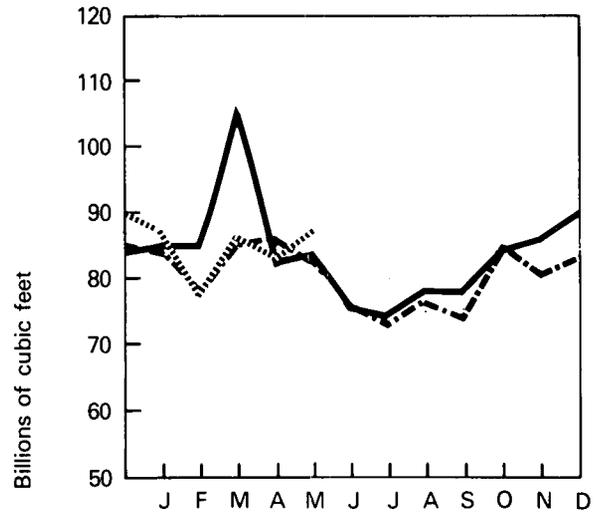
Marketed Production



Domestic Producer Sales to Major Interstate Pipelines



Imports



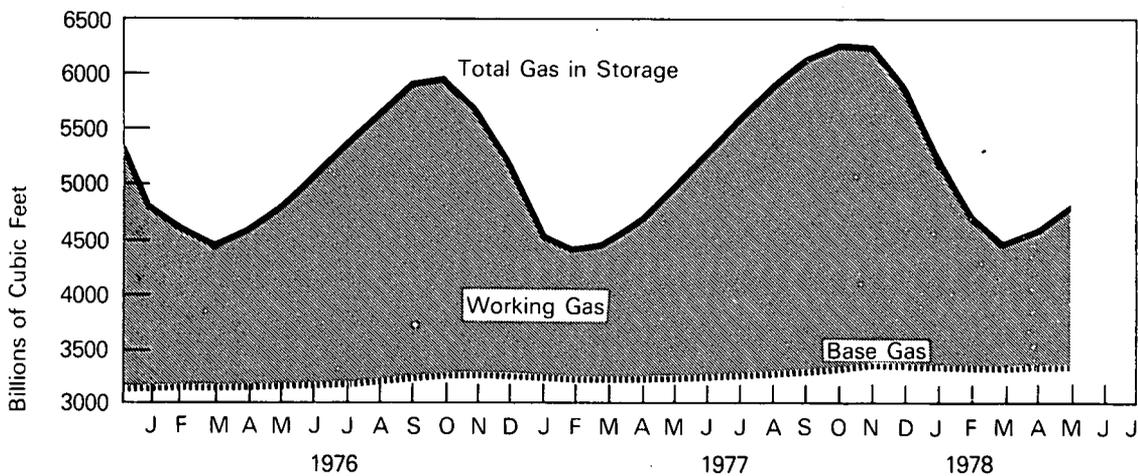
- - - 1976
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 1978

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

Gas in Storage



*See Explanatory Note 6.

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 68.8 million tons in May 1978, only 0.4 million tons less than the record monthly output of September 1977, and an increase of 10.5 percent over production for May 1977. Coal production in the first 5 months of 1978 totaled 213.7 million tons, 24.4 percent below the output level for the same period of 1977.

Domestic consumption of bituminous coal and lignite totaled 45.5 million tons in April 1978, down 1.8 percent from the amount consumed during April 1977. In the first 4 months of 1978, domestic coal consumption was 189.7 million tons, 6.6 percent below consumption for the same period in 1977. Electric utility coal consumption* was 34.5 million tons in April 1978 compared with 33.9 million tons in April 1977. Utilities consumed 146.8 million tons in the first 4 months of 1978, 4.9 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 5.5 million tons in April 1978, 1.3 million tons less than in April 1977. In the first 4 months of 1978, coal consumption by coke plants was 19.1 million tons, 7.4 million tons below the amount consumed in the same period a year earlier, while coal consumption by the general industrial sector totaled 20.8 million tons, 1.2 million tons less than for the January-April period of 1977. Shipments of coal to retail dealers in the first 4 months of 1978 totaled 3.0 million tons, unchanged from the same 4-month period a year earlier.

Stocks of bituminous coal and lignite on April 30, 1978, were 96.9 million tons, or 64 days' supply at April burn rates, up 13.0 million tons from the stock level at the end of March. Electric utilities increased their stockpiles* from 75.1 million tons to 85.8 million tons during April. Utility stocks a year earlier were 113.7 million tons, equivalent to a 101 days' supply. Stocks of coking coal were 5.6 million tons on April 30, 1.9 million tons above the March 31 level. Coal stocks held by general industry increased from 5.0 million tons at the end of March to 5.4 million tons at the end of April. Coal stocks at retail dealer yards on April 30

remained unchanged from the 0.1-million-ton level on March 31.

United States' exports of coal increased to 2.6 million tons in April. Exports for the first 4 months of 1978 were 4.3 million tons, 9.9 million tons below the amount exported during the same period a year earlier, and 12.2 million tons below the exports for the January-April period of 1976.

*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	R43,310	38,765	325	231	R83,942
	April	45,457	59,530	2,594	417	96,889
	May	NA	68,760	NA	NA	NA
	TOTAL (Year to date)	189,686	213,690	4,344	946	

*See Explanatory Note 7.

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

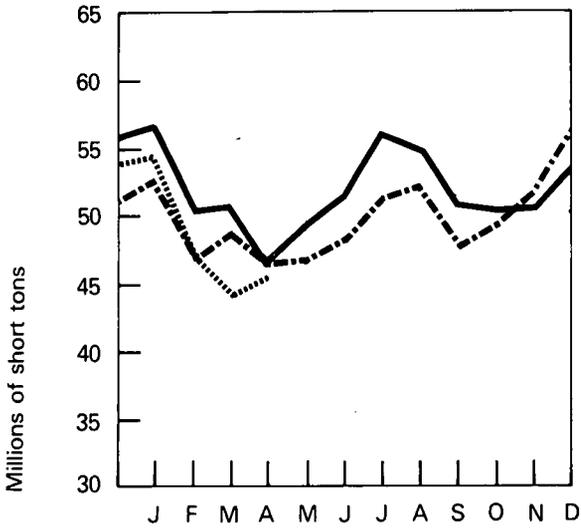
R=Revised data.

NA=Not available.

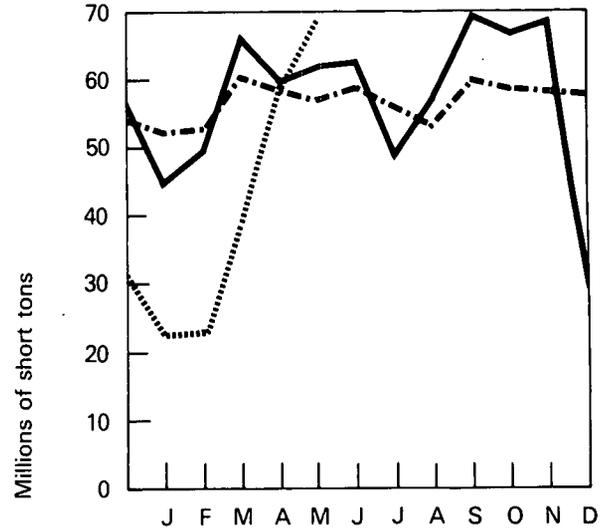
Source: Exports—U.S. Department of Commerce, Bureau of the Census; remaining data—Bureau of Mines *Mineral Industry Surveys*, "Weekly Coal Report" through September 1977; and EIA *Energy Data Reports*, "Weekly Coal Report" for October 1977 forward.

Bituminous and Lignite

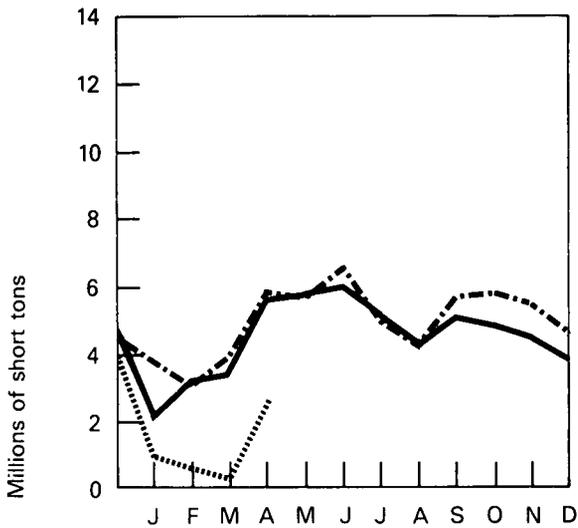
Domestic Consumption



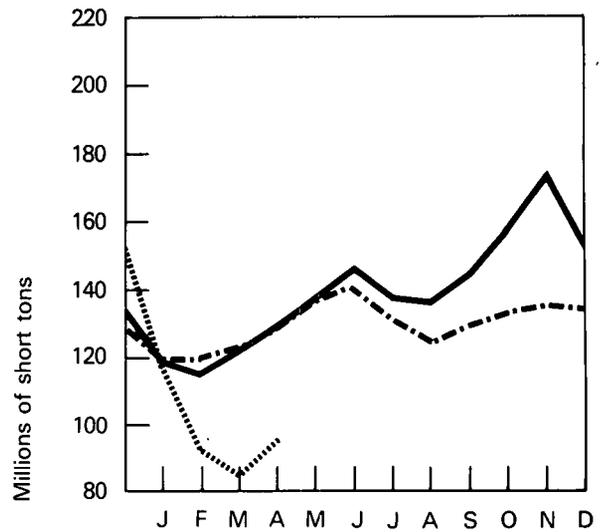
Production



Exports



Stocks

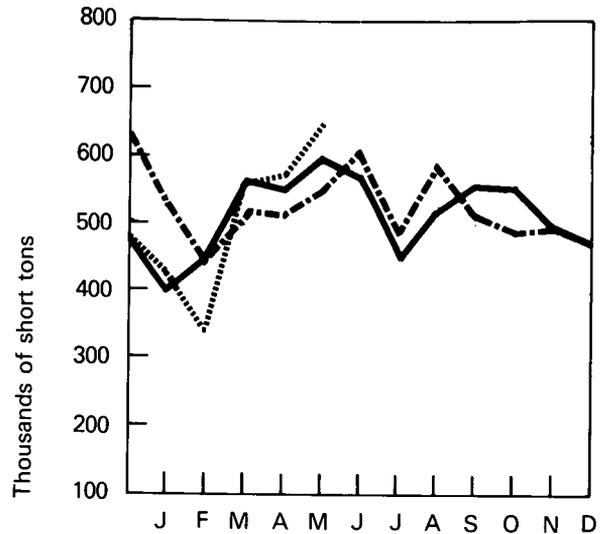


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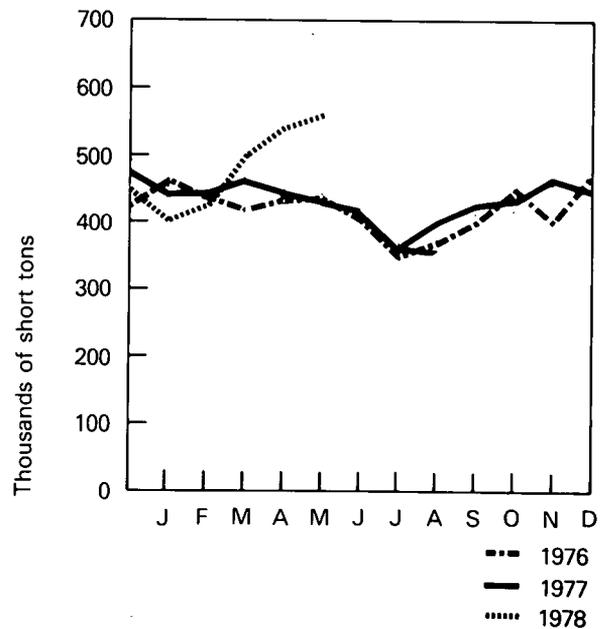
Anthracite

		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	560	500
	April	575	540
	May	650	560
	TOTAL (5 months)	2,555	2,425

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

Electricity production by utilities during April 1978 was 159.8 billion kilowatt hours, an increase of 1.8 percent from the April 1977 production level. Total production during the first 4 months of 1978 was 704.3 billion kilowatt hours, 2.8 percent above the level for the same months of 1977. Edison Electric Institute has estimated May 1978 production at 175.2 billion kilowatt hours.

Electric utility oil consumption during April 1978 was 3.0 percent below the April 1977 consumption level; however, for the first 4 months of 1978, oil consumption was 11.0 percent above the 1977 level. Coal consumption* for April 1978 was 34.7 million tons, 1.8 percent above the April 1977 rate. It was the first month this year that utility coal consumption has surpassed the level for the previous year. Coal consumption for January through April 1978 was down 3.2 percent from last year's level. Consumption by gas-fired plants in April was 223.4 billion cubic feet, 0.2 percent above the April 1977 consumption rate. Gas consumption in the first 4 months of 1978 was 4.0 percent above 1977 levels.

Following the end of the UMWA strike near the end of March, coal stocks* held by utilities were built up by 13.8 percent during the month of April. Utility coal stocks, however, were still 24.1 percent below the stock level of April 30, 1977. Oil stocks on April 30, 1978, were up 11.8 percent from the level for the same month of 1977.

Sales of electric energy to ultimate consumers by all electric utilities in the United States in March 1978 totaled 161.9 billion kilowatt hours, an increase of 4.8 percent over March 1977 sales.

Sales to residential consumers during March were 58.2 billion kilowatt hours, an increase of 14.4 percent over sales for the corresponding month in 1977. Commercial sales were 36.2 billion kilowatt hours, 5.7 percent higher than in March 1977. Sales to industrial consumers totaled 61.5 billion kilowatt hours, a decrease of 2.8 percent compared to March 1977. Other

sales totaled 6.0 billion kilowatt hours, or 2.0 percent less than for the same month of the previous year.

*Utility coal consumption and stocks include bituminous and anthracite coal, lignite, and coke.

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	19,480	19,601	15,150	322	162,734
	March	R77,521	R28,343	R22,467	20,672	19,801	356	R169,160
	April	70,898	25,834	21,297	19,867	18,642	319	156,857
	May	77,071	27,945	R24,701	20,599	18,677	341	R169,334
	June	R83,148	R28,947	R29,623	21,517	17,226	335	R180,796
	July	92,408	34,866	R32,715	21,825	R16,799	328	R198,941
	August	90,764	32,302	33,293	22,750	16,712	317	196,138
	September	82,593	R26,347	R30,942	19,630	16,455	342	R176,309
	October	79,406	R23,060	R27,359	19,041	R17,219	360	R166,445
	November	79,495	24,848	R22,581	19,458	20,428	347	R167,157
	December	R83,640	R32,652	R21,151	23,771	22,787	337	R184,338
	TOTAL	R985,540	R357,936	R305,562	250,883	220,596	4,063	R2,124,580
1978	January	85,027	R39,227	R22,296	25,833	R25,055	357	R197,795
	February	70,693	R38,074	R20,360	21,833	22,399	309	R173,668
	March	R66,781	R36,741	R22,213	22,443	R24,662	264	R173,104
	April	70,437	24,869	21,309	R17,584	25,343	208	R159,750
	May	NA	NA	NA	20,474	NA	NA	175,153
	TOTAL (Year to date)	292,938	138,911	86,178	108,167	97,459	1,138	879,470

(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 April 1978; Edison Electric Institute for May 1978 Total and Nuclear Regulatory Commission for May 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	205,072
	February	R37,665	47,659	3,150	50,809	200,407
	March	37,218	46,172	R2,495	R48,667	R231,825
	April	34,051	42,218	2,213	44,431	223,081
	May	37,159	44,779	3,846	48,625	R259,800
	June	40,151	46,249	R4,303	R50,552	R310,702
	July	44,977	54,664	R7,741	R62,405	R346,675
	August	44,172	51,950	4,646	56,596	R350,756
	September	40,168	43,297	2,523	45,820	R324,613
	October	38,379	38,071	1,899	39,970	R284,844
	November	38,722	40,654	R2,469	R43,123	R234,197
	December	R41,312	R52,780	R4,067	R56,847	R219,976
	TOTAL	R477,229	R574,872	R48,870	R623,742	R3,191,948
1978	January	42,713	61,263	R8,243	R69,506	R229,001
	February	35,884	R59,632	R7,693	67,325	R211,079
	March	R34,081	R58,570	R5,466	R64,036	R231,573
	April	34,667	40,821	2,256	43,077	223,434
	TOTAL (3 months)	147,345	220,286	23,658	243,944	895,087

*Primarily residual fuel oil.

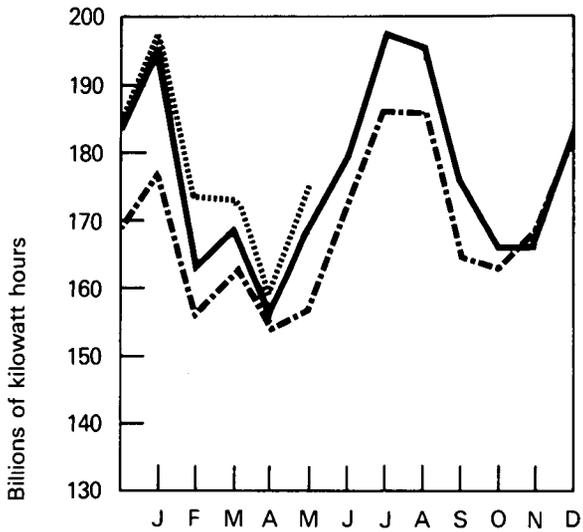
**Primarily middle distillates.

R=Revised.

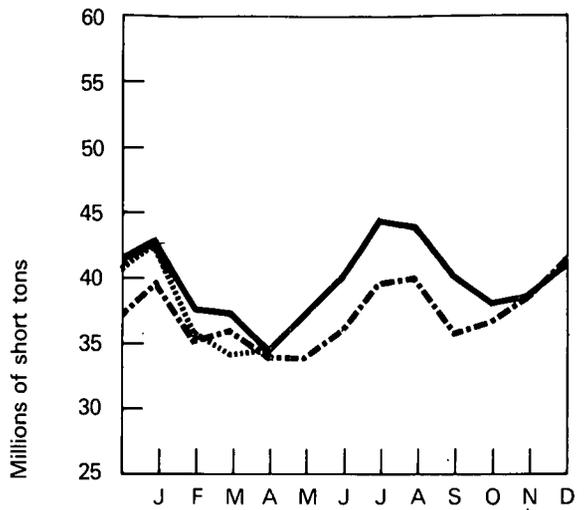
Source: Federal Power Commission Form 4, "Monthly Powerplant Report."

Electric Utilities

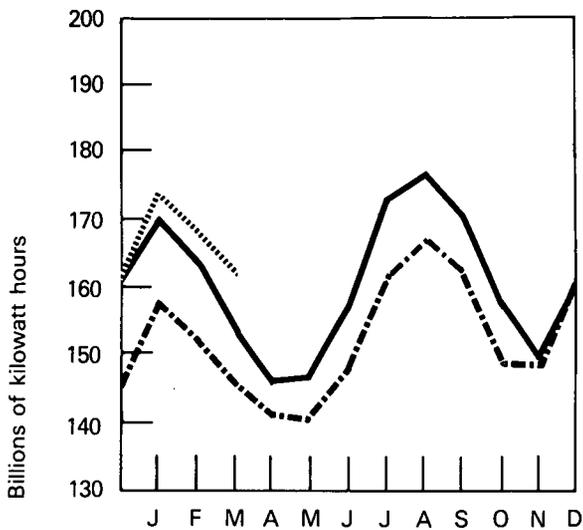
Total Net Electricity Production



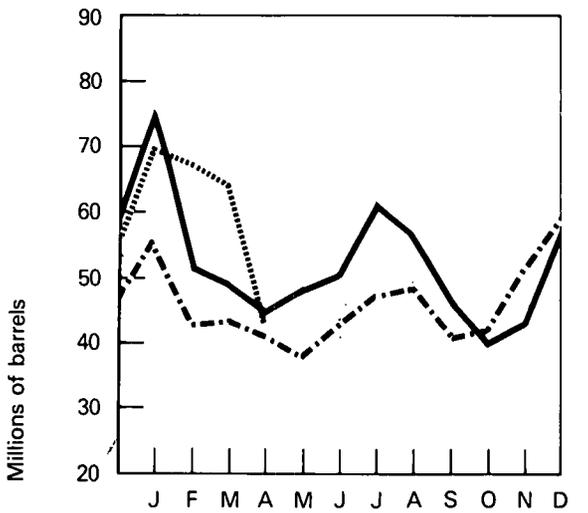
Coal Consumption



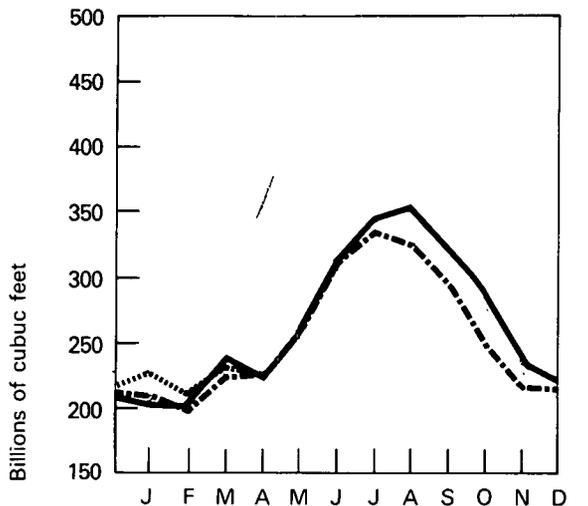
Total Electricity Sales



Oil Consumption



Gas Consumption



--- 1976 — 1977 1978

Electric Utilities (Continued)

Stocks at End of Month

		Coal	Oil			
			Thousands of short tons	Steam*	Gas Turbine/ Internal Combustion*	Total
					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	R12,740	R102,844	
	February	R103,307	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	R104,094	15,841	R119,935	
	June	R128,820	107,932	R15,515	R123,447	
	July	123,405	113,250	R16,028	R129,278	
	August	123,856	119,599	17,093	136,692	
	September	R130,379	125,360	17,864	143,224	
	October	139,705	128,452	R19,128	R147,580	
	November	149,731	129,701	19,149	148,850	
	December	133,288	125,245	19,316	144,561	
1978	January	105,327	R114,049	R16,232	R130,281	
	February	84,745	R110,023	R17,098	R127,121	
	March	R77,329	R111,049	R17,262	R128,311	
	April	88,018	114,174	17,337	131,511	

*Primarily residual fuel oil.

**Primarily middle distillates.

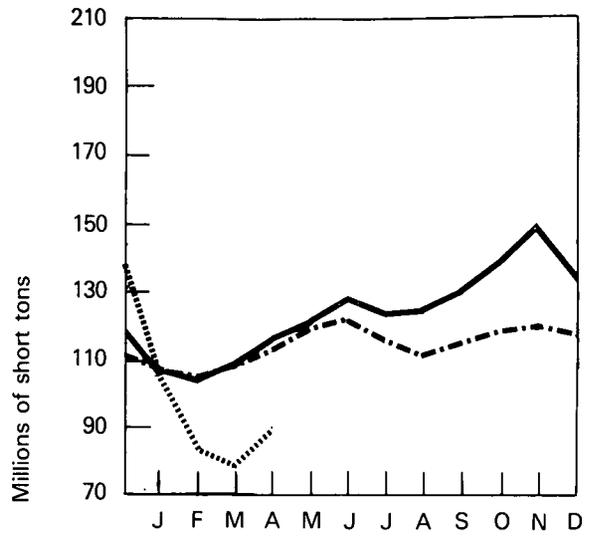
***As of December 31.

R=Revised.

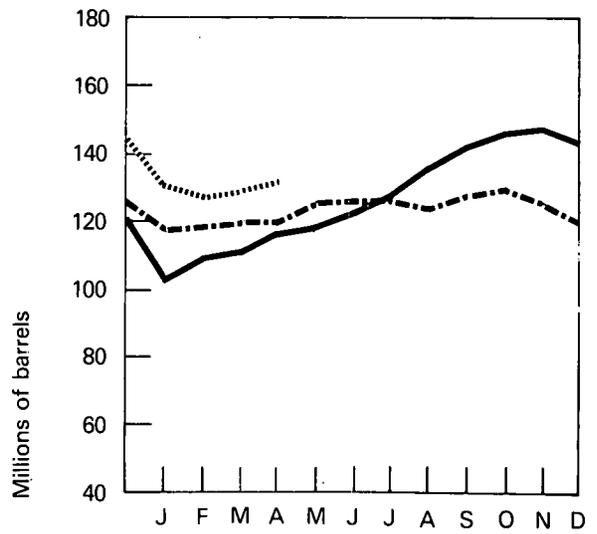
Source: Federal Power Commission Form 4, "Monthly Powerplant Report."

Electric Utilities

Coal Stocks



Oil Stocks



--- 1976
— 1977
..... 1978

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	R50,859	R34,248	R63,294	R6,158	R154,559
	April	44,564	33,051	63,583	5,078	146,276
	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	R642,498	R444,310	R773,447	R69,766	R1,930,021
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
	TOTAL (3 months)	187,677	111,429	186,641	18,868	504,615

(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

Nuclear powerplants generated 20.5 billion net kilowatt hours of electricity during May which was approximately 11.7 percent of total net domestic electricity production for the month. For the first 5 months of 1978 nuclear power contributed 12.3 percent of total electricity production, about the same as during the first 5 months of 1977. The 65 fully operable domestic reactors, with a maximum dependable capacity of 45,744 net electrical megawatts,* operated at 59 percent of capacity in May. Performance for the first 5 months of 1978 averaged 65 percent of capacity.

Plans for three reactors at two locations were terminated during May (Sundesert units 1 and 2 of the San Diego Gas and Electric Company and the Carolina No. 3 unit of the Carolina Power and Light Company). The Summit 1 reactor of the Delmarva Power and Light Company, previously reported as being cancelled, is actually still under consideration by the utility.

Recently released DOE uranium resource estimates** indicate that nearly 2.4 million tons of uranium oxide (U_3O_8) reserves and probable resources are recoverable at a cost of \$50 per pound or less. Reserves are generally defined as uranium deposits which have been clearly established by detailed investigation of drill hole samples and other similar geologic procedures, while probable resources are deposits estimated to exist adjacent to known deposits or in new areas with known mineral potential. Probable resources fall into a general grouping called potential resources along with two other categories, possible and speculative resources. Reserve estimates total 890,000 tons of U_3O_8 while probable resources are estimated at 1,535,000 tons.*** These reserves and potential resources recoverable at \$50 per pound or less would be sufficient lifetime fuel for approximately 440 reactors of the 1,000-megawatt-size range,

assuming each reactor consumes approximately 5,500 tons of U_3O_8 in a 30-year operating lifetime.

*Does not include four units in startup testing having a total capacity of 3,180 megawatts.

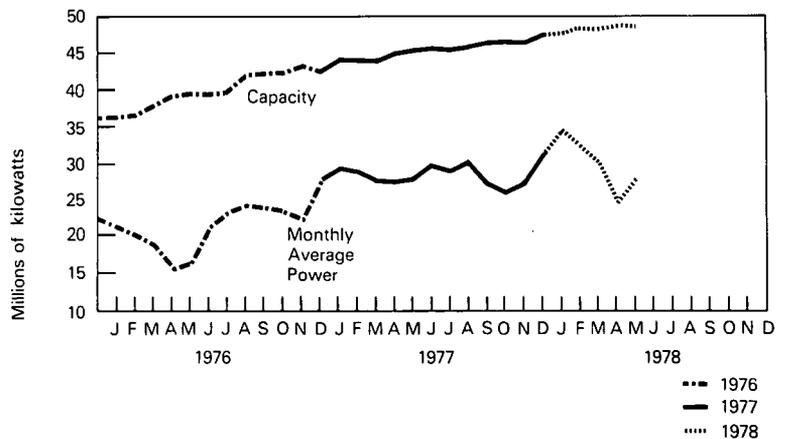
**Statistical Data of the Uranium Industry, U.S. Department of Energy Report No. GJO-100(78), Grand Junction Office, Grand Junction, Colorado 81501, January 1, 1978.

***Includes 140,000 tons estimated to be recoverable as a by-product of copper and phosphate mining.

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	30,165	13.0
April	48,926	R24,456	R11.0
May	48,924	**27,519	**11.7
AVERAGE (5 months)	48,230	29,856	12.3

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 May 1978 from Nuclear Regulatory Commission. Remaining data from FPC Form 4, "Monthly Powerplant Report."

Status of Nuclear Powerplants—May 31, 1978

Status	Number of Plants				Total	Design Capacity
	Boiling Water Reactors	High Temperature Gas Reactors	Pressurized Water Reactors	Other**		Net Electrical Megawatts
In operation or startup testing*	25	1	41	2	69	50,000
Construction permit granted	29	0	61	0	90	98,000
Construction permit pending	8	0	28	3	39	44,000
Orders placed for plant	3	0	7	0	10	12,000
Publicly announced	—	—	—	6	6	7,000
TOTAL	65	1	137	11	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 8 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—May 1978

Country	Number of Reactors*	Capacity Thousands of gross electrical kilowatts	Electricity Generation Millions of gross kilowatt hours	Generation of Electricity Percent of Design Capacity Used			
				May		Year**	
				1978	1975	1976	1977
Asia							
Japan	15	8,780	3,702	57	46	57	41
India	3	620	223	48	46	58	51
Pakistan	1	140	NA	NA	46	41	28
Taiwan	1	640	205	43	—	—	—
Europe							
Belgium	3	1,740	1,287	99	83	65	78
England***	31	8,100	2,361	43	57	62	55
Finland	1	440	309	94	—	—	92
France	13	5,890	2,113	48	68	59	52
Germany (FR)	10	6,410	3,134	68	72	57	64
Italy	3	630	370	79	69	69	61
Netherlands	2	520	380	98	73	84	81
Spain	3	1,120	113	14	77	77	67
Sweden	6	3,850	1,543	54	44	55	59
Switzerland	3	1,060	736	93	84	85	87
North America							
Canada†	+8	4,790	2,469	77	64	80	76
United States	67	50,470	21,262	57	56	55	64
South America							
Argentina	1	370	270	99	85	86	55
Total or Average	171	95,570	40,477	58	58	59	62

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

***May figures for 21 units are based on a 4-week period; figures for remaining units are for 31 days.

†May figures are based on 4-week period.

NA=Not available.

Source: *Nucleonics Week* magazine.

U.S. Uranium Enrichment—May 1978

	Domestic Customers	Foreign Customers	Total
Separative work performed (in metric tons of separative work units)	340.879	520.727	861.607
Cost (in millions of dollars)	25.584	40.159	65.743
Product quantity (in metric tons of uranium)	136.875	138.910	275.784
Feed requirement (in metric tons of uranium)	517.914	689.114	1,207.027

Source: U.S. Department of Energy.

Summary of Monthly Fuel Cycle—April 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	148	14	51,000	81	1.27
Conversion	Uranium Hexafluoride (UF ₆) Deliveries	1,253	587	428,000	189	0.16
Enrichment	Enriched UF ₆ Deliveries	44 (181 MT-SWU)	(⁶)	90,000	400	1.53
Fabrication	Finished Fuel Assemblies Shipped	40	NA	82,000	11	0.47
Powerplant Operation	Electricity Generated	16,674 (million kWhe)	54	178,000	873 (million kWhe)	10.93
Spent Fuel	Stored at Reactor Site	156	—	—	—	} 71.57
	Stored at Non-Reactor Sites	0	—	—	—	

¹ Units of measure are discussed in Explanatory Notes 8 and 9.

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 April 1978 was 6.0 quadrillion Btu, 3.1 percent more than in April 1977, and 4.4 percent more than in April 1976. The sectoral breakdown for April is not yet available.

In March 1978, the combined residential/commercial sector consumed 2.9 quadrillion Btu, 14.7 percent more than in March 1977. Industrial energy consumption for March 1978 was 2.2 quadrillion Btu, 3.6 percent less than in March 1977. Transportation consumption in March 1978 was 1.8 quadrillion Btu, up 7.2 percent from the March 1977 level.

Energy Indicators*

U.S. Dependence on Petroleum Imports

The fraction of petroleum demand supplied by imports increased from a seasonally adjusted figure of 42.9 percent in December 1977 to 46.1 percent in March 1978. Imports from Arab members of OPEC increased from 18.4 percent of petroleum demand to 19.5 percent.

Energy Consumption Per GNP Dollar

Energy consumption per GNP dollar dropped 2.6 percent between fourth quarter 1977 and first quarter 1978 to a seasonally adjusted figure of 53.9 thousand Btu per constant 1972 dollar.

Consumer Energy Price Indicator

The Consumer Energy Price Indicator went up 0.5 percent between fourth quarter 1977 and first quarter 1978, while the Consumer Price Index increased 2 percent.

Cooling Degree-Days

For the period June 5 through July 2, 1978, the Nation accumulated 6 percent more cooling degree-days than normal and 2 percent more than for the same period in 1977, indicating somewhat warmer weather.

Regionally, cooling degree-days for New England during the June period were approximately normal; the Middle Atlantic States accumulated 9 percent fewer than normal cooling degree-days; and the Lower Atlantic States had 5 percent above normal. Cooling degree-days for the combined Rocky Mountain and West Coast regions were approximately 28 percent above normal, and the combined South Central, Midwest, and North Central Regions were approximately 8 percent above normal.

National average cumulative cooling degree-days for the period January 1 through July 2, 1978, were 6 percent greater than normal but 11 percent below the level accumulated during the similar period of 1977.

*See Explanatory Notes 11-13.

Energy Consumption

Domestic Energy Consumption by Primary Energy Type

		Coal*	Natural Gas (dry)	Petroleum	Hydroelectric Power**	Nuclear Electric Power	Total***	Cumulative Total***
		Quadrillion (10 ¹⁵) Btu						
1972	TOTAL	12.424	22.699	32.966	2.946	0.576	71.610	
1973	TOTAL	13.294	22.512	34.852	3.006	0.888	74.551	
1974	TOTAL	12.889	21.732	33.468	3.313	1.215	72.617	
1975	TOTAL	12.813	19.948	32.742	3.222	1.839	70.564	
1976	January	1.216	2.337	3.177	0.282	0.172	7.183	7.183
	February	1.076	1.977	2.791	0.265	0.153	6.262	R13.445
	March	1.117	1.755	2.948	0.287	0.149	6.256	19.701
	April	1.067	1.538	2.749	0.261	0.117	5.732	25.433
	May	1.073	1.463	2.722	0.276	0.127	5.661	31.094
	June	1.112	1.362	2.774	0.276	0.168	5.692	36.786
	July	1.185	1.399	2.829	0.281	0.189	5.884	42.671
	August	1.194	1.343	2.835	0.258	0.196	5.827	48.498
	September	1.095	1.328	2.776	0.222	0.184	5.606	54.104
	October	1.133	1.653	2.912	0.229	0.185	6.113	60.216
	November	1.192	1.912	3.107	0.216	0.172	6.599	66.816
	December	1.289	2.277	3.503	0.221	0.225	7.515	74.330
	TOTAL	13.751	20.345	35.123	3.075	2.037	74.330	
1977	January	1.287	2.434	3.489	0.224	0.236	7.671	7.671
	February	1.140	1.829	3.143	0.167	0.209	6.488	14.159
	March	1.146	1.727	3.076	0.215	0.220	R6.384	20.544
	April	1.056	1.436	2.897	0.203	0.212	5.804	26.347
	May	1.120	1.379	2.890	0.203	0.220	5.811	32.158
	June	1.177	1.337	2.976	0.188	0.229	5.907	38.066
	July	1.276	1.330	2.990	0.184	0.233	6.012	44.078
	August	1.246	1.370	3.068	0.183	0.243	6.109	50.188
	September	1.153	1.431	2.924	0.180	0.209	5.897	56.085
	October	1.144	1.520	3.038	0.188	0.203	6.092	62.177
	November	1.146	1.696	3.040	0.221	0.207	6.311	R68.489
	December	1.223	2.124	R3.415	0.246	0.253	R7.261	75.750
	TOTAL	14.114	19.613	36.947	2.402	2.674	75.750	
1978	January	1.238	2.400	R3.355	0.270	0.275	R7.538	R7.538
	February	1.049	R2.158	3.197	0.242	0.233	R6.880	R14.417
	March	R1.001	R1.930	R3.354	0.266	R0.239	R6.790	R21.207
	April	1.039	1.510	2.975	0.273	0.187	5.984	27.191
	TOTAL (4 months)	4.327	7.998	12.882	1.050	0.934	27.191	

*Includes bituminous coal, lignite, and anthracite coal.

**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	26.515	29.161	18.877	74.551
1974	TOTAL	25.863	28.492	18.261	72.617
1975	TOTAL	26.135	26.071	18.358	70.564
1976	January	3.109	2.421	1.653	7.183
	February	2.688	2.111	1.463	6.262
	March	2.431	2.199	1.626	6.256
	April	2.085	2.068	1.580	5.732
	May	1.917	2.191	1.553	5.661
	June	1.865	2.228	1.599	5.692
	July	1.970	2.278	1.637	5.884
	August	1.978	2.258	1.592	5.827
	September	1.840	2.208	1.558	5.606
	October	1.952	2.561	1.600	6.113
	November	2.374	2.585	1.642	6.599
	December	3.007	2.714	1.794	7.515
	TOTAL	27.215	27.823	19.294	74.330
1977	January	3.425	2.524	1.722	7.671
	February	2.970	1.939	1.579	6.488
	March	R2.500	R2.233	1.651	R6.384
	April	2.094	2.086	1.624	5.804
	May	1.919	2.285	1.607	5.811
	June	1.972	2.287	1.648	5.907
	July	2.116	2.228	1.669	6.012
	August	2.108	2.313	1.688	6.109
	September	1.955	2.329	1.613	5.897
	October	2.003	2.440	1.649	6.092
	November	2.163	2.505	1.643	6.311
	December	R2.830	R2.626	R1.806	R7.261
	TOTAL	R28.054	R27.796	R19.900	75.750
1978	January	R3.283	R2.556	R1.700	R7.538
	February	3.132	R2.135	R1.613	R6.880
	March	2.868	2.152	1.770	R6.790
	TOTAL (3 months)	9.282	6.842	5.083	21.207

R=Revised data.

*See Explanatory Note 10 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.

Energy Consumption by Economic Sector and Primary Source—March 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					
Residential and Commercial	0.023	1.059	0.645	—	—	1.727	0.337	2.064	0.803	2.868
Industrial	0.242	0.572	0.627	0.001	—	1.442	0.210	1.652	0.500	2.152
Transportation	0	0.061	1.691	—	(⁹)	1.752	0.005	1.757	0.013	1.770
Electric Utilities	0.736	0.238	0.392	0.264	0.239	1.869	—	—	—	—
TOTAL	1.001	1.930	3.354	0.266	0.239	6.790	0.553	5.474	1.316	6.790

¹ See Explanatory Note 10 for definitions of the Residential and Commercial, Industrial, Transportation, and Electric Utilities Sectors.

² Data are from the Energy Information Administration. Includes anthracite and bituminous coal and lignite.

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 1977. 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.

⁹ Negligible.

Energy Consumption (Continued)

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

	March 1978 Consumption	Percent Change from March 1977*	Cumulative Percent Change from 1977 (January through March)*
	Quadrillion Btu		
Refined Petroleum Products	3.354	+9.0	+2.0
Motor Gasoline	1.179	+5.0	+2.9
Jet Fuel	0.191	+5.7	+1.1
Distillate	0.734	+18.9	+1.0
Residual	0.685	+11.7	+1.5
Other Petroleum Products	0.565	+6.1	+2.4
Natural Gas (Dry)	1.930	+11.8	+8.3
Coal (Anthracite, bituminous, and lignite)	1.001	-12.6	-8.0
Hydroelectric and Nuclear Electric Power	0.505	+16.1	+20.0
TOTAL ENERGY USE	6.790	+6.4	+3.2
Economic Sector Consumption			
Residential and Commercial	2.868	+14.7	+4.4
Industrial	2.152	-3.6	+2.2
Transportation	1.770	+7.2	+2.6

*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	8.120	26.515	
1974	TOTAL	0.297	7.427	6.484	3.424	8.232	25.863	
1975	TOTAL	0.253	7.688	6.135	3.538	8.520	26.135	
1976	January	0.031	1.254	0.648	0.340	0.836	3.109	3.109
	February	0.019	1.090	0.581	0.315	0.683	2.688	5.797
	March	0.018	0.856	0.571	0.286	0.699	2.431	8.228
	April	0.020	0.671	0.500	0.271	0.623	2.085	10.313
	May	0.016	0.488	0.506	0.265	0.642	1.917	12.230
	June	0.015	0.333	0.488	0.285	0.745	1.865	14.095
	July	0.011	0.281	0.486	0.333	0.858	1.970	16.065
	August	0.015	0.259	0.506	0.347	0.851	1.978	18.043
	September	0.016	0.272	0.518	0.331	0.702	1.840	19.882
	October	0.020	0.395	0.569	0.286	0.681	1.952	21.834
	November	0.025	0.723	0.622	0.288	0.715	2.374	24.208
	December	0.036	1.083	0.730	0.330	0.828	3.007	27.215
	TOTAL	0.243	7.706	6.726	3.676	8.863	27.215	
1977	January	0.035	1.376	0.712	0.367	0.935	3.425	3.425
	February	0.024	1.216	0.674	0.347	0.709	2.970	6.395
	March	0.019	0.845	0.608	R0.306	R0.722	R2.500	R8.895
	April	0.020	0.623	0.538	0.277	0.635	2.094	R10.988
	May	0.016	0.405	0.529	0.271	0.697	1.919	R12.907
	June	0.015	0.315	0.544	0.311	0.788	1.972	R14.879
	July	0.014	0.283	0.503	0.366	0.950	2.116	R16.995
	August	0.014	0.256	0.551	0.373	0.915	2.108	R19.103
	September	0.015	0.264	0.551	0.350	0.776	1.955	R21.059
	October	0.018	0.376	0.612	0.306	0.691	2.003	R23.062
	November	0.025	0.552	0.611	0.284	0.691	2.163	R25.224
	December	0.030	0.952	R0.685	0.326	0.837	R2.830	R28.054
	TOTAL	0.246	7.462	R7.117	R3.883	R9.346	R28.054	
1978	January	0.029	1.257	R0.674	0.369	0.952	R3.283	R3.283
	February	0.029	1.283	0.640	0.361	0.819	3.132	R6.415
	March	0.023	1.059	0.645	0.337	0.803	2.868	9.282
	TOTAL (3 months)	0.082	3.600	1.959	1.068	2.574	9.282	

(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	4.370	10.493	6.403	0.036	2.341	5.518	29.161	
1974	TOTAL	4.062	10.137	6.305	0.036	2.337	5.615	28.492	
1975	TOTAL	3.798	8.425	5.966	0.035	2.302	5.545	26.071	
1976	January	0.316	0.794	0.630	0.003	0.196	0.482	2.421	2.421
	February	0.299	0.618	0.565	0.003	0.198	0.429	2.111	4.532
	March	0.317	0.616	0.556	0.003	0.206	0.503	2.199	6.732
	April	0.316	0.587	0.487	0.003	0.205	0.471	2.068	8.799
	May	0.323	0.658	0.492	0.003	0.209	0.506	2.191	10.990
	June	0.308	0.670	0.475	0.003	0.214	0.559	2.228	13.219
	July	0.307	0.734	0.473	0.003	0.213	0.549	2.278	15.496
	August	0.300	0.709	0.492	0.003	0.218	0.535	2.258	17.754
	September	0.299	0.716	0.504	0.003	0.220	0.467	2.208	19.962
	October	0.314	0.951	0.554	0.003	0.218	0.521	2.561	22.523
	November	0.323	0.905	0.605	0.003	0.215	0.534	2.585	25.108
	December	0.353	0.900	0.710	0.003	0.214	0.536	2.714	27.823
	TOTAL	3.775	8.859	6.540	0.033	2.525	6.091	27.823	
1977	January	0.319	0.767	0.693	0.001	0.210	0.535	2.524	2.524
	February	0.305	0.349	0.655	0.001	0.206	0.422	1.939	4.463
	March	0.325	0.591	0.591	0.001	0.216	R0.509	R2.233	R6.696
	April	0.306	0.541	0.523	0.001	0.217	0.497	2.086	R8.782
	May	0.303	0.667	0.514	0.001	0.224	0.576	2.285	R11.067
	June	0.294	0.667	0.529	0.001	0.225	R0.570	2.287	R13.354
	July	0.286	0.657	0.489	0.001	0.221	0.574	2.228	R15.582
	August	0.274	0.718	0.536	0.001	0.227	0.557	2.313	R17.895
	September	0.267	0.795	0.536	0.001	0.227	0.504	2.329	R20.225
	October	0.298	0.807	0.595	0.001	0.227	0.512	2.440	R22.665
	November	0.297	0.851	0.594	0.001	0.222	0.540	2.505	R25.170
	December	0.303	0.878	R0.666	0.001	0.218	0.559	R2.626	R27.796
	TOTAL	3.576	8.288	6.920	0.017	2.639	R6.356	R27.796	
1978	January	0.283	0.830	R0.656	0.001	0.219	0.566	R2.556	R2.556
	February	0.244	R0.589	0.622	0.001	0.208	0.471	R2.135	R4.690
	March	0.242	0.572	0.627	0.001	0.210	0.500	2.152	6.842
	TOTAL (3 months)	0.770	1.991	1.905	0.004	0.637	1.536	6.842	

(See footnotes on page 50)

Energy Consumption (Continued)

Energy Consumption by the Transportation Economic Sector¹

		Coal	Natural Gas ⁴ (dry)	Petroleum ²	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	0.0580.137	18.877		
1974	TOTAL	0.009	0.656	17.392	0.060	0.144	18.261	
1975	TOTAL	0.001	0.602	17.544	0.062	0.149	18.358	
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	6.321
	May	negl.	0.043	1.493	0.005	0.012	1.553	7.874
	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	14.259
	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	17.500
	December	negl.	0.074	1.699	0.006	0.015	1.794	19.294
	TOTAL	negl.	0.619	18.457	0.064	0.154	19.294	
1977	January	negl.	0.080	1.620	0.006	0.015	1.722	1.722
	February	negl.	0.058	1.503	0.006	0.012	1.579	3.301
	March	negl.	0.054	1.580	0.005	0.012	1.651	4.953
	April	negl.	0.043	1.564	0.005	0.011	1.624	6.577
	May	negl.	0.040	1.549	0.005	0.013	1.607	8.184
	June	negl.	0.037	1.594	0.005	0.012	1.648	9.832
	July	negl.	0.035	1.616	0.005	0.013	1.669	11.501
	August	negl.	0.036	1.635	0.005	0.012	1.688	13.189
	September	negl.	0.040	1.557	0.005	0.011	1.613	14.802
	October	negl.	0.044	1.587	0.005	0.012	1.649	16.451
	November	negl.	0.052	1.571	0.006	0.014	1.643	18.094
	December	negl.	0.068	R1.717	0.006	0.015	R1.806	R19.900
	TOTAL	negl.	0.588	R19.094	0.064	0.153	R19.900	
1978	January	negl.	0.078	R1.600	0.006	0.016	R1.700	R1.700
	February	negl.	R0.070	1.524	0.006	0.013	R1.613	R3.312
	March	negl.	0.061	1.691	0.005	0.013	1.770	5.083
	TOTAL (3 months)	negl.	0.209	4.815	0.017	0.042	5.083	

¹ See Explanatory Note 10 for definitions of the Residential and Commercial, Industrial, and Transportation Sectors. The methodology used for sector calculations is provided in the footnotes of the 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.

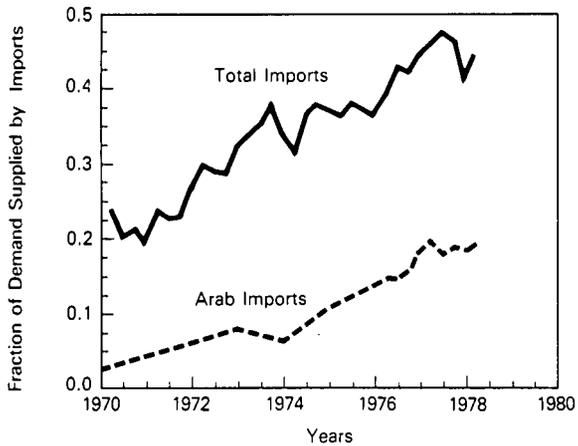
³ The percentage share used in calculating Industrial consumption of petroleum was 47.5 percent for 1973 and 49.3 percent for 1974, 1975, 1976, 1977, and 1978.

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.

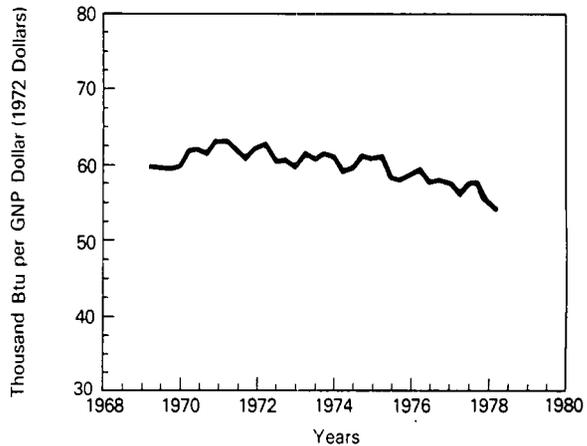
R=Revised data.

Energy Indicators*

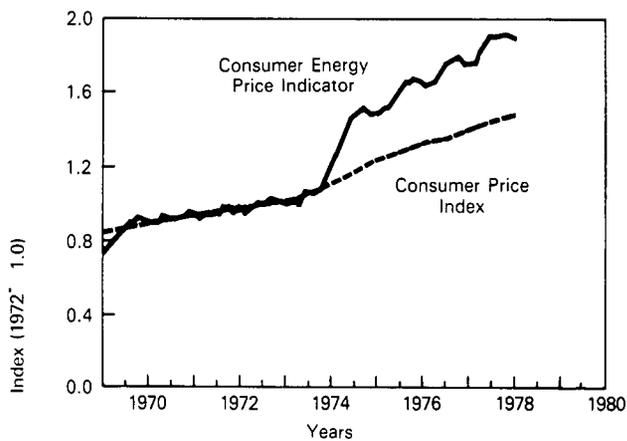
U.S. Dependence on Petroleum Imports



Energy Consumption per GNP Dollar



Consumer Energy Price Indicator



*See Explanatory Notes 11, 12 and 13.

Cooling Degree-Days*

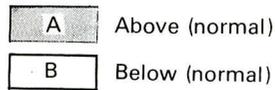
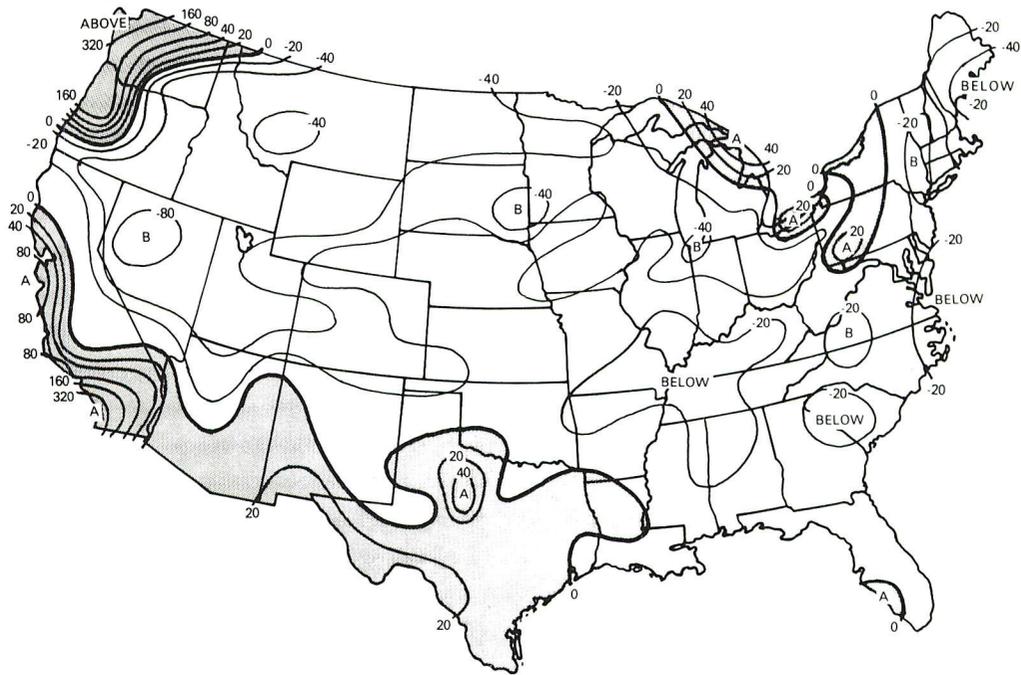
Petroleum Administration For Defense (PAD) Districts	1978	June 5 to July 2, 1978				Cumulative January 1-July 2, 1978				
		1977**		Normal (1941-70)**	1978	1977**		Normal (1941-70)*		
PAD District I	222.1	219.4	(1.2)	224.0	(-0.9)	403.9	456.9	(-11.6)	407.5	(-0.9)
New England	103.0	121.6	(-15.3)	102.7	(0.2)	155.0	211.4	(-26.7)	125.1	(23.9)
Conn., Maine, Mass., N.H., R.I., Vt.										
Middle Atlantic	165.7	148.0	(11.9)	181.2	(-8.6)	243.4	272.3	(-10.6)	242.5	(0.3)
Del., Md., N.J., N.Y., Pa.										
Lower Atlantic	359.1	369.9	(-2.9)	341.7	(5.1)	754.8	842.6	(-10.4)	779.6	(-3.2)
Fla., Ga., N.C., S.C., Va., W. Va.										
PAD District II	213.5	196.2	(8.9)	196.5	(8.6)	324.1	421.0	(-23.0)	295.6	(9.6)
Ill., Ind., Iowa, Kans., Ky., Mich., Minn., Mo., Nebr., N. Dak., Ohio, Okla., S. Dak., Tenn., Wisc.										
PAD District III	462.2	477.7	(-3.3)	426.9	(8.3)	942.6	976.7	(-3.5)	904.3	(4.2)
Ala., Ark., La., Miss., N. Mex., Tex.										
PAD District IV	147.1	196.9	(-25.3)	112.4	(30.9)	162.2	245.2	(-33.8)	133.9	(21.1)
Colo., Idaho, Mont., Utah, Wyo.										
PAD District V	150.2	143.1	(5.0)	119.0	(26.2)	291.7	227.8	(28.0)	215.0	(35.7)
Ariz., Calif., Nev., Oreg., Wash.										
U.S. AVERAGE	235.8	231.4	(1.9)	221.6	(6.4)	420.1	469.4	(-10.5)	396.2	(6.0)

*See Explanatory Note 14 for explanation of degree-days.

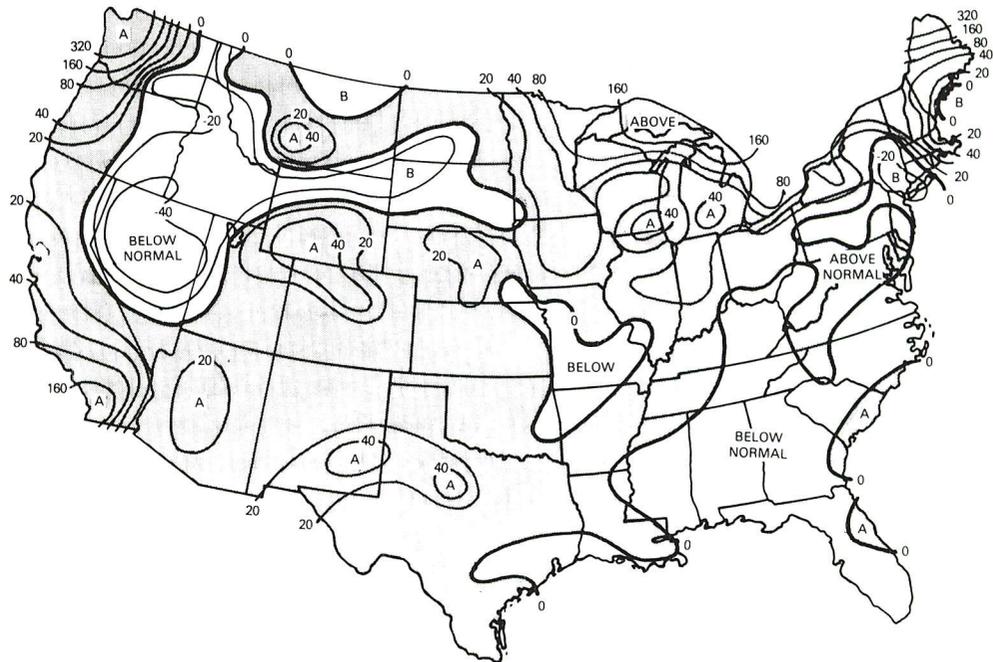
**Percentage change in parentheses.

Cooling Degree-Days Accumulated from January 1, 1978, through July 2, 1978

Percent Departure from 1977



Percent Departure from Normal (1941-70)



Note: Above normal cooling-days correspond to below normal temperatures.

Source: Department of Commerce – NOAA.

Oil and Gas Exploration and Development

The rotary rig count climbed to 2,286 in June, the highest June count since 1957, and more than double the count of June 1973, which was several months before the Arab oil embargo.

Well completions were down slightly in May, but for the first 5 months of the year, the number of wells drilled was up 4.6 percent from the number drilled during the corresponding months of 1977. A 7.6-percent decline in the number of oil well completions was offset by an 18.5-percent increase in gas wells and 10.4-percent increase in dry holes. Total footage drilled rose 7.3 percent during the period.

The first two exploratory wells drilled in the Atlantic Outer Continental Shelf (OCS) region (Baltimore Canyon area) were abandoned as dry holes at depths of 12,000 and 14,000 feet, respectively. Four other exploratory wells are currently being drilled in this locality, but no substantive information is yet available on their progress.

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
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
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
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		NA	NA	NA	NA	NA
		AVERAGE (6 months)	2,188	TOTAL** (5 months)	6,755	4,859	6,182	17,796

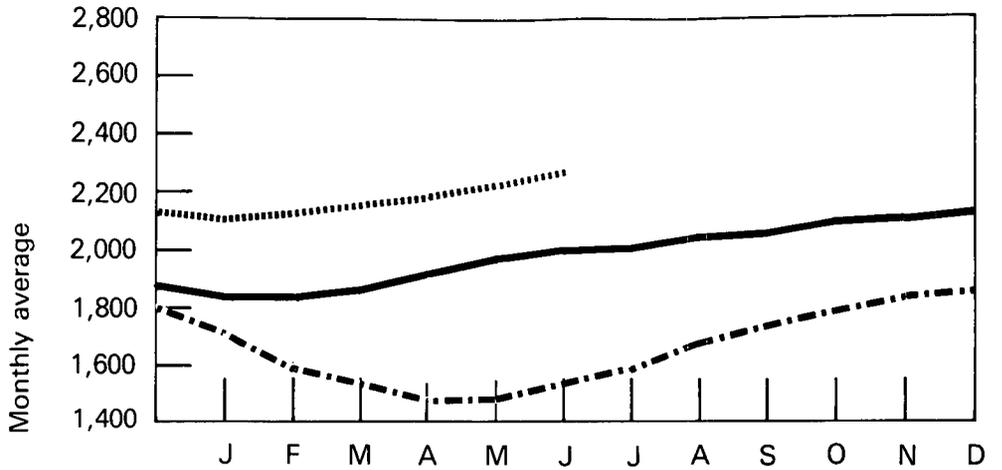
*Excludes service wells and stratigraphic and core tests.

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

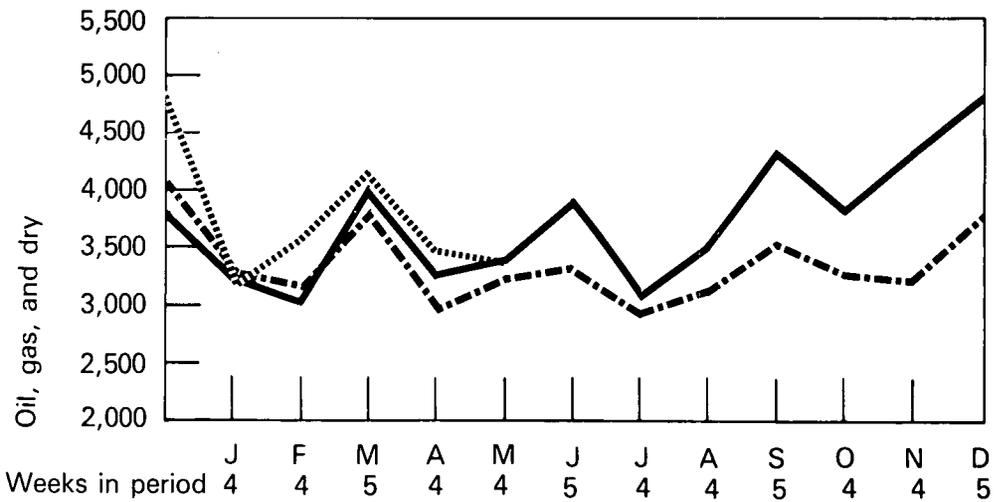
NA=Not available.

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."

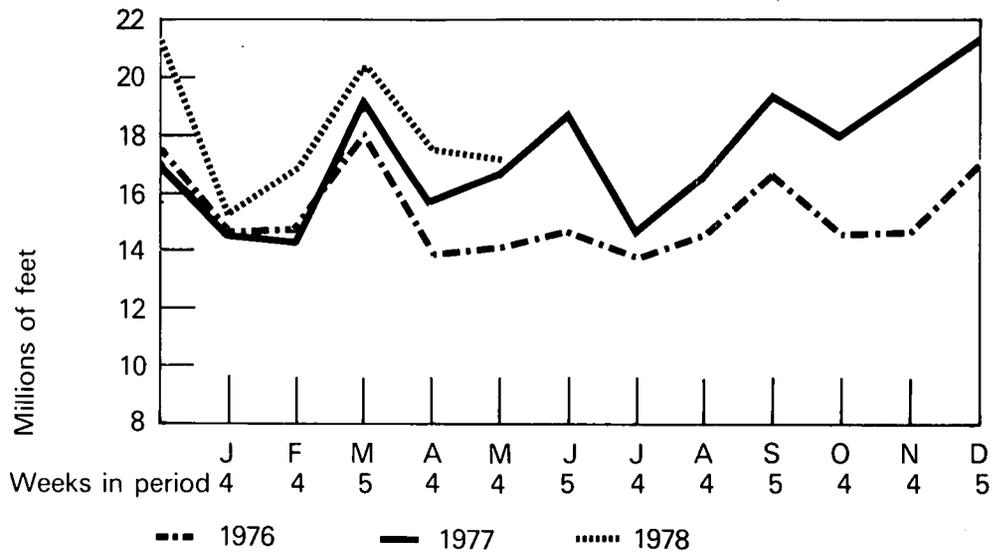
Rotary Rigs in Operation



Total Wells Drilled



Total Footage of Wells Drilled

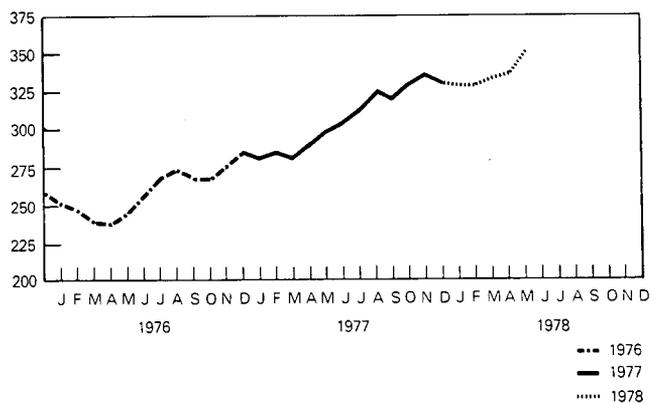


--- 1976 — 1977 1978

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	R315	R336			
	May	21	330	351			
	AVERAGE (5 months)	22	313	335			

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 price of domestic crude oil purchased by refiners in April was \$10.54 per barrel,* \$1.33 above the price 1 year earlier.

The average cost of imported crude oil purchased by refiners was \$14.40 per barrel* in April, 4 cents above the average price in April 1977.

The composite refiner acquisition cost of domestic and imported crude oil was \$12.20 per barrel* in April, up 45 cents from the price a year ago.

The average price paid by first purchasers for lower tier crude oil was \$5.35 per barrel in April, up 1 cent from the price paid in March. The upper tier crude oil price increased 7 cents in April to \$11.94 per barrel. The average strip-oil price decreased 2 cents to \$13.95 per barrel. The Alaskan North Slope crude oil price increased to \$5.25 per barrel during April from the revised March price of \$5.00. The average price paid for all first purchases of domestic crude oil in April was \$8.82 per barrel, up 42 cents from the price 1 year earlier.

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 62.0 cents per gallon in April, which is 0.3 cent above the price in March. The price for unleaded regular gasoline at full serve pumps also increased 0.3 cent, to 66.1 cents per gallon, which was 4.1 cents above the price for leaded regular gasoline at full serve pumps. Self-serve leaded and unleaded regular gasoline prices were 57.4 and 62.0 cents per gallon, respectively.

On a regional basis,** average selling prices for leaded regular gasoline at full serve pumps ranged from 60.7 cents per gallon in Region 7 (0.1 cent lower than the March price) to 66.8 cents in Region 9 (1.2 cents higher than the

March price). The average price for unleaded regular gasoline at full serve pumps ranged from 64.3 cents in Region 6 (0.4 cent higher than the revised March price) to 70.6 cents in Region 9 (1.3 cents higher than the March price).

The average price of full serve major brand leaded regular gasoline in April was 63.6 cents per gallon compared to 59.4 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 April to 38.5 cents per gallon. The price has increased a total of 3.6 cents from the price 1 year earlier.

Residual Fuel Oil

The average retail price for all grades of No. 6 residual fuel oil in April was \$12.87 per barrel, a 24-cent increase from the March price, but a 74-cent decrease from the price 1 year earlier.

Liquefied Petroleum Gases

The average wholesale price of butane sold by refiners and gas plant operators continued to decline in April to 23.9 cents per gallon. This price is 0.3 cent lower than the price 1 year earlier. The average wholesale price of propane also dropped in April to 24.4 cents per gallon, which is 0.8 cent higher than the price 1 year earlier.

*Includes transportation costs to U.S. refineries.

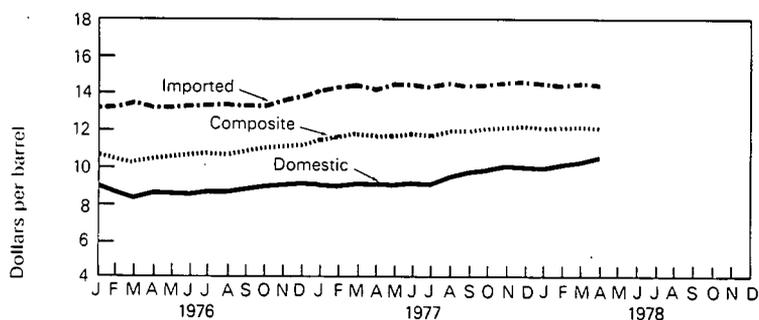
**DOE regions are defined in Explanatory Note 19.

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
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
1978	January	10.14	14.52	12.13
	February	10.25	14.41	12.19
	March	R10.46	14.57	12.23
	April**	10.54	14.40	12.20

Crude Oil Refiner Acquisition Cost



*See Explanatory Note 15.

**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

		Old	New	Domestic Average				Lower Tier ²	Upper Tier ²	Actual Stripper ³	Actual Domestic Average ⁴	Imputed Domestic Average ⁴			
		Dollars per barrel													
1974 AVERAGE		5.03	10.13	6.87	1977	January	5.17	11.44	13.27	8.50	8.28				
						February	5.18	11.39	13.32	8.57	8.33				
						March	5.15	11.03	13.31	8.45	8.19				
1975 AVERAGE		5.03	12.03	7.67		April	5.15	10.97	13.28	8.40	8.14				
						May	5.18	10.98	13.26	8.49	8.23				
1976	January	5.02	12.99	8.63		June	5.16	10.92	13.28	8.44	8.17				
		Lower Tier ²	Upper Tier ²	Domestic Average				Lower Tier ²	Upper Tier ²	Actual Stripper ³	Alaskan North Slope ⁵	Naval Petroleum Reserves ⁶	Actual Domestic Average ⁴	Imputed Domestic Average ⁴	
	February	5.05	11.47	7.87											
	March	5.07	11.39	7.79		July	5.16	11.00	13.31	6.84	12.21	8.48	8.21		
	April	5.07	11.52	7.86		August	5.18	10.93	13.95	6.91	12.29	8.62	8.25		
	May	5.13	11.55	7.89		September	5.20	11.20	14.01	6.98	12.33	8.63	8.26		
	June	5.15	11.60	7.99		October	5.23	11.42	14.01	6.66	12.38	8.72	8.36		
	July	5.19	11.59	8.04		November	5.24	11.63	13.98	5.73	12.40	8.72	8.35		
	August	5.18	11.62	8.03		December	5.25	11.76	13.98	5.73	12.36	8.77	8.40		
						AVERAGE	5.19	11.22	13.59	6.35	12.34	8.57			
		Lower Tier ²	Upper Tier ²	Actual Stripper ³	Actual Domestic Average ⁴	Imputed Domestic Average ⁴									
1976	September	5.17	11.65	13.21	8.39	8.19	1978	January	5.28	11.78	13.89	5.30	12.38	8.68	8.34
	October	5.15	11.62	13.35	8.46	8.23		February	5.29	11.81	13.90	5.68	12.46	8.84	8.48
	November	5.17	11.62	13.31	8.62	8.40		March	5.34	11.87	13.97	R5.00	12.60	R8.80	R8.41
	December	5.17	11.64	13.30	8.62	8.40		April ⁷	5.35	11.94	13.95	5.25	12.67	8.82	8.44
	AVERAGE	5.13	11.71	12.16	8.19										

¹ See Explanatory Note 16.

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.

⁶ 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	R39.24	R34.06		R13.98	R11.76	R0.92
	April***	37.91	33.89		13.71	13.45	1.02

*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

NA= Not available.

*The FOB cost excludes all costs related to insurance and transportation. See Explanatory Note 17.

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	13.49	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

*See Explanatory Note 18.

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

*See Definitions.
Source: DOE.

Crude Oil (Continued)

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	—	R967	R224	R351	R1,542
	June	—	R957	R234	R344	1,535
	July	—	869	210	R391	R1,470
	August	—	R764	R279	R455	R1,498
	September	—	R784	R186	R500	R1,470
	October	—	R879	R248	R511	R1,638
	November	—	R904	R218	R538	R1,660
	December	—	R818	R185	R470	R1,473
1978	January	—	R1,055	R191	R420	R1,666
	February	—	R1,265	R198	R435	R1,898
	March	—	1,065	175	378	1,618
	April ⁴	—	1,025	165	401	1,591

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.

R=Revised data.

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

Motor Gasoline

Leaded Regular Gasoline—Full Serve

Leaded Regular Gasoline—Self Serve

		Average Retail Dealer Selling Price	Average Retail Dealer Margin	Average Retail Dealer Selling Price	Average Retail Dealer Margin
		Cents per gallon, including tax		Cents per gallon, including tax	
1975	January	52.4	9.0	NA	NA
	February	52.5	9.0	NA	NA
	March	52.6	8.8	NA	NA
	April	53.5	8.6	NA	NA
	May	54.3	8.3	NA	NA
	June	55.6	8.1	NA	NA
	July	58.7	8.4	NA	NA
	August	59.2	8.4	NA	NA
	September	59.3	8.2	NA	NA
	October	58.9	8.2	NA	NA
	November	58.4	8.2	55.4	5.5
	December	58.0	8.1	54.9	5.3
	AVERAGE	56.2	8.4	55.1	5.4
1976	January	57.7	8.1	54.7	5.4
	February	57.1	8.3	53.8	5.4
	March	56.6	8.3	53.2	5.3
	April	56.6	8.0	53.2	4.9
	May	57.4	7.4	54.4	4.5
	June	59.0	7.4	56.3	4.8
	July	59.6	7.4	56.6	4.6
	August	60.1	7.4	56.7	4.4
	September	60.2	7.6	56.5	4.3
	October	60.2	7.6	56.5	4.4
	November	60.0	7.8	56.4	4.5
	December	59.9	7.9	56.1	4.5
	AVERAGE	58.7	7.8	55.4	4.8
1977	January	59.9	7.9	56.2	4.5
	February	60.7	7.9	57.1	4.4
	March	61.3	7.8	57.7	4.4
	April	62.2	8.1	58.4	4.4
	May	62.9	7.9	58.9	4.2
	June	63.4	8.1	59.3	4.3
	July	63.4	8.3	59.2	4.4
	August	63.4	8.4	58.8	4.2
	September	63.3	8.6	58.5	4.2
	October	63.2	8.8	58.2	4.2
	November	63.1	8.7	58.1	4.0
	December	63.3	9.0	58.2	4.2
	AVERAGE	62.6	8.3	58.2	4.3
1978	January	61.7	NA	57.2	NA
	February	61.6	NA	57.1	NA
	March	61.7	NA	57.0	NA
	April*	62.0	NA	57.4	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	Average Retail Dealer Selling Price	Average Retail Dealer Margin
		Cents per gallon, including tax		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	R65.8	NA	61.8	NA
	April*	66.1	NA	62.0	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

Leaded Premium Gasoline —Self Serve

		Average Retail Dealer Selling Price	Average Retail Dealer Margin			Average Retail Dealer Selling Price	Average Retail Dealer Margin
		Cents per gallon, including tax				Cents per gallon, including tax	
1975	January	57.1	NA	NA	NA	NA	NA
	February	57.3	NA	NA	NA	NA	NA
	March	57.5	NA	NA	NA	NA	NA
	April	58.2	NA	NA	NA	NA	NA
	May	59.0	NA	NA	NA	NA	NA
	June	60.3	NA	NA	NA	NA	NA
	July	63.1	NA	NA	NA	NA	NA
	August	63.6	NA	NA	NA	NA	NA
	September	63.8	NA	NA	NA	NA	NA
	October	63.4	NA	NA	NA	NA	NA
	November	63.2	NA	NA	NA	NA	NA
	December	62.9	NA	NA	NA	NA	NA
	AVERAGE	60.9	NA	NA	NA	NA	NA
1976	January	62.7	NA	59.6	NA	59.6	NA
	February	62.1	NA	58.9	NA	58.9	NA
	March	61.6	NA	58.4	NA	58.4	NA
	April	61.6	NA	58.5	NA	58.5	NA
	May	62.4	NA	59.6	NA	59.6	NA
	June	63.9	NA	61.4	NA	61.4	NA
	July	64.6	NA	61.8	NA	61.8	NA
	August	65.2	NA	62.0	NA	62.0	NA
	September	65.3	NA	61.9	NA	61.9	NA
	October	65.2	NA	61.9	NA	61.9	NA
	November	65.2	NA	61.9	NA	61.9	NA
	December	65.0	NA	61.6	NA	61.6	NA
	AVERAGE	63.8	NA	60.7	NA	60.7	NA
1977	January	65.2	NA	61.7	NA	61.7	NA
	February	66.1	NA	62.7	NA	62.7	NA
	March	66.8	NA	63.3	NA	63.3	NA
	April	67.6	NA	64.1	NA	64.1	NA
	May	68.4	NA	64.8	NA	64.8	NA
	June	68.9	NA	65.2	NA	65.2	NA
	July	68.9	NA	65.2	NA	65.2	NA
	August	68.9	9.9	65.8	7.2	65.8	7.2
	September	68.9	10.0	65.8	7.3	65.8	7.3
	October	68.9	10.1	65.7	7.3	65.7	7.3
	November	68.9	10.1	65.6	7.3	65.6	7.3
	December	69.1	10.2	65.8	7.4	65.8	7.4
	AVERAGE	68.1	10.1	64.7	7.3	64.7	7.3
1978	January	67.7	NA	63.5	NA	63.5	NA
	February	67.7	NA	64.0	NA	64.0	NA
	March	68.0	NA	63.9	NA	63.9	NA
	April*	68.3	NA	64.2	NA	64.2	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)

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

Leaded Regular Gasoline—Full Serve

Cents per gallon, including tax

	Selling Price	
	Mar	Apr*
	Major	63.3
Nonmajor	R59.0	59.4
National Average	61.7	62.0

Unleaded Regular Gasoline—Full Serve

Cents per gallon, including tax

	Selling Price	
	Mar	Apr*
	Major	66.9
Nonmajor	62.6	62.8
National Average	R65.8	66.1

Leaded Regular Gasoline—Self Serve

Selling Price

	Mar	Apr*
	Major	58.3
Nonmajor	55.8	56.3
National Average	57.0	57.4

Unleaded Regular Gasoline—Self Serve

Selling Price

	Mar	Apr*
	Major	63.4
Nonmajor	R59.5	59.8
National Average	61.8	62.0

Leaded Premium Gasoline—Full Serve

Selling Price

	Mar	Apr*
	Major	69.1
Nonmajor	R64.4	65.2
National Average	R67.9	68.3

Unleaded Premium Gasoline—Full Serve

Selling Price

	Mar	Apr*
	Major	69.7
Nonmajor	R70.6	70.5
National Average	69.7	70.0

Leaded Premium Gasoline—Self Serve

Selling Price

	Mar	Apr*
	Major	R66.3
Nonmajor	R61.2	61.8
National Average	63.9	64.2

Unleaded Premium Gasoline—Self Serve

Selling Price

	Mar	Apr*
	Major	R67.0
Nonmajor	R62.0	62.3
National Average	R66.0	65.6

*Preliminary data.

R = Revised data.

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

**Average Regional Retail Dealer Selling Prices and Buying Prices for Full Serve Leaded Regular Gasoline—
March and April 1978**

DOE Region**	Selling Price		Buying Price	
	Cents per gallon, including tax		Cents per gallon, including tax	
	Mar	Apr*	Mar	Apr*
1	R61.0	61.3	R54.5	54.7
2	60.7	60.8	R53.4	53.9
3	R61.6	62.0	R54.0	54.0
4	R61.3	62.1	R52.8	53.3
5	61.5	61.5	R52.9	53.4
6	R60.5	61.0	R50.1	50.4
7	R60.8	60.7	52.5	53.0
8	R64.2	64.1	R53.3	53.4
9	65.6	66.8	54.0	54.8
10	R64.1	64.8	R55.8	56.4
National Average	61.7	62.0	R53.0	53.4

**Average Regional Retail Dealer Selling Prices and Buying Prices for Full Serve Unleaded Regular
Gasoline—March and April 1978**

DOE Region**	Selling Price		Buying Price	
	Cents per gallon, including tax		Cents per gallon, including tax	
	Mar	Apr*	Mar	Apr*
1	R65.0	65.3	R57.4	57.8
2	R64.9	65.0	56.2	56.5
3	R65.5	65.8	R56.7	56.9
4	R65.9	65.9	56.0	56.2
5	R65.6	65.7	R56.0	56.6
6	R63.9	64.3	52.9	53.5
7	64.8	64.7	55.6	55.9
8	R67.0	67.3	R56.2	56.4
9	69.3	70.6	56.5	57.2
10	R68.2	68.7	R58.4	59.0
National Average	R65.8	66.1	55.9	56.4

*Preliminary data.

**DOE regions are defined in Explanatory Note 19.

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	62.3	60.7
	March**	56.5	62.4	60.8

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**	47.8	49.4	36.9	37.8	38.4
	April**	49.5	51.5	36.8	38.1	38.5

*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	NA	NA

*See Explanatory Note 20.

**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."

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
	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
1978	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	R47.8
	April	49.3	49.2	48.2	47.1	46.4	NA	44.6	45.0	45.1	47.6

*DOE regions are defined in Explanatory Note 19.

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."

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 21.
 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	R39.6	R41.6
	March*	R39.6	41.0
	April*	39.7	42.5

*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)

		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	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	R11.75	13.35	12.20	14.05	11.64	12.42	R10.58	R11.75	11.25	12.53	9.66	10.84
	March*	R11.34	R13.62	12.79	13.99	R11.79	R12.75	R10.48	R11.70	11.36	12.63	R8.89	10.47
	April*	10.72	13.52	12.66	14.51	12.24	12.97	10.76	11.85	11.57	12.87	8.85	10.83

*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

*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	R129.3	R132.1	132.5
	April	65.2	190.7	76.4	128.4	130.9	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	91.1	149.7	144.9	145.7

*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."

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

	California		Kansas		Louisiana		Oklahoma		Texas	
	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	160.32	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
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

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

Utility Fossil Fuels (Continued)

COST OF FOSSIL FUELS DELIVERED TO STEAM ELECTRIC UTILITY PLANTS

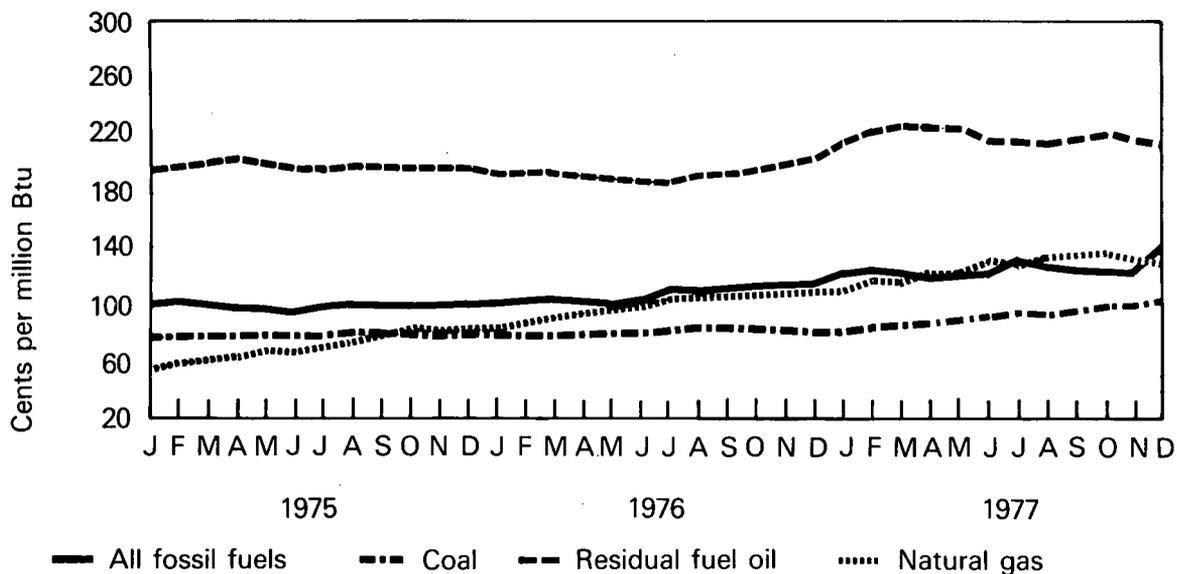
All Fossil Fuels*

Region	1976	1977												
	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	
	Cents per million Btu													
New England	197.0	207.7	211.4	225.3	213.9	215.1	213.3	209.9	206.7	206.8	205.2	202.1	199.0	
Middle Atlantic	146.5	161.8	162.1	152.2	149.9	149.4	152.1	167.9	158.8	151.3	144.8	142.5	180.2	
East North Central	94.4	104.1	102.7	104.0	102.6	103.9	107.3	109.7	105.2	106.5	108.8	111.6	134.8	
West North Central	78.5	85.4	85.3	82.0	79.0	82.5	84.0	87.9	86.2	86.5	89.2	124.6	99.1	
South Atlantic	134.7	146.5	142.5	137.3	132.7	133.8	137.9	148.9	146.6	143.7	137.6	137.0	156.1	
East South Central	96.7	99.8	101.8	100.1	100.3	102.3	104.5	110.4	106.6	109.9	112.0	113.0	125.5	
West South Central	106.9	113.6	119.8	116.9	117.5	117.2	124.3	123.2	122.5	123.2	121.3	119.9	121.0	
Mountain	53.9	53.0	55.2	60.4	64.3	68.8	69.9	71.8	72.6	73.7	74.7	68.4	73.3	
Pacific	218.9	219.2	213.6	209.8	217.6	219.0	212.6	221.2	223.8	221.2	238.7	221.9	226.9	
NATIONAL AVG.	118.6	126.8	128.4	123.5	122.0	123.1	125.1	133.2	129.4	128.6	127.6	125.6	144.2	

*See Explanatory Note 22.

Source: Federal Power Commission Form 423.

National Average



Coal

Region	1976												1977													
	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
	Cents per million Btu																									
New England	124.4	127.6	126.8	127.5	127.9	128.1	130.1	130.6	133.1	134.0	122.4	136.6	137.5	124.4	127.6	126.8	127.5	127.9	128.1	130.1	130.6	133.1	134.0	122.4	136.6	137.5
Middle Atlantic	101.2	105.9	101.2	100.8	102.5	103.1	107.4	111.7	107.0	106.0	104.6	105.0	127.1	101.2	105.9	101.2	100.8	102.5	103.1	107.4	111.7	107.0	106.0	104.6	105.0	127.1
East North Central	90.7	90.7	91.5	94.1	93.9	94.3	95.5	99.8	97.3	99.5	101.7	104.7	116.3	90.7	90.7	91.5	94.1	93.9	94.3	95.5	99.8	97.3	99.5	101.7	104.7	116.3
West North Central	67.6	66.5	68.4	71.5	72.5	75.5	77.0	77.9	77.4	78.5	84.3	81.2	88.7	67.6	66.5	68.4	71.5	72.5	75.5	77.0	77.9	77.4	78.5	84.3	81.2	88.7
South Atlantic	104.1	105.4	106.5	108.1	108.4	110.9	113.9	119.2	115.9	121.1	122.0	122.8	133.0	104.1	105.4	106.5	108.1	108.4	110.9	113.9	119.2	115.9	121.1	122.0	122.8	133.0
East South Central	90.6	91.2	94.1	93.6	96.5	95.8	95.0	99.9	98.4	103.1	104.3	107.8	114.0	90.6	91.2	94.1	93.6	96.5	95.8	95.0	99.9	98.4	103.1	104.3	107.8	114.0
West South Central	56.6	58.8	61.1	64.3	60.2	60.3	63.9	59.2	62.1	64.4	65.2	72.0	68.7	56.6	58.8	61.1	64.3	60.2	60.3	63.9	59.2	62.1	64.4	65.2	72.0	68.7
Mountain	38.1	37.6	38.9	41.1	42.4	46.3	47.4	43.0	50.1	47.5	51.4	48.8	47.9	38.1	37.6	38.9	41.1	42.4	46.3	47.4	43.0	50.1	47.5	51.4	48.8	47.9
Pacific	74.5	77.6	80.5	74.0	70.8	70.9	71.2	71.7	71.1	71.3	71.4	70.6	70.5	74.5	77.6	80.5	74.0	70.8	70.9	71.2	71.7	71.1	71.3	71.4	70.6	70.5
NATIONAL AVG.	86.6	85.9	88.0	89.9	90.1	91.8	93.3	96.2	94.3	98.0	100.5	101.7	106.8	86.6	85.9	88.0	89.9	90.1	91.8	93.3	96.2	94.3	98.0	100.5	101.7	106.8

Residual Fuel Oil*

Region	1976												1977													
	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
	Cents per million Btu																									
New England	198.9	213.6	223.5	231.7	218.5	223.4	216.2	212.5	211.3	210.2	210.8	206.9	202.3	198.9	213.6	223.5	231.7	218.5	223.4	216.2	212.5	211.3	210.2	210.8	206.9	202.3
Middle Atlantic	208.3	220.5	235.8	237.2	230.8	227.7	223.1	220.5	218.5	220.8	225.8	213.2	209.0	208.3	220.5	235.8	237.2	230.8	227.7	223.1	220.5	218.5	220.8	225.8	213.2	209.0
East North Central	227.9	247.5	267.7	257.8	256.3	250.9	248.6	247.1	241.6	264.7	256.5	245.4	246.7	227.9	247.5	267.7	257.8	256.3	250.9	248.6	247.1	241.6	264.7	256.5	245.4	246.7
West North Central	191.5	201.0	210.3	205.5	298.7	193.6	186.6	179.0	185.0	186.9	185.3	183.3	170.9	191.5	201.0	210.3	205.5	298.7	193.6	186.6	179.0	185.0	186.9	185.3	183.3	170.9
South Atlantic	197.0	212.4	213.7	222.8	217.8	211.7	210.1	207.2	199.2	211.0	211.4	209.2	204.4	197.0	212.4	213.7	222.8	217.8	211.7	210.1	207.2	199.2	211.0	211.4	209.2	204.4
East South Central	166.4	166.2	182.7	180.4	180.5	175.7	177.7	175.9	178.3	177.7	186.5	183.8	185.1	166.4	166.2	182.7	180.4	180.5	175.7	177.7	175.9	178.3	177.7	186.5	183.8	185.1
West South Central	179.9	192.0	198.1	201.9	200.3	198.3	194.3	187.6	188.5	184.2	192.6	193.3	192.2	179.9	192.0	198.1	201.9	200.3	198.3	194.3	187.6	188.5	184.2	192.6	193.3	192.2
Mountain	181.2	201.0	210.9	220.9	220.6	224.9	215.3	232.5	230.7	216.4	214.3	209.7	211.3	181.2	201.0	210.9	220.9	220.6	224.9	215.3	232.5	230.7	216.4	214.3	209.7	211.3
Pacific	233.4	231.3	231.0	232.1	235.8	235.2	235.7	240.0	240.1	240.6	241.6	241.2	242.2	233.4	231.3	231.0	232.1	235.8	235.2	235.7	240.0	240.1	240.6	241.6	241.2	242.2
NATIONAL AVG.	207.5	217.2	223.3	228.0	226.2	227.7	217.8	217.0	213.0	218.3	220.3	216.8	214.5	207.5	217.2	223.3	228.0	226.2	227.7	217.8	217.0	213.0	218.3	220.3	216.8	214.5

Natural Gas**

Region	1976												1977													
	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
	Cents per million Btu																									
New England	186.1	200.1	200.1	200.1	200.1	195.9	193.9	185.8	187.2	188.1	185.3	187.9	198.2	186.1	200.1	200.1	200.1	200.1	195.9	193.9	185.8	187.2	188.1	185.3	187.9	198.2
Middle Atlantic	127.8	211.3	349.8	155.9	155.4	154.7	144.2	165.5	162.4	165.1	162.6	154.0	155.0	127.8	211.3	349.8	155.9	155.4	154.7	144.2	165.5	162.4	165.1	162.6	154.0	155.0
East North Central	188.9	186.5	174.7	170.6	184.7	176.7	177.3	183.5	185.9	183.7	182.3	168.4	176.2	188.9	186.5	174.7	170.6	184.7	176.7	177.3	183.5	185.9	183.7	182.3	168.4	176.2
West North Central	84.0	86.1	93.4	88.8	96.0	102.9	104.8	106.7	106.8	109.0	103.8	110.3	117.3	84.0	86.1	93.4	88.8	96.0	102.9	104.8	106.7	106.8	109.0	103.8	110.3	117.3
South Atlantic	90.4	80.4	112.1	93.6	85.7	76.2	74.4	91.1	100.9	91.7	94.2	102.5	94.6	90.4	80.4	112.1	93.6	85.7	76.2	74.4	91.1	100.9	91.7	94.2	102.5	94.6
East South Central	160.8	165.1	170.3	157.8	154.7	139.7	134.3	148.5	149.9	135.7	138.6	156.0	145.9	160.8	165.1	170.3	157.8	154.7	139.7	134.3	148.5	149.9	135.7	138.6	156.0	145.9
West South Central	106.8	108.1	114.6	111.2	113.7	116.5	122.1	122.5	123.7	123.7	122.5	120.1	120.2	106.8	108.1	114.6	111.2	113.7	116.5	122.1	122.5	123.7	123.7	122.5	120.1	120.2
Mountain	136.0	133.3	115.0	129.1	134.9	134.4	132.9	133.3	130.7	149.8	136.9	155.5	159.2	136.0	133.3	115.0	129.1	134.9	134.4	132.9	133.3	130.7	149.8	136.9	155.5	159.2
Pacific	188.7	196.8	189.2	181.0	204.5	208.9	200.5	211.0	218.8	217.9	219.7	220.6	225.4	188.7	196.8	189.2	181.0	204.5	208.9	200.5	211.0	218.8	217.9	219.7	220.6	225.4
NATIONAL AVG.	111.3	111.1	123.5	121.1	125.6	125.6	130.5	131.7	135.4	138.4	139.4	134.9	130.6	111.3	111.1	123.5	121.1	125.6	125.6	130.5	131.7	135.4	138.4	139.4	134.9	130.6

*See Explanatory Note 22.

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

Source: Federal Power Commission Form 423.

International

Petroleum Consumption

Total International Energy Agency petroleum consumption was 4.0 percent lower in January 1978 than in January 1977, primarily reflecting less severe weather conditions especially in the United States. In each of the four major industrialized countries in Western Europe (West Germany, France, Great Britain, and Italy), consumption was greater the first 2 months of 1978 than for the comparable period in 1977. Combined, these countries used 6.7 percent more petroleum than for the same period in 1977.

Crude Oil Production

Petroleum production by the Organization of Petroleum Exporting Countries (OPEC) averaged 28.9 million barrels per day in April, about 600,000 barrels per day more than the March rate. Increases were registered by both Arab and non-Arab members. Arab OPEC production for April, however, was 13.1 percent below the April 1977 production level, continuing the downturn begun last October.

Total world production was 59.5 million barrels per day in April, about 1.2 million barrels per day higher than March production, but 0.6 million barrels per day lower than in April 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	R1,520	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	5,820	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	36,200	5,266	2,461	2,646	1,856	1,833	1,755
	Feb	NA	6,243	3,016	2,601	1,912	NA	1,859

*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.

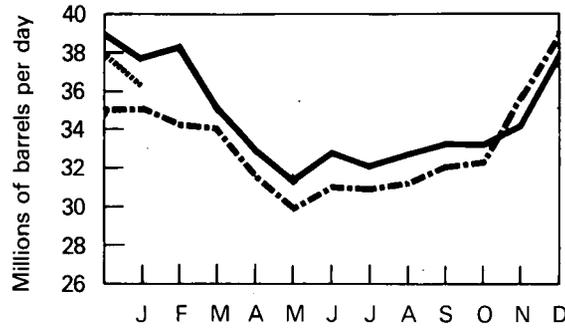
R=Revised data.

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.

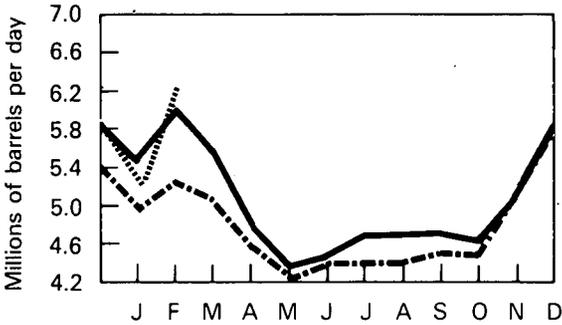
Source: Central Intelligence Agency, National Foreign Assessment Center, *International Energy Statistical Review*, 14 June 1978.

Petroleum Consumption

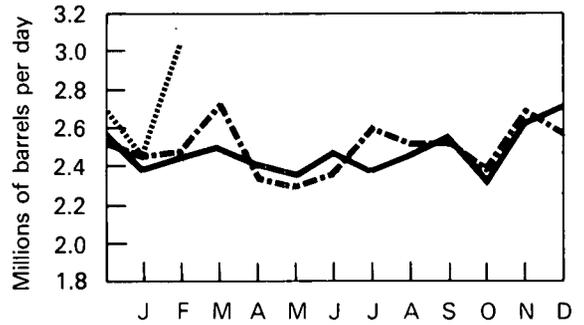
Total IEA



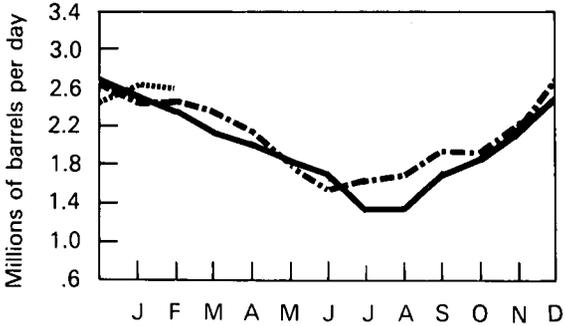
Japan*



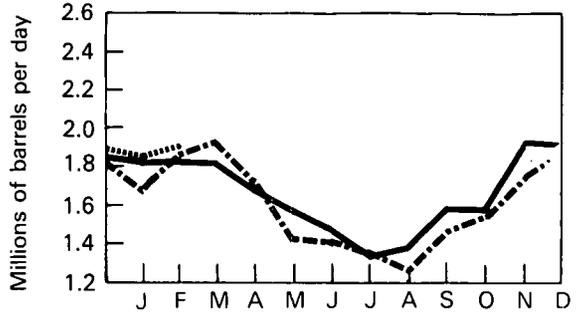
West Germany



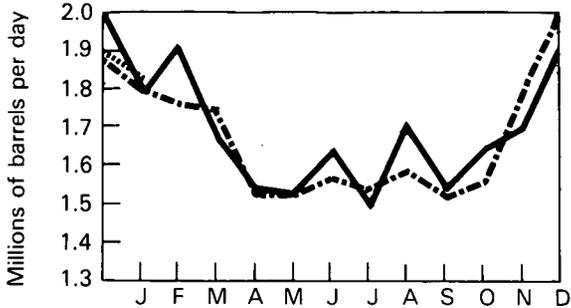
France**



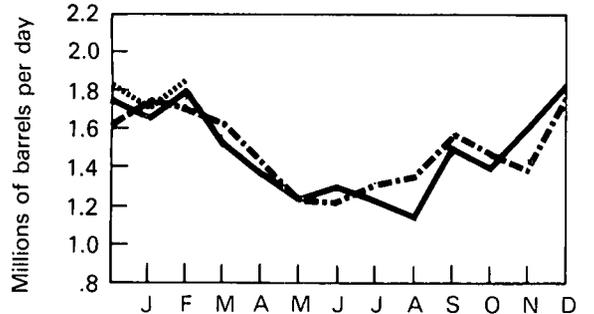
United Kingdom



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—April 1978

Country	Production							Maximum Sustainable Production Capacity	Production Shut in
	1972 Year	1973 Year	1974 Year	1975 Year	1976 Year	1977 Year	1978 April**		
Thousands of barrels per day									
Algeria	1,040	1,070	960	960	990	1,040	1,000	1,080	7.0
Iraq	1,465	2,020	1,970	2,260	2,415	2,330	2,300	3,000	23.3
Kuwait*	3,283	3,020	2,545	2,085	2,145	1,970	2,030	3,300	38.5
Libya	2,239	2,175	1,520	1,480	1,935	2,080	1,860	2,300	19.1
Qatar	482	570	520	440	495	430	510	600	15.0
Saudi Arabia*	6,016	7,595	8,480	7,075	8,575	9,200	8,010	10,100	20.7
United Arab Emirates	1,202	1,535	1,680	1,665	1,935	2,010	1,730	2,375	27.2
Subtotal: Arab OPEC	15,727	17,985	17,675	15,965	18,490	19,060	17,440	22,755	23.4
Ecuador	78	210	175	160	185	180	***230	225	—
Gabon	125	150	200	225	225	230	220	225	2.2
Indonesia	1,080	1,340	1,375	1,305	1,505	1,690	1,690	1,700	0.6
Iran	5,023	5,860	6,020	5,350	5,885	5,660	5,430	6,500	16.5
Nigeria	1,815	2,055	2,255	1,785	2,070	2,100	1,700	2,300	26.1
Venezuela	3,219	3,365	2,975	2,345	2,295	2,240	2,230	2,600	14.2
Subtotal: Non-Arab OPEC	11,340	12,980	13,000	11,170	12,165	12,100	11,500	13,550	15.1
TOTAL OPEC	27,067	30,965	30,675	27,135	30,655	31,160	28,940	36,305	20.3
Canada	1,540	1,800	1,695	1,460	1,300	1,320	1,150	1,800	36.1
Mexico	440	465	580	720	850	980	1,140	1,500	24.0
TOTAL OPEC, Canada, Mexico	29,047	33,230	32,950	29,315	32,805	33,460	31,230	39,605	21.1
TOTAL WORLD	50,550	55,755	55,875	52,990	57,340	59,520	59,470		

*Includes about one-half of the former Kuwait-Saudi Arabia Neutral Zone. Production in April 1978 amounted to approximately 465,000 barrels per day.

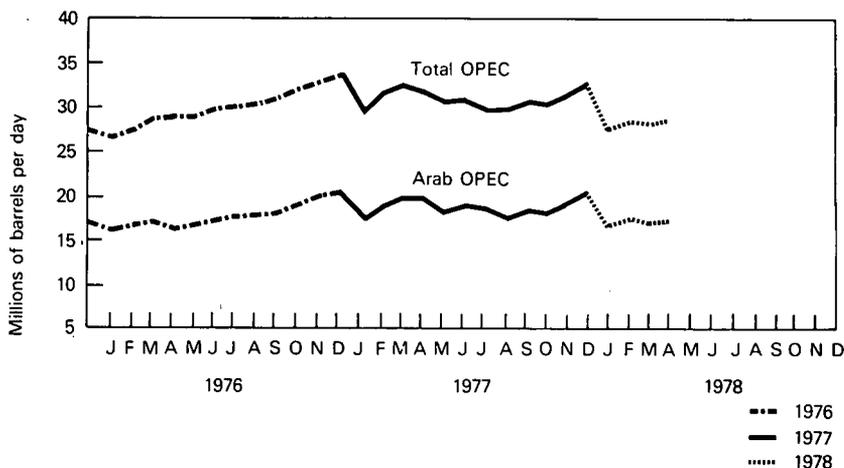
**Estimated.

***Production may exceed capacity for brief periods of time.

R = Revised.

Sources: Central Intelligence Agency, National Foreign Assessment Center, *International Energy Statistical Review*, 14 June 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.

Branded Independent Marketer

A firm which is engaged in the marketing or distribution of refined petroleum products pursuant to (1) an agreement or contract with a refiner (or a firm which controls, is controlled by, or is under common control with such refiner) to use a trademark, trade name, service mark, or other identifying symbol or name owned by such refiner (or any such firm), or (2) an agreement or contract under which any such firm engaged in the marketing or distribution of refined petroleum products is granted authority to occupy premises owned, leased, or in any way controlled by a refiner (or firm which controls, is controlled by, or is under common control with such refiner), but which is not affiliated with, controlled by, or under common control with any refiner (other than by means of a supply contract, or an agreement or contract described in parts (1) and (2) of this definition), and which does not control such refiner.

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.

Jobber

A petroleum distributor who purchases refined product from a refiner or terminal operator for the purpose of

reselling to retail outlets and commercial accounts or for the purpose of retailing through his own retail outlets.

Jobber Margin

The difference between the price at which a jobber purchases refined product from a refiner or terminal operator and the price at which the jobber sells to retail outlets. This does not reflect margins obtained by jobbers through retail sales or commercial accounts.

Jobber Price

The price at which a petroleum jobber purchases refined product from a refiner or terminal operator.

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), and coal (anthracite, bituminous, and lignite), as well as electricity output from hydroelectric and nuclear powerplants and industrial hydroelectric power production. 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, and natural gas (dry). Does not include imports of petroleum for the Strategic Petroleum Reserve.

3. Domestic consumption of energy includes domestic demand for refined petroleum products, consumption of coal (anthracite, bituminous, and lignite) and natural gas (dry), electricity output from hydroelectric and nuclear powerplants, industrial hydroelectric power production, and net imports of electric power. Approximate heat contents (Btu-values) were derived using conversion factors listed in the Units of Measure. Electricity imports were converted using the Btu-content of hydroelectric power. 1977 electricity imports were estimated on the basis of the import level for 1976.

4. 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.

5. 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.

6. 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.

7. Bituminous coal and lignite consumption is calculated by EIA from information provided by the Federal Power 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.

8. 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.

9. 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).

10. 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.

11. The indicator, U.S. Dependence on Petroleum Imports, shows the fraction of domestic petroleum demand constituted by imports of crude oil and refined petroleum products. To factor out the effects of temporary stock level changes, the fraction is calculated as the difference between demand and domestic production, divided by demand. Imports from Arab nations (which include both direct and indirect quantities) are shown separately.

12. The index, Energy Consumption per GNP Dollar, is a ratio of total U.S. energy consumption in Btu to gross national product in constant 1972 dollars. The index is adjusted seasonally and for normal weather conditions.

13. The Consumer Energy Price Indicator (CEPI) is an index of the quantity-weighted average of direct energy costs to the consumer (1972 base year). It reflects, therefore, changes in both the prices of individual fuels and in the relative quantities of each fuel consumed. Included in the computation of the CEPI are automotive gasoline and the principal residential fuels (heating oil, natural gas, and electricity).

14. 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.

15. 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 wellhead 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.

16. 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.

17. 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.

18. 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.

19. 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.

20. 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.

21. 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.

22. 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
Consumption	Btu/short ton	23,750,000	23,650,000	23,070,000	22,800,000	22,750,000	22,565,000
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
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
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					

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