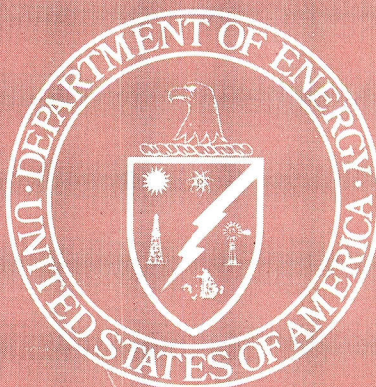


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July 1978

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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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
Solar Collector Industry—March 1976

Trends in United States Petroleum Imports—
September 1976

Crude Oil Entitlements Program—January 1977

Motor Gasoline Supply and Demand—July 1977

Short-Term Petroleum Supply and Demand—
May 1978

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 | () |
| Educational Institution | () | Coal Industry | () | Other (Specify) | () |
| Public Library | () | Nuclear Energy Industry | () | | |

Thank you for your cooperation.

U.S. DEPARTMENT OF ENERGY
WASHINGTON, D.C. 20461

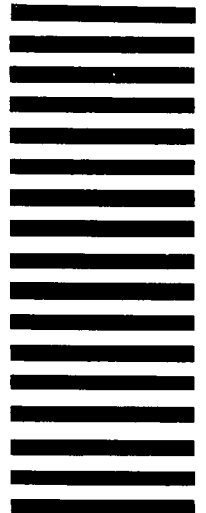
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Overview

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.

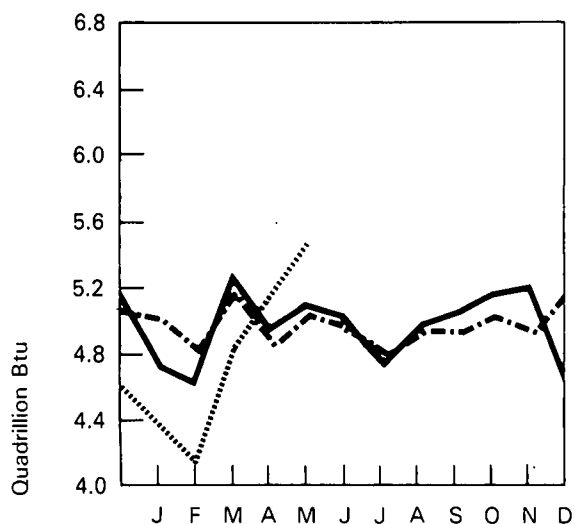
During June, the beginning of the air conditioning season, there were 1.9 percent more cooling degree-days than in June 1977, indicating relatively warmer weather. For the period January-June 1978, however, there were 10.5 percent fewer cooling degree-days than in 1977, denoting cooler weather. Compared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

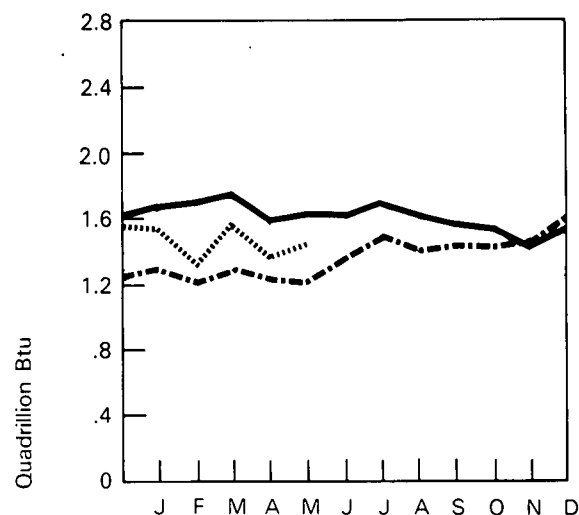
*One barrel of crude oil contains approximately 5.8 million Btu.

| | | 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 |

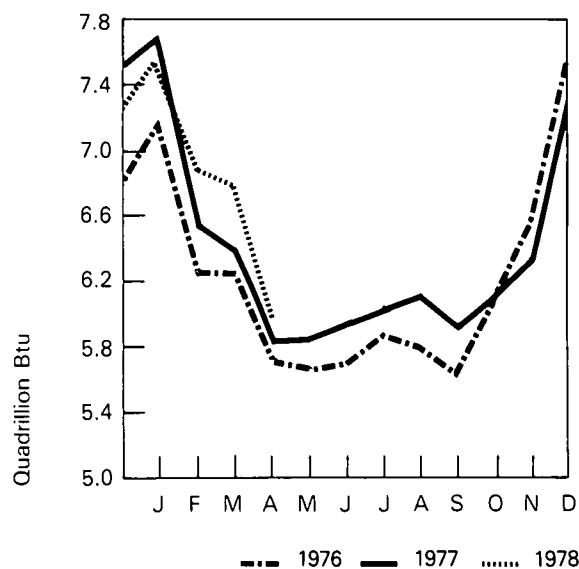
Domestic Production of Energy



Imports of Fossil Fuels



Domestic Consumption of Energy



*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 | *246,395 | |
| 1973 | AVERAGE | 12,431 | 9,208 | 3,244 | | 2 | *242,478 | |
| 1974 | AVERAGE | 12,133 | 8,774 | 3,477 | | 3 | *265,020 | |
| 1975 | AVERAGE | 12,442 | 8,375 | 4,105 | | 6 | *271,354 | |
| 1976 | January | 12,560 | 8,232 | 4,594 | | 0 | 289,296 | |
| | February | 12,834 | 8,231 | 4,208 | | 0 | 277,414 | |
| | March | 12,877 | 8,232 | 4,738 | | 1 | 283,112 | |
| | April | 12,727 | 8,077 | 4,790 | | 0 | 286,628 | |
| | May | 12,920 | 8,125 | 4,669 | | 0 | 283,982 | |
| | June | 13,799 | 8,094 | 5,628 | | 0 | 281,715 | |
| | July | 13,901 | 8,127 | 5,792 | | 0 | 282,599 | |
| | August | 13,888 | 8,111 | 5,556 | | 12 | 277,272 | |
| | September | 13,716 | 8,150 | 5,875 | | 0 | 284,357 | |
| | October | 13,319 | 8,063 | 5,689 | | 18 | 297,683 | |
| | November | 14,101 | 8,080 | 5,946 | | 30 | 298,836 | |
| | December | 14,333 | 8,061 | 5,925 | | 34 | 285,471 | |
| | AVERAGE | 13,416 | 8,132 | 5,287 | | 8 | | |
| 1977 | January | 14,140 | 7,790 | 6,288 | | 13 | 294,037 | |
| | February | 14,740 | 8,067 | 6,652 | | 59 | 291,387 | |
| | March | 14,270 | 8,022 | 6,633 | | 32 | 299,464 | |
| | April | 14,185 | 8,079 | 6,785 | | 17 | 318,588 | |
| | May | 14,605 | 8,009 | 6,821 | | 89 | 328,559 | |
| | June | 14,867 | 8,039 | 6,997 | | 10 | 333,635 | |
| | July | 14,884 | 8,040 | 7,021 | | 53 | 335,193 | |
| | August | 14,645 | 8,244 | 6,416 | | 37 | 338,300 | |
| | September | 14,930 | 8,416 | 6,429 | | 91 | 334,180 | |
| | October | 14,658 | 8,508 | 6,270 | 93 | 38 | 340,517 | 2,646 |
| | November | 14,636 | 8,513 | 6,230 | 73 | 45 | 345,098 | 5,084 |
| | December | 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 | 14,193 | 8,570 | 5,731 | 116 | NA | | |
| | (Year to date) | | | | | | | |

¹See Definitions.

²Excludes SPR imports.

³Excludes SPR stocks.

⁴Total as of December 31.

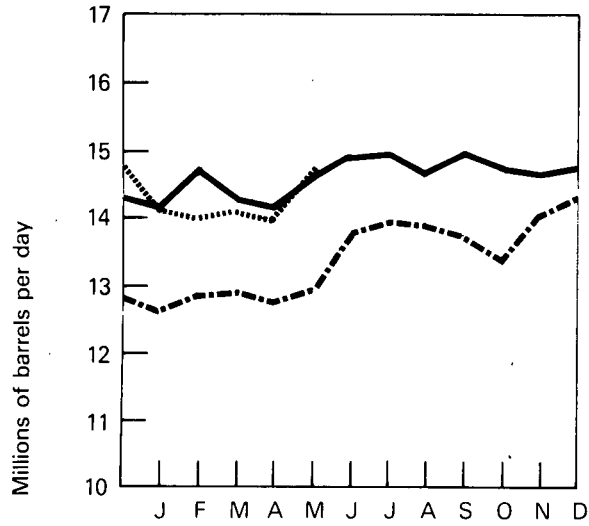
R=Revised data.

NA = Not available.

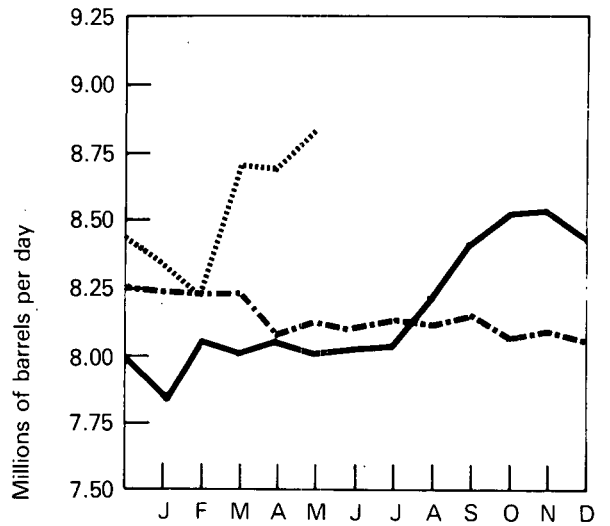
Sources: 1972 through 1976: Bureau of Mines (BOM) *Mineral Industry Surveys*, "Petroleum Statement, Annual;" January 1977 through April 1977: Bureau of Mines *Mineral Industry Surveys*, "Petroleum Statement, Monthly;" May 1977 through January 1978: Energy Information Administration (EIA) *Energy Data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

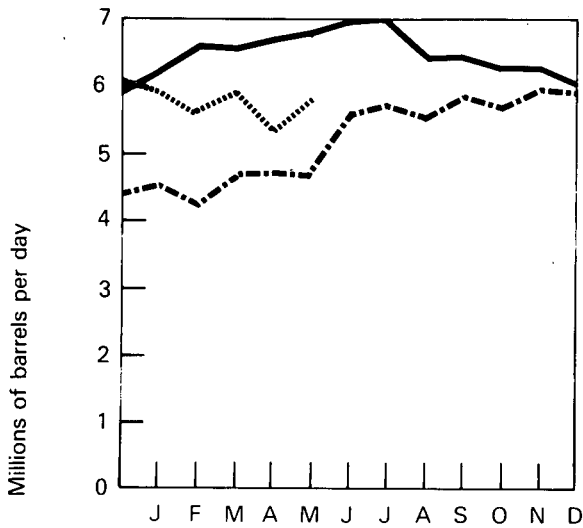
Crude Input to Refineries



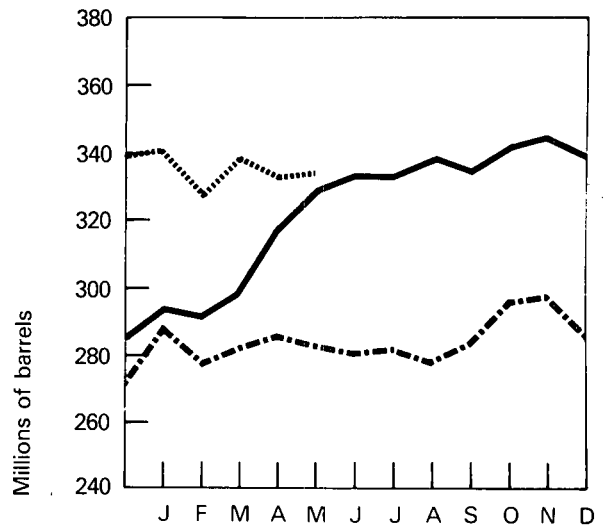
Domestic Production



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 (Year to date) | 19,249 | 2,064 | NA |

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 |

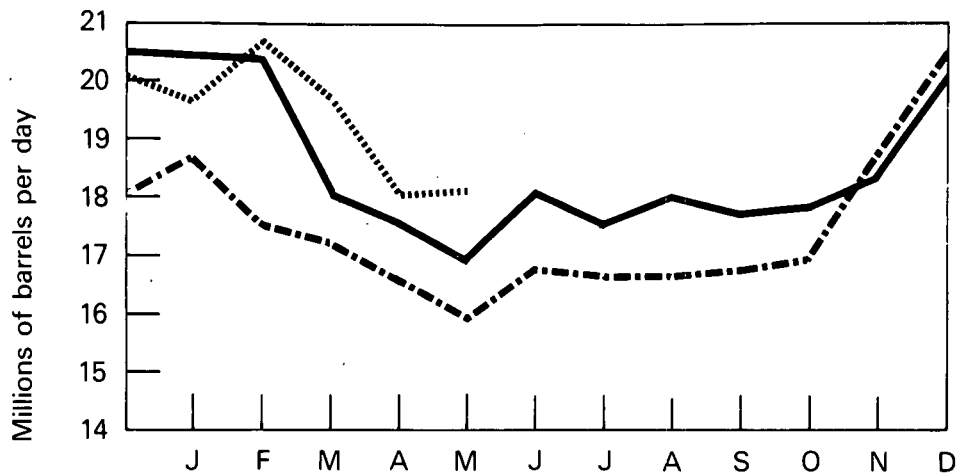
*See Definitions.

R=Revised data.

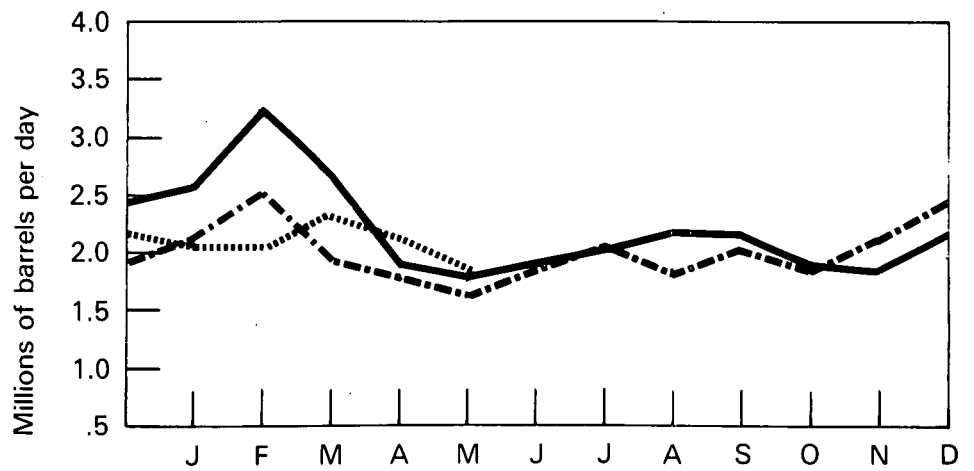
NA=Not available.

Sources: 1972 through 1976: Bureau of Mines (BOM) *Mineral Industry Surveys*, "Petroleum Statement, Annual;" January 1977 through April 1977: Bureau of Mines *Mineral Industry Surveys*, "Petroleum Statement, Monthly;" May 1977 through 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."

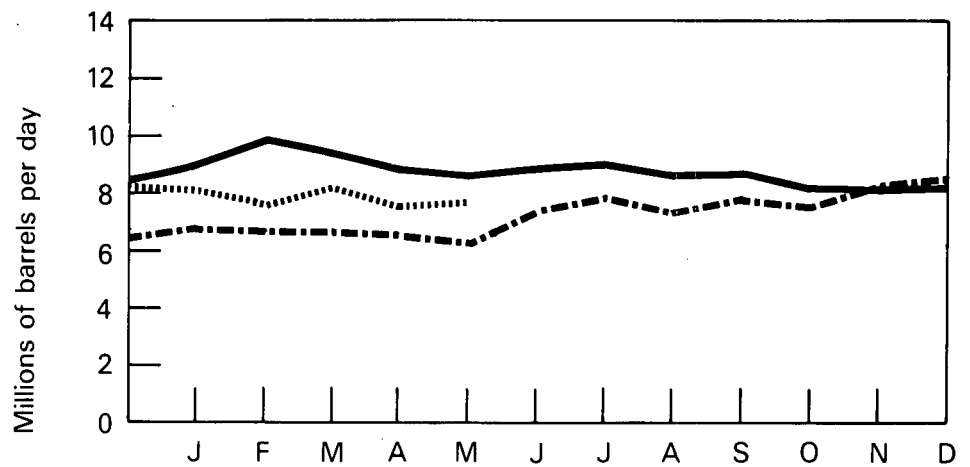
Total Refined Product Domestic Demand



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 | 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 | | | Production* | Imports | Exports | Stocks* |
|------|---------------------------|------------------------------|----------|---------------------------------|-------------|---------|-------------------------|-----------|
| | | Total | Unleaded | Unleaded Percent of Total | | | | |
| | | 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.

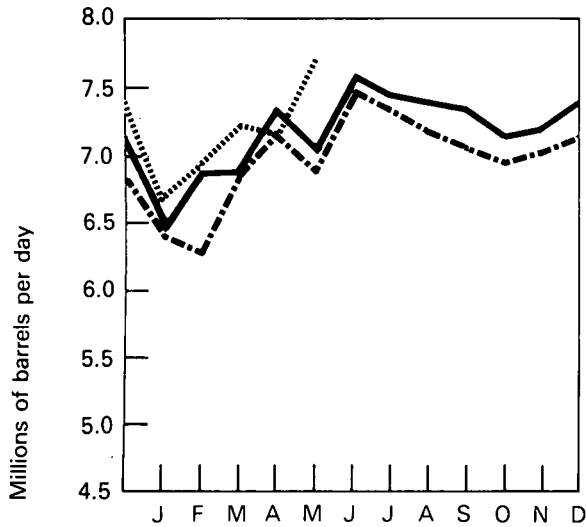
R=Revised data.

NA=Not available.

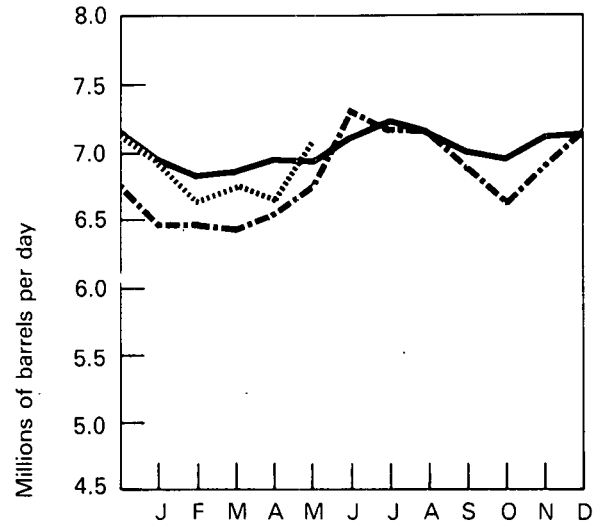
Sources: Data other than unleaded—1972 through 1976: Bureau of Mines (BOM) *Mineral Industry Surveys*, "Petroleum Statement, Annual;" January 1977 through April 1977: Bureau of Mines *Mineral Industry Surveys*, "Petroleum, Statement, Monthly;" May 1977 through January 1978: Energy Information Administration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

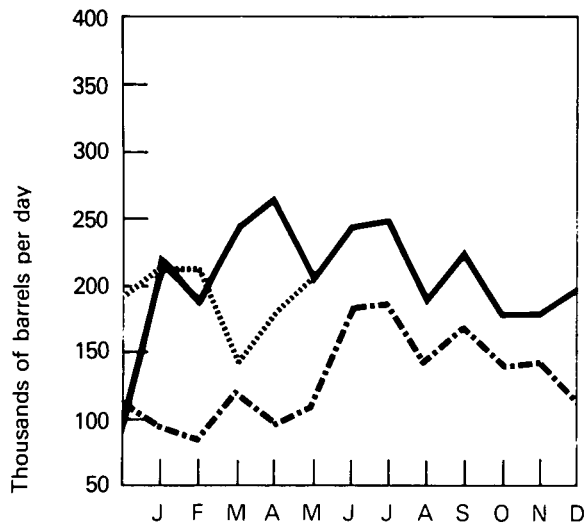
Domestic Demand



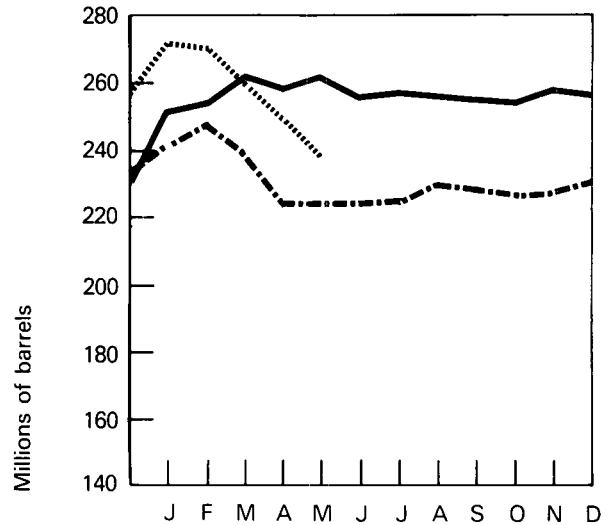
Production



Imports



Stocks



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

Jet Fuel

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

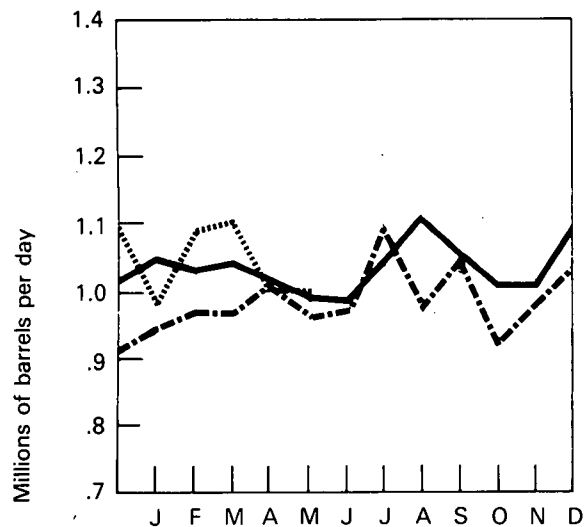
R=Revised data.

NA=Not available.

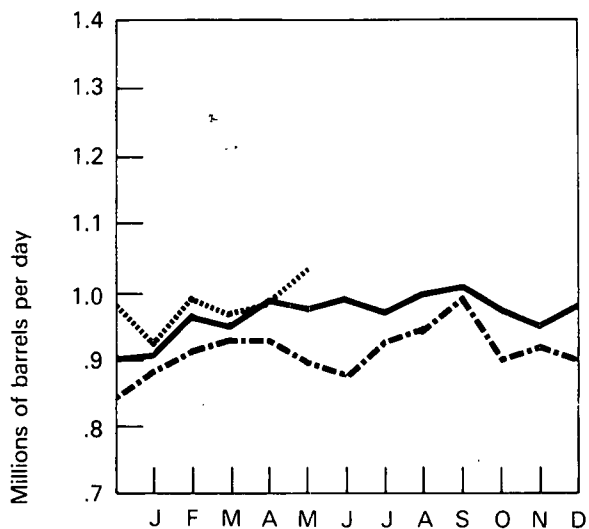
Sources: 1972 through 1976: Bureau of Mines (BOM) *Mineral Industry Surveys*, "Petroleum Statement, Annual;" January 1977 through April 1977: Bureau of Mines *Mineral Industry Surveys*, "Petroleum Statement, Monthly;" May 1977 through January 1978: Energy Information Administration (EIA) *Energy Data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

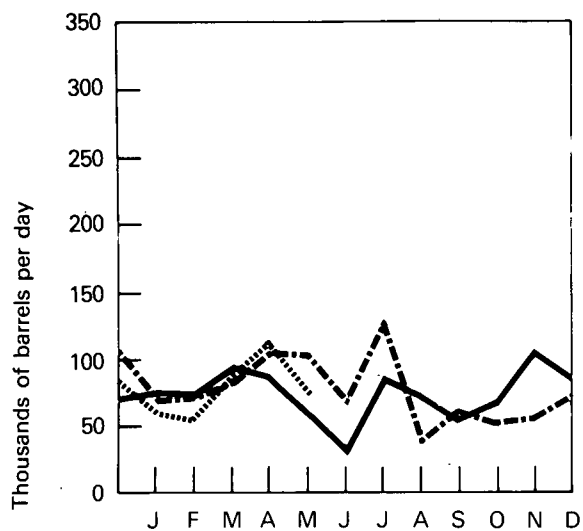
Domestic Demand



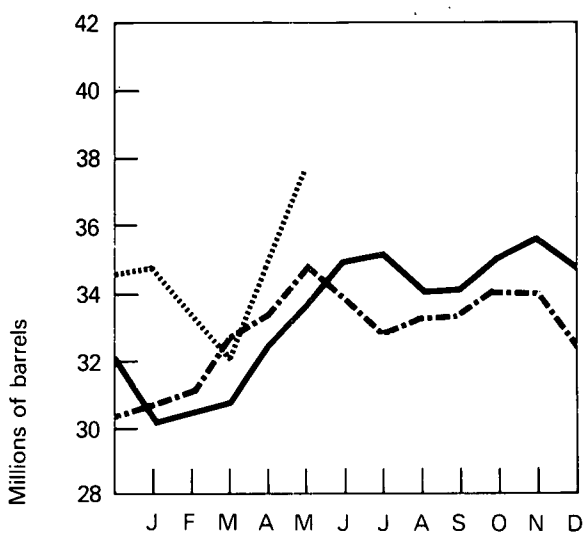
Production



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.

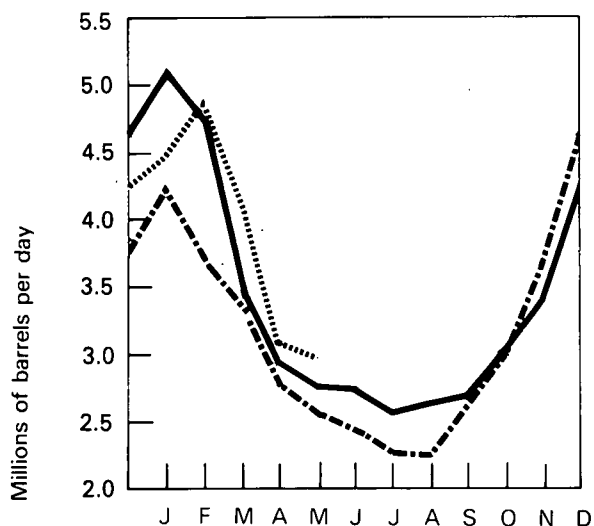
R=Revised data.

NA=Not available.

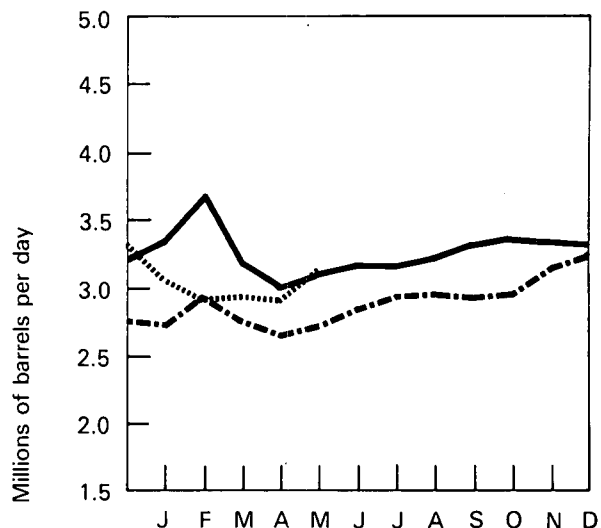
Sources: 1972 through 1976: Bureau of Mines (BOM) *Mineral Industry Surveys*, "Petroleum Statement, Annual;" January 1977 through April 1977: Bureau of Mines *Mineral Industry Surveys*, "Petroleum Statement, Monthly;" May 1977 through January 1978: Energy Information Administration (EIA) *Energy Data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

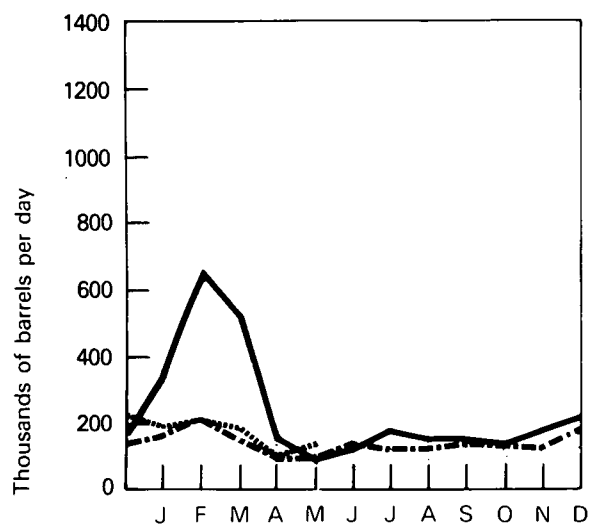
Domestic Demand



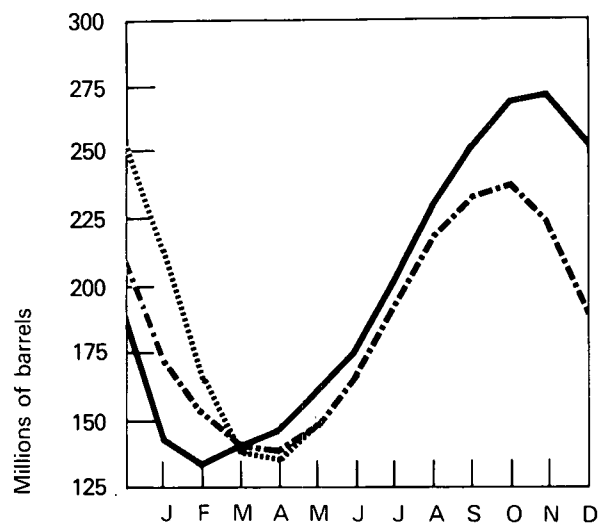
Production



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.

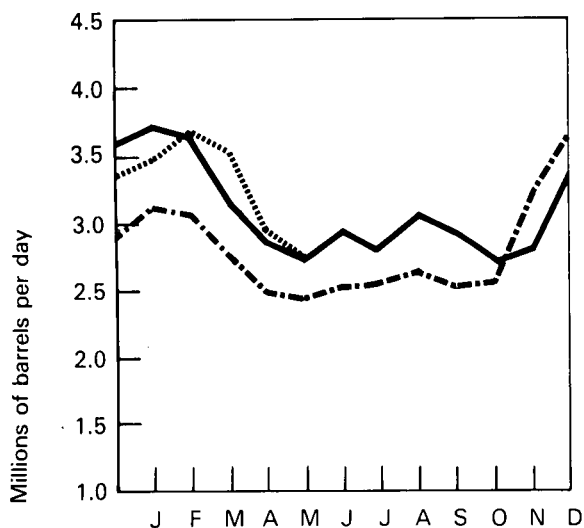
R=Revised data.

NA=Not available.

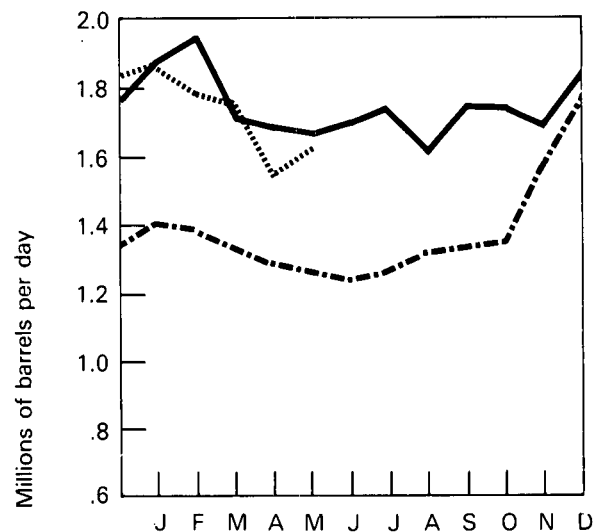
Sources: 1972 through 1976: Bureau of Mines (BOM) *Mineral Industry Surveys*, "Petroleum Statement, Annual;" January 1977 through April 1977: Bureau of Mines *Mineral Industry Surveys*, "Petroleum Statement, Monthly;" May 1977 through January 1978: Energy Information Administration (EIA) *Energy Data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

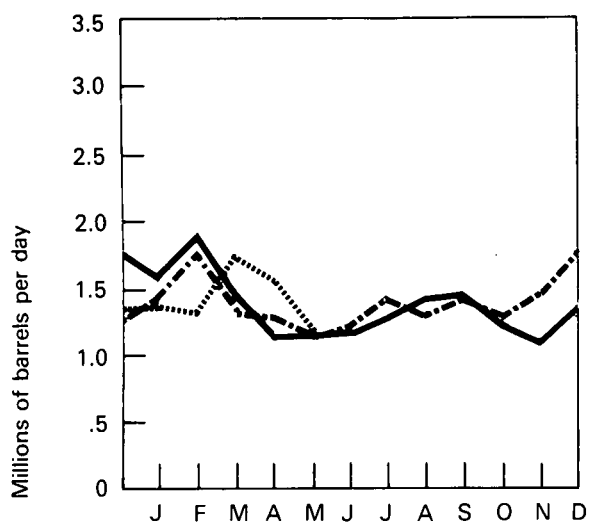
Domestic Demand



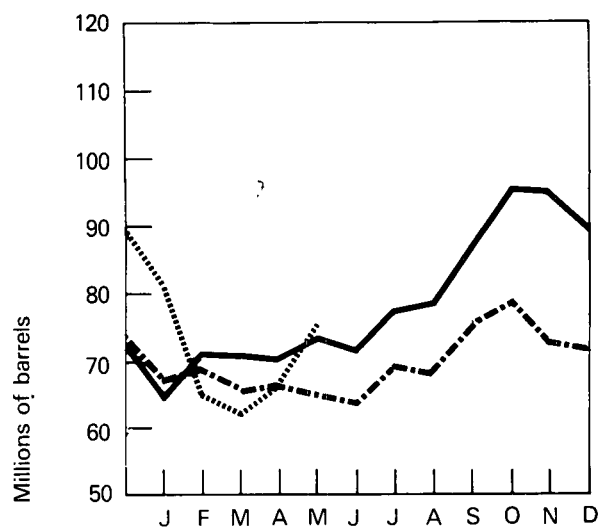
Production



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.

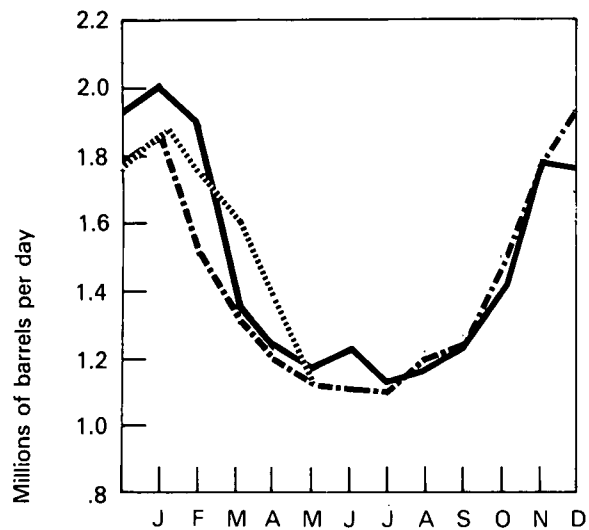
***Estimated.

R=Revised data.

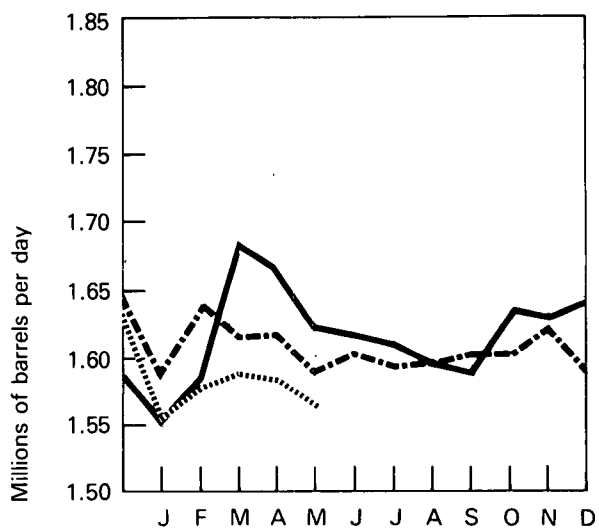
Source: Bureau of Mines *Mineral Industry Surveys*, "Petroleum Statement, Monthly" through April 1977; EIA *Energy Data Reports*, "Petroleum Statement, Monthly" for May 1977 through January 1978; and EIA estimates for February 1978 forward.

Natural Gas Liquids

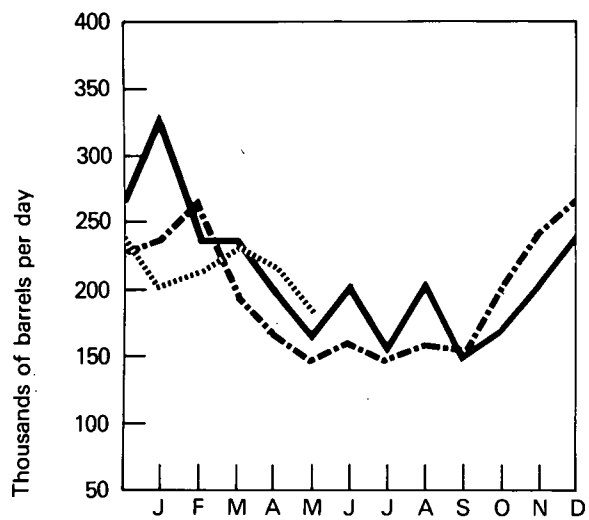
Domestic Demand



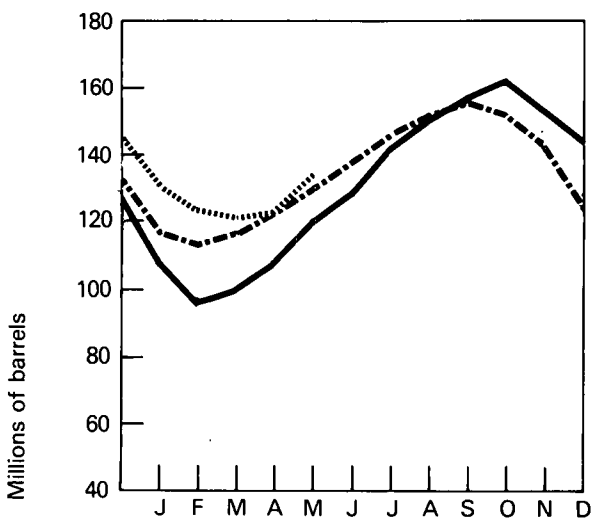
Production at Processing Plants



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.

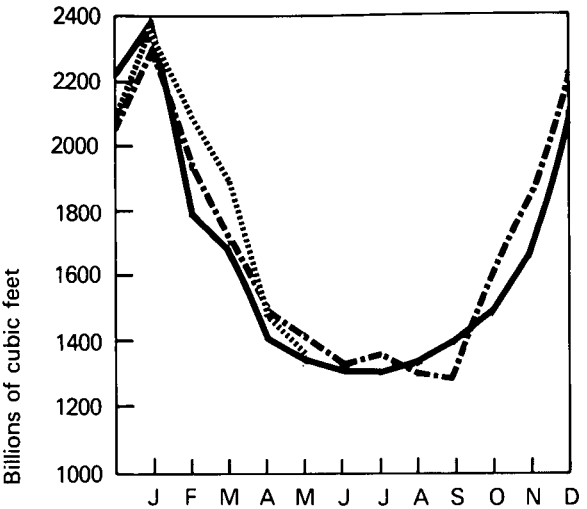
NA=Not available.

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

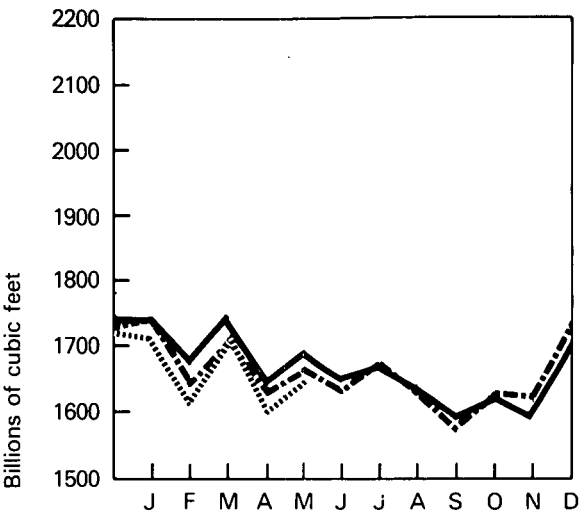
Sources: Domestic Consumption—EIA estimates; Marketed Production, Imports, and Exports—Bureau of Mines *Mineral Industry Surveys*, "Natural Gas, Monthly" through June 1977 and EIA *Energy Data Reports*, "Natural Gas, Monthly" for July 1977 forward; Domestic Producer Sales—Federal Power Commission Form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

Natural Gas

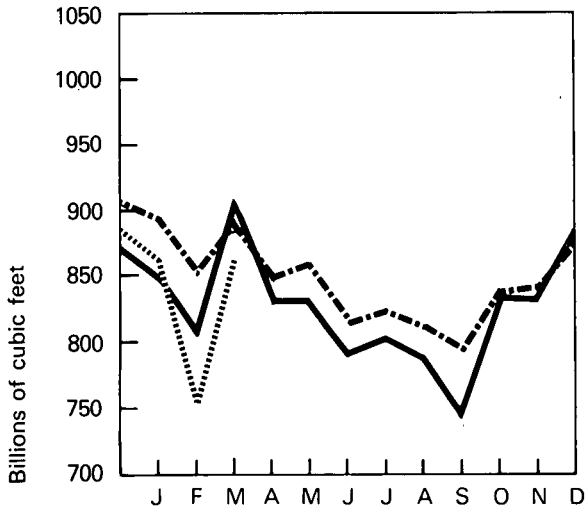
Domestic Consumption



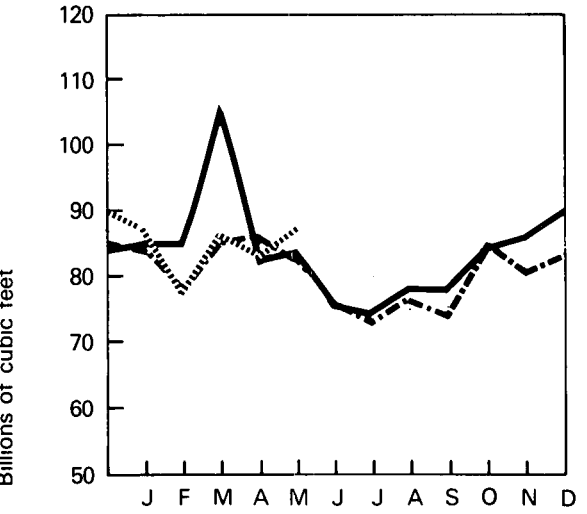
Marketed Production



Domestic Producer Sales to Major Interstate Pipelines



Imports



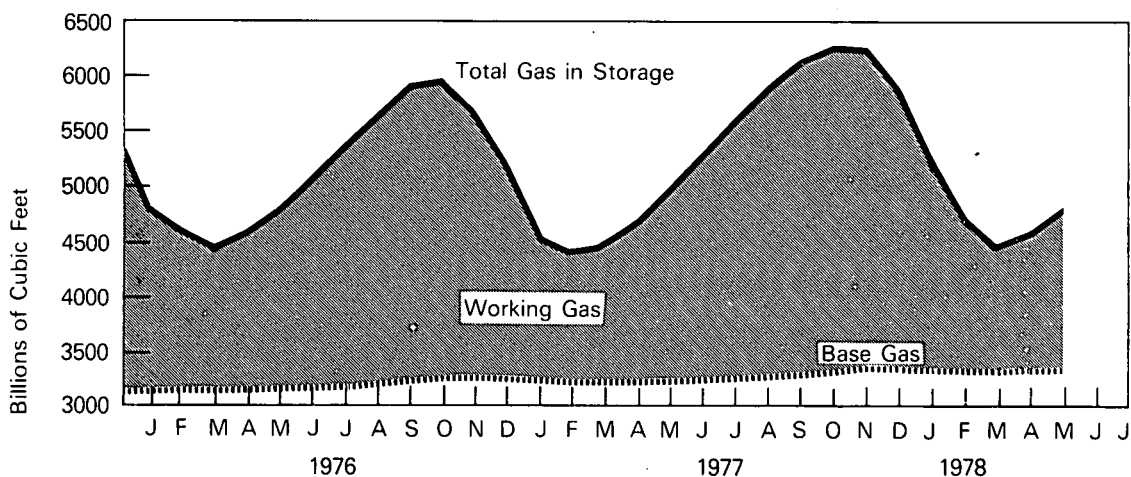
--- 1976
— 1977
..... 1978

Natural Gas (Continued)

Natural Gas in Underground Storage*

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

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.

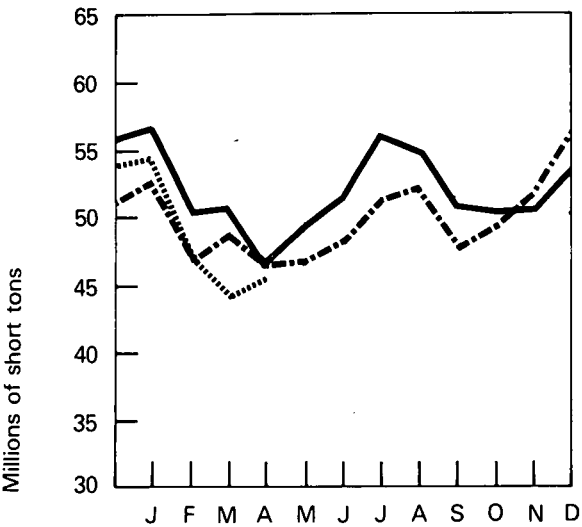
R=Revised data.

NA=Not available.

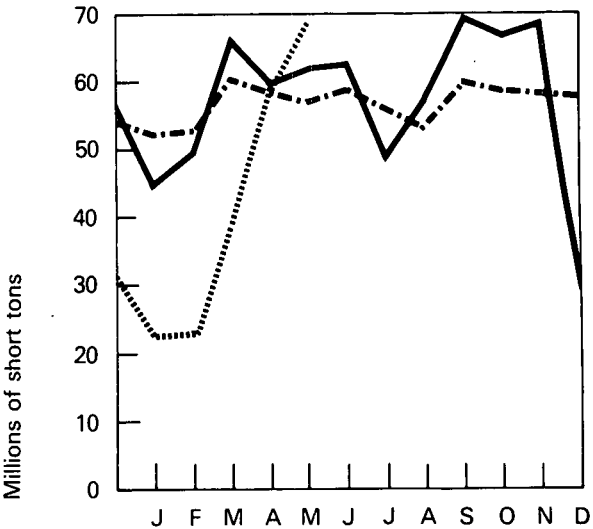
Source: Exports—U.S. Department of Commerce, Bureau of the Census; remaining data—Bureau of Mines *Mineral Industry Surveys*, "Weekly Coal Report" through September 1977; and EIA *Energy Data Reports*, "Weekly Coal Report" for October 1977 forward.

Bituminous and Lignite

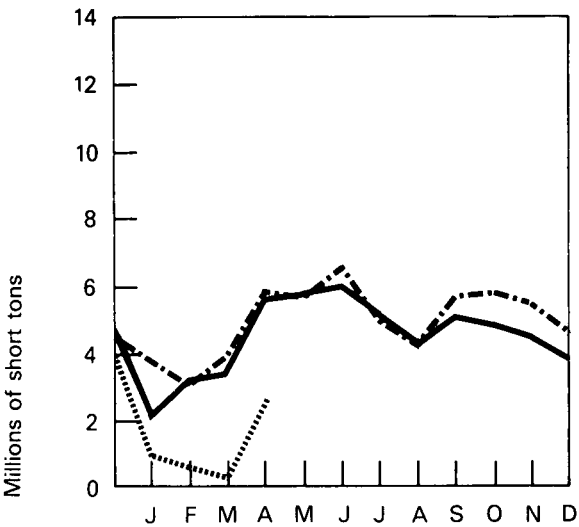
Domestic Consumption



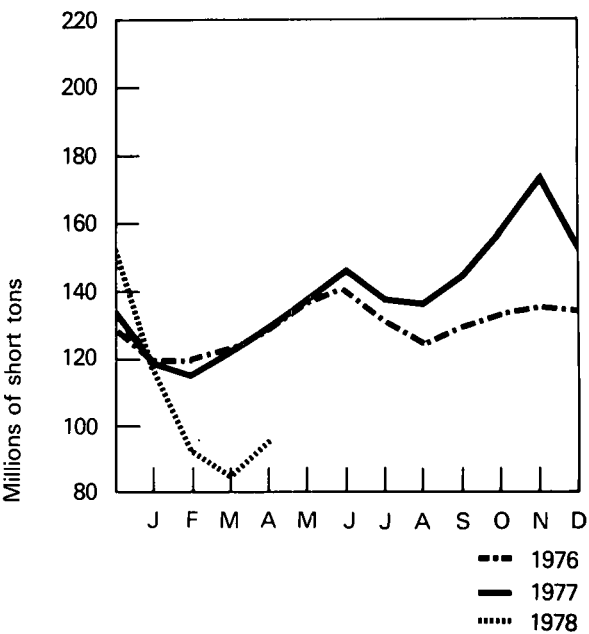
Production



Exports



Stocks

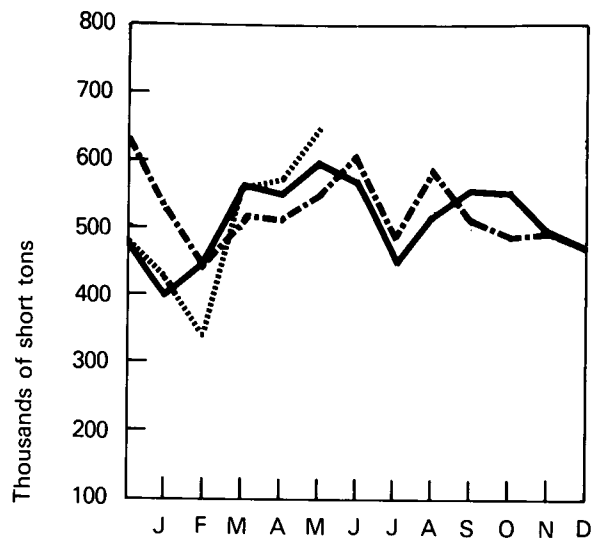


--- 1976
— 1977
..... 1978

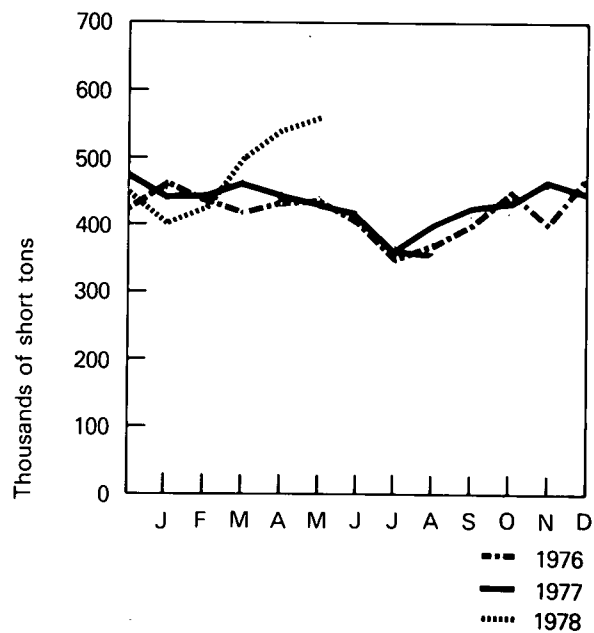
Anthracite

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

Part 5

Electric Utilities

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 |
|------|---------------------|-------------------------------|----------------------|------------------------------------------|---------|------------------------------|
| | | | Steam* | Gas Turbine/ Internal Combustion** | Total | |
| | | Thousands of short tons | Thousands of barrels | | | Millions of cubic feet |
| 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 |
| 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 |
| 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.

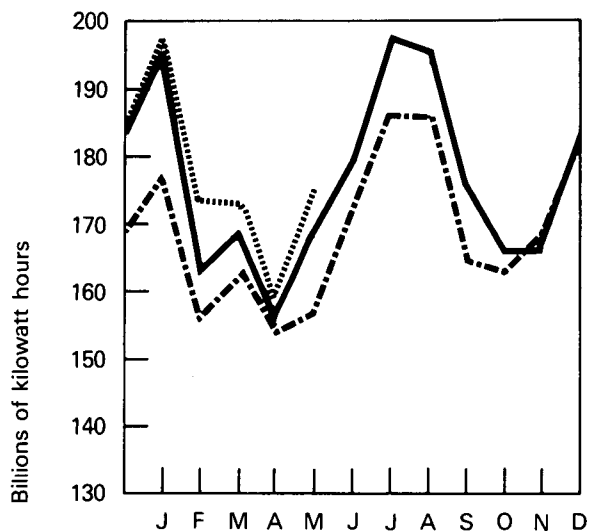
**Primarily middle distillates.

R=Revised.

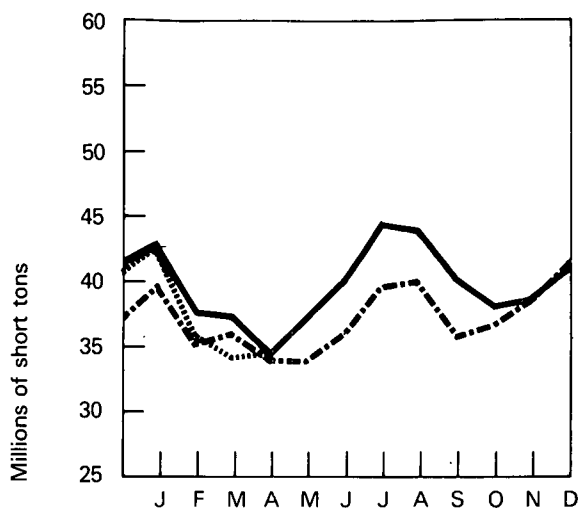
Source: Federal Power Commission Form 4, "Monthly Powerplant Report."

Electric Utilities

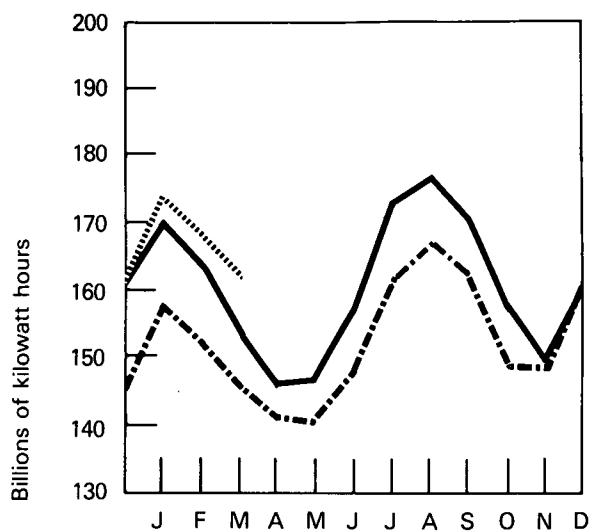
Total Net Electricity Production



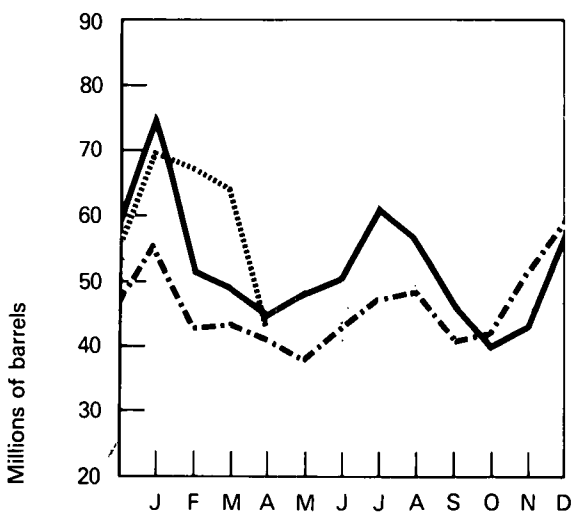
Coal Consumption



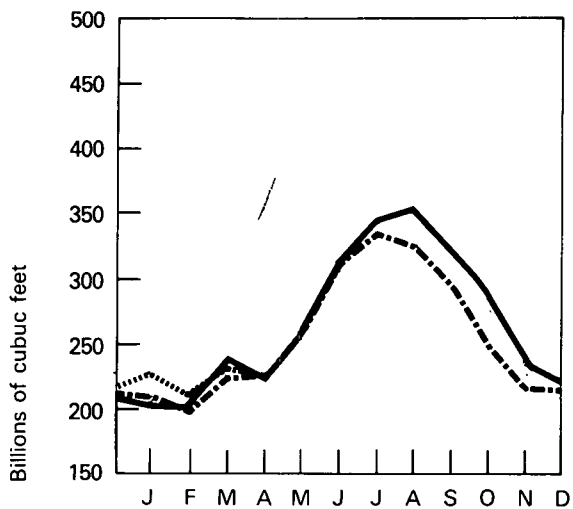
Total Electricity Sales



Oil Consumption



Gas Consumption



--- 1976 — 1977 1978

Electric Utilities (Continued)

Stocks at End of Month

| | | Coal | Oil | | |
|------|-----------|----------------------------|----------------------|-----------------------------------------|------------|
| | | | Steam* | Gas Turbine/ Internal Combustion* | Total |
| | | Thousands of short tons | Thousands of barrels | | |
| 1971 | | ***78,069 | ***46,451 | ***3,194 | ***49,645 |
| 1972 | | ***100,009 | ***52,575 | ***5,079 | ***57,654 |
| 1973 | | ***87,279 | ***79,121 | ***10,095 | ***89,216 |
| 1974 | | ***83,542 | ***97,201 | ***15,715 | ***112,916 |
| 1975 | | ***110,750 | ***108,358 | ***16,886 | ***125,244 |
| 1976 | January | 105,518 | 102,023 | 15,922 | 117,945 |
| | February | 104,874 | 102,147 | 16,706 | 118,853 |
| | March | 108,450 | 104,082 | 16,467 | 120,550 |
| | April | 112,862 | 103,757 | 16,642 | 120,399 |
| | May | 119,611 | 109,142 | 16,962 | 126,105 |
| | June | 123,048 | 109,660 | 16,621 | 126,281 |
| | July | 115,204 | 110,829 | 15,862 | 126,691 |
| | August | 110,752 | 109,823 | 16,007 | 125,830 |
| | September | 115,399 | 112,965 | 17,059 | 130,024 |
| | October | 118,591 | 114,437 | 16,954 | 131,391 |
| | November | 119,323 | 111,137 | 15,517 | 126,655 |
| | December | 117,493 | 106,744 | 14,980 | 121,724 |
| 1977 | January | 106,183 | 90,104 | 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.

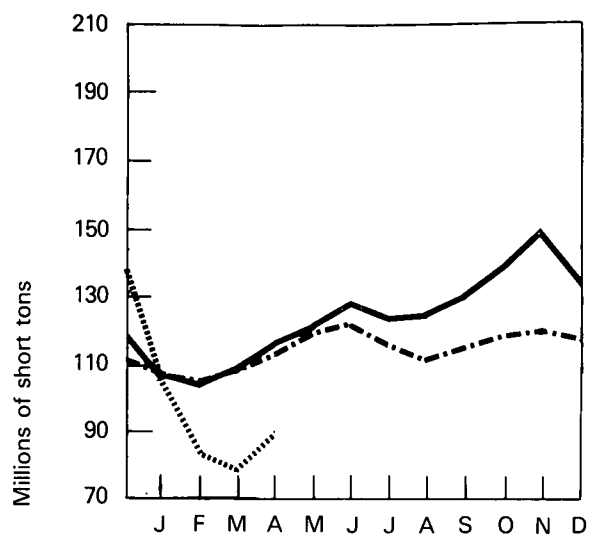
***As of December 31.

R=Revised.

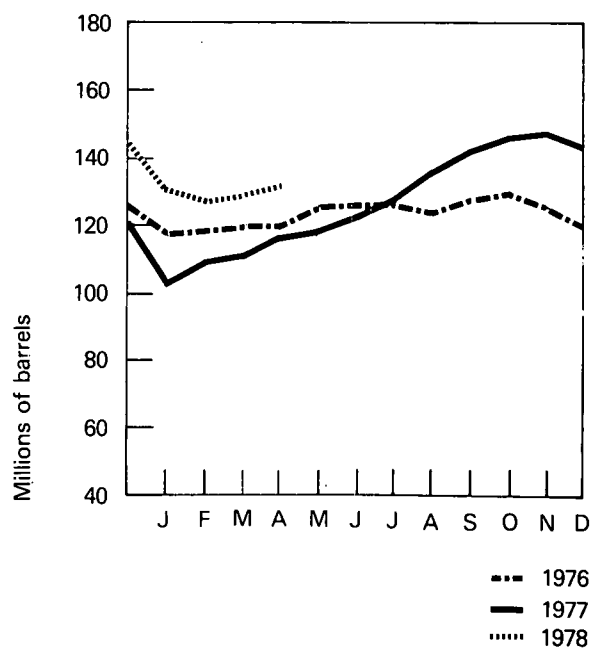
Source: Federal Power Commission Form 4, "Monthly Powerplant Report."

Electric Utilities

Coal Stocks



Oil Stocks



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.

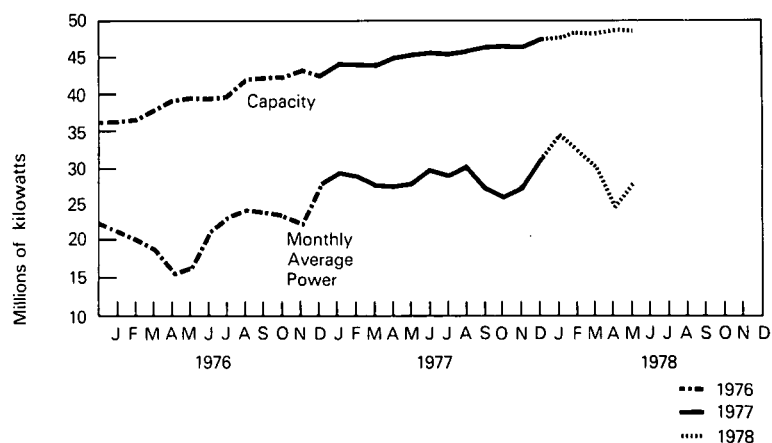
**Statistical Data of the Uranium Industry, U.S. Department of Energy Report No. GJO-100(78), Grand Junction Office, Grand Junction, Colorado 81501, January 1, 1978.

***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 | | | | Design Capacity | |
|----------------------------------|------------------------|-------------------------------|----------------------------|-----------|-----------------|--------------------------|
| | Boiling Water Reactors | High Temperature Gas Reactors | Pressurized Water Reactors | Other** | Total | 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 | Generation of Electricity | | | | |
|-------------------------|---------------------|-----------------------------------------|----------------------------------|---------------------------------|-----------|-----------|-----------|
| | | | Electricity Generation | Percent of Design Capacity Used | | | |
| | | | | May 1978 | Year** | | |
| | | Thousands of gross electrical kilowatts | Millions of gross kilowatt hours | | 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.

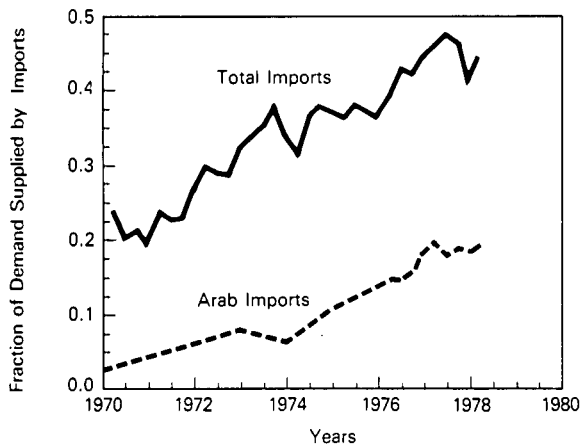
³ The percentage share used in calculating Industrial consumption of petroleum was 47.5 percent for 1973 and 49.3 percent for 1974, 1975, 1976, 1977, and 1978.

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.

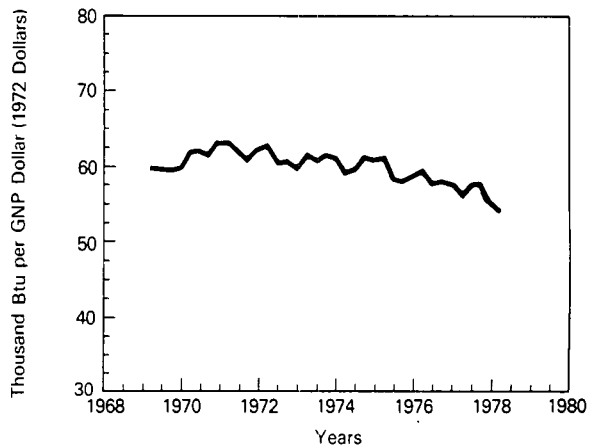
R=Revised data.

Energy Indicators*

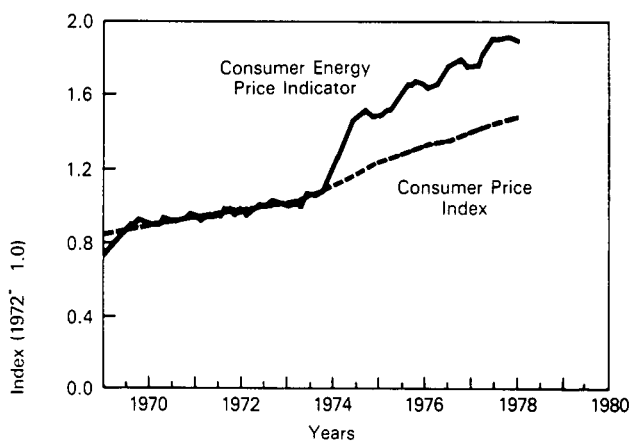
U.S. Dependence on Petroleum Imports



Energy Consumption per GNP Dollar



Consumer Energy Price Indicator



*See Explanatory Notes 11, 12 and 13.

Cooling Degree-Days*

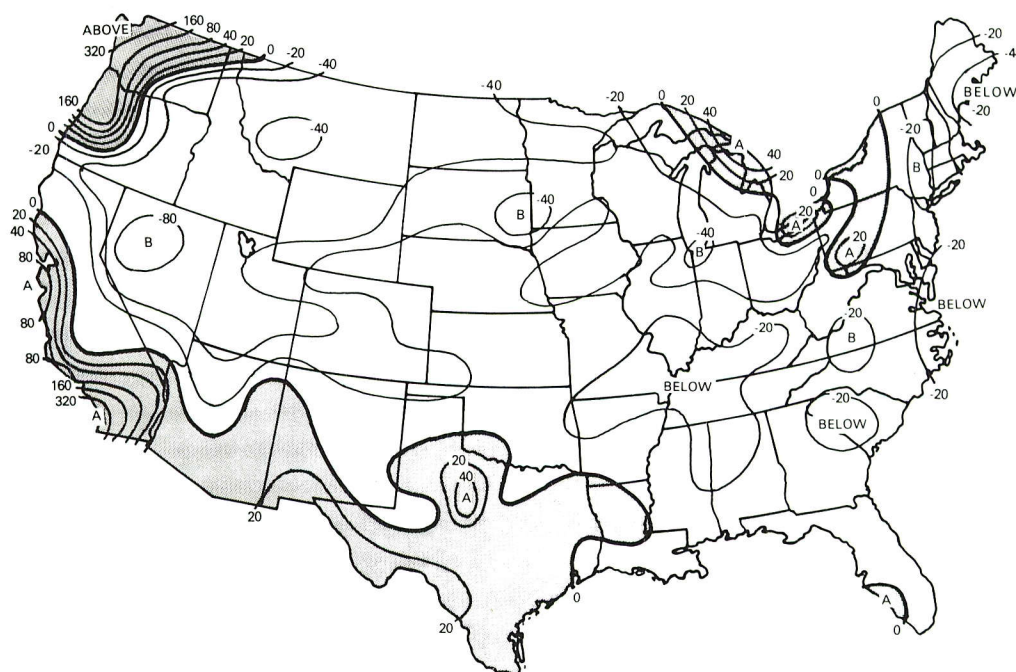
| Petroleum Administration For Defense (PAD) Districts | 1978 | June 5 to July 2, 1978 | | | | Cumulative January 1-July 2, 1978 | | | | |
|-----------------------------------------------------------------------------------------------------------------|--------------|------------------------|--------------|--------------------|--------------|-----------------------------------|--------------|----------------|-------------------|--------------|
| | | 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.

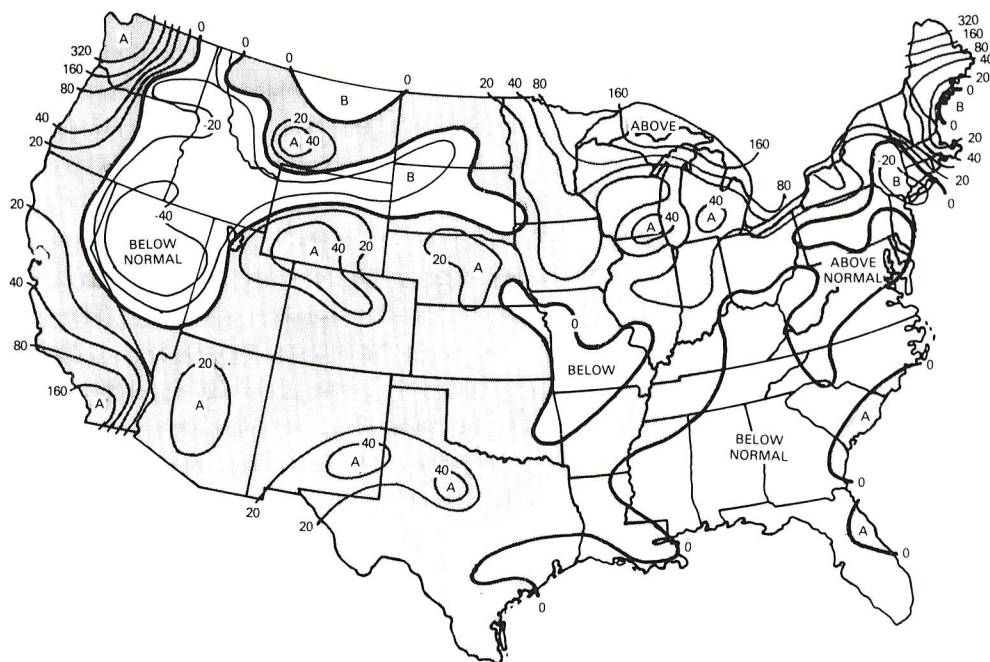
Cooling Degree-Days Accumulated from January 1, 1978, through July 2, 1978

Percent Departure from 1977



| | |
|---|----------------|
| A | Above (normal) |
| B | Below (normal) |

Percent Departure from Normal (1941-70)



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

Source: Department of Commerce — NOAA.

Part 8

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.

Resource Development

Oil and Gas Exploration and Development

| | | Rotary Rigs in Operation | Exploratory and Development Wells Drilled* | | | | | Total Footage of Wells Drilled* |
|------|-----------------------|-----------------------------|-----------------------------------------------|---------|--------|--------|--------|------------------------------------|
| | | Monthly Average | | Oil | Gas | Dry | Total | Thousands of feet |
| 1972 | AVERAGE | 1,107 | TOTAL | 11,306 | 4,928 | 11,057 | 27,291 | 134,602 |
| 1973 | AVERAGE | 1,194 | TOTAL | 9,902 | 6,385 | 10,305 | 26,592 | 136,391 |
| 1974 | AVERAGE | 1,475 | TOTAL | 12,784 | 7,240 | 11,674 | 31,698 | 150,551 |
| 1975 | AVERAGE | 1,660 | TOTAL | 16,408 | 7,580 | 13,247 | 37,235 | 174,434 |
| 1976 | January | 1,710 | | 1,465 | 772 | 1,055 | 3,292 | 14,517 |
| | February | 1,594 | | 1,341 | 652 | 1,159 | 3,152 | 14,888 |
| | March | 1,540 | | 1,726 | 821 | 1,301 | 3,848 | 18,126 |
| | April | 1,480 | | 1,237 | 672 | 994 | 2,903 | 13,765 |
| | May | 1,496 | | 1,501 | 658 | 1,104 | 3,263 | 14,196 |
| | June | 1,546 | | 1,500 | 709 | 1,123 | 3,332 | 14,780 |
| | July | 1,597 | | 1,312 | 730 | 916 | 2,958 | 13,716 |
| | August | 1,691 | | 1,265 | 711 | 1,140 | 3,116 | 14,697 |
| | September | 1,744 | | 1,474 | 909 | 1,199 | 3,582 | 16,777 |
| | October | 1,794 | | 1,396 | 750 | 1,123 | 3,269 | 14,542 |
| | November | 1,840 | | 1,291 | 698 | 1,222 | 3,211 | 14,642 |
| | December | 1,860 | | 1,512 | 926 | 1,414 | 3,852 | 17,093 |
| | | AVERAGE | 1,656 | TOTAL** | 17,059 | 9,085 | 13,621 | 39,765 |
| 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 | 87,547 |

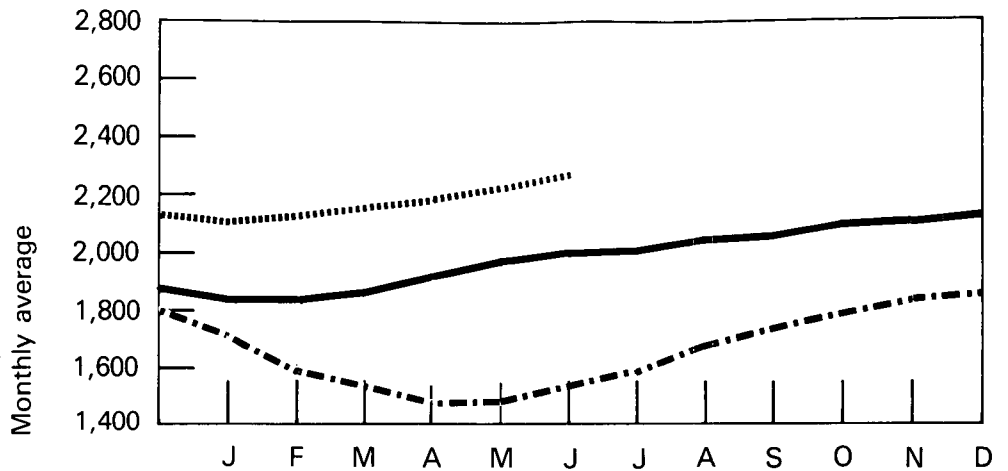
*Excludes service wells and stratigraphic and core tests.

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

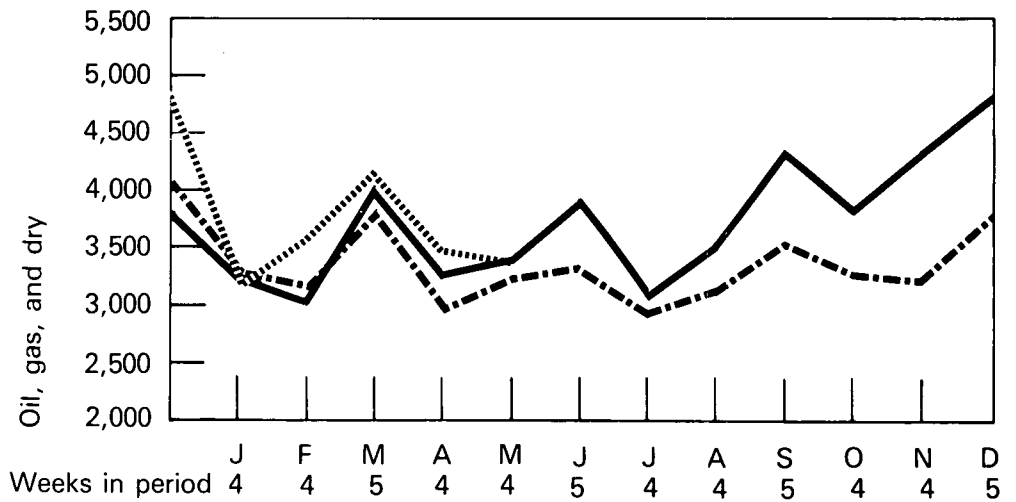
NA=Not available.

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

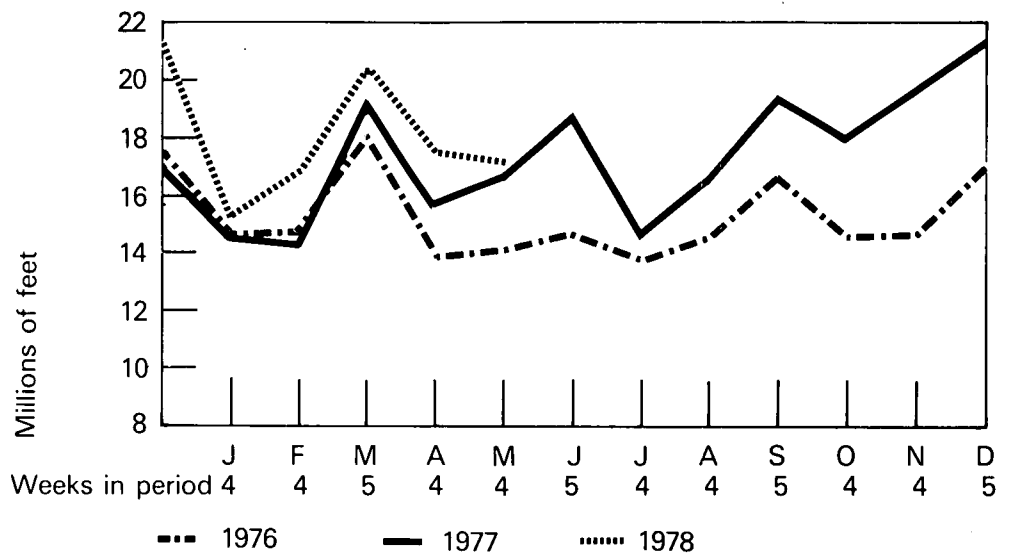
Rotary Rigs in Operation



Total Wells Drilled



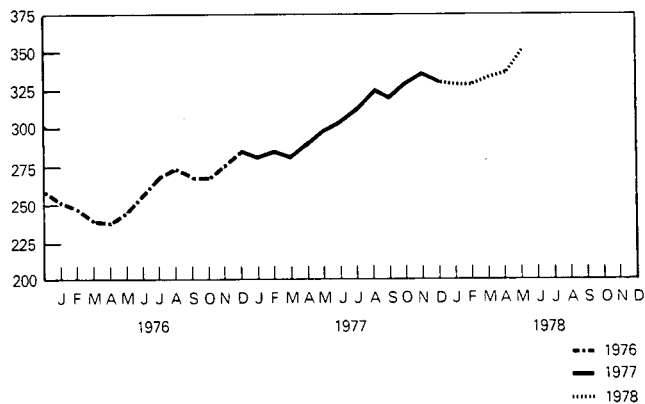
Total Footage of Wells Drilled



Oil and Gas Exploration and Development (Continued)

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

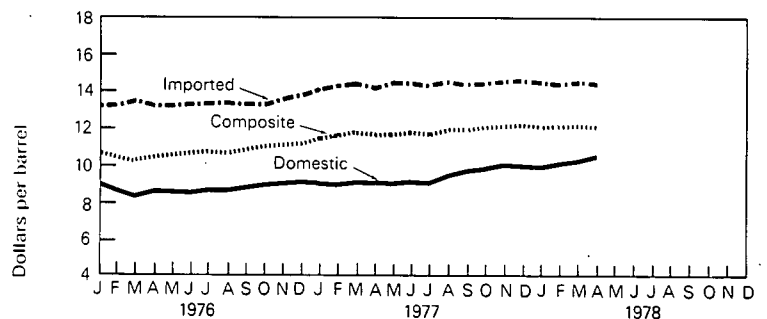
**DOE regions are defined in Explanatory Note 19.

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 | 10.89 |
| 1977 | January | 9.23 | 14.11 | 11.64 |
| | February | 9.24 | 14.50 | 11.80 |
| | March | 9.32 | 14.54 | 11.88 |
| | April | 9.21 | 14.36 | 11.75 |
| | May | 9.21 | 14.62 | 11.87 |
| | June | 9.34 | 14.63 | 11.98 |
| | July | 9.32 | 14.44 | 11.90 |
| | August | 9.54 | 14.68 | 12.01 |
| | September | 9.75 | 14.50 | 12.01 |
| | October | 9.95 | 14.56 | 12.12 |
| | November | 10.17 | 14.61 | 12.18 |
| | December | 10.15 | 14.76 | 12.27 |
| | AVERAGE | 9.55 | 14.53 | 11.96 |
| 1978 | January | 10.14 | 14.52 | 12.13 |
| | February | 10.25 | 14.41 | 12.19 |
| | March | 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 | | | |
| 1976 | | Lower Tier ² | Upper Tier ² | Actual Stripper ³ | Actual Domestic Average ⁴ | Imputed Domestic Average ⁴ | 1978 | January | 5.28 | 11.78 | 13.89 | 5.30 | 12.38 | 8.68 | 8.34 |
| | September | 5.17 | 11.65 | 13.21 | 8.39 | 8.19 | | February | 5.29 | 11.81 | 13.90 | 5.68 | 12.46 | 8.84 | 8.48 |
| | October | 5.15 | 11.62 | 13.35 | 8.46 | 8.23 | | March | 5.34 | 11.87 | 13.97 | R5.00 | 12.60 | R8.80 | R8.41 |
| | November | 5.17 | 11.62 | 13.31 | 8.62 | 8.40 | | April ⁷ | 5.35 | 11.94 | 13.95 | 5.25 | 12.67 | 8.82 | 8.44 |
| | December | 5.17 | 11.64 | 13.30 | 8.62 | 8.40 | | | | | | | | | |
| | 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 | |
| | July | 46.75 | 36.59 | | 13.30 | Alaskan North Slope** | Naval Petroleum Reserve** |
| | August | 43.31 | 36.65 | | 13.32 | 2.58 | 0.75 |
| | September | 42.78 | 34.07 | | 13.14 | 5.79 | 0.91 |
| | October | 42.23 | 34.58 | | 12.92 | 9.06 | 0.91 |
| | November | 41.41 | 34.67 | | 13.00 | 9.09 | 1.15 |
| | December | 40.42 | 34.61 | | 13.00 | 9.84 | 1.05 |
| | AVERAGE | 45.92 | 36.11 | | 13.32 | 10.92 | 1.03 |
| | | | | | | 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 |
|------|----------------|-------------------------------------------------|---------------------------------------|
| | | Cents per gallon, including tax | |
| 1975 | January | 52.4 | 9.0 |
| | February | 52.5 | 9.0 |
| | March | 52.6 | 8.8 |
| | April | 53.5 | 8.6 |
| | May | 54.3 | 8.3 |
| | June | 55.6 | 8.1 |
| | July | 58.7 | 8.4 |
| | August | 59.2 | 8.4 |
| | September | 59.3 | 8.2 |
| | October | 58.9 | 8.2 |
| | November | 58.4 | 8.2 |
| | December | 58.0 | 8.1 |
| | AVERAGE | 56.2 | 8.4 |

| | | | |
|------|----------------|-------------|------------|
| 1976 | January | 57.7 | 8.1 |
| | February | 57.1 | 8.3 |
| | March | 56.6 | 8.3 |
| | April | 56.6 | 8.0 |
| | May | 57.4 | 7.4 |
| | June | 59.0 | 7.4 |
| | July | 59.6 | 7.4 |
| | August | 60.1 | 7.4 |
| | September | 60.2 | 7.6 |
| | October | 60.2 | 7.6 |
| | November | 60.0 | 7.8 |
| | December | 59.9 | 7.9 |
| | AVERAGE | 58.7 | 7.8 |

| | | | |
|------|----------------|-------------|------------|
| 1977 | January | 59.9 | 7.9 |
| | February | 60.7 | 7.9 |
| | March | 61.3 | 7.8 |
| | April | 62.2 | 8.1 |
| | May | 62.9 | 7.9 |
| | June | 63.4 | 8.1 |
| | July | 63.4 | 8.3 |
| | August | 63.4 | 8.4 |
| | September | 63.3 | 8.6 |
| | October | 63.2 | 8.8 |
| | November | 63.1 | 8.7 |
| | December | 63.3 | 9.0 |
| | AVERAGE | 62.6 | 8.3 |

| | | | |
|------|----------|------|----|
| 1978 | January | 61.7 | NA |
| | February | 61.6 | NA |
| | March | 61.7 | NA |
| | April* | 62.0 | NA |

| | Average Retail Dealer Selling Price | Average Retail Dealer Margin |
|--|-------------------------------------------------|---------------------------------------|
| | Cents per gallon, including tax | |

| | |
|------|-----|
| NA | NA |
| NA | NA |
| NA | NA |
| NA | NA |
| NA | NA |
| NA | NA |
| NA | NA |
| NA | NA |
| NA | NA |
| NA | NA |
| 55.4 | 5.5 |
| 54.9 | 5.3 |

| | |
|-------------|------------|
| 55.1 | 5.4 |
|-------------|------------|

| | |
|------|-----|
| 54.7 | 5.4 |
| 53.8 | 5.4 |
| 53.2 | 5.3 |
| 53.2 | 4.9 |
| 54.4 | 4.5 |
| 56.3 | 4.8 |
| 56.6 | 4.6 |
| 56.7 | 4.4 |
| 56.5 | 4.3 |
| 56.5 | 4.4 |
| 56.4 | 4.5 |
| 56.1 | 4.5 |

| | |
|-------------|------------|
| 55.4 | 4.8 |
|-------------|------------|

| | |
|------|-----|
| 56.2 | 4.5 |
| 57.1 | 4.4 |
| 57.7 | 4.4 |
| 58.4 | 4.4 |
| 58.9 | 4.2 |
| 59.3 | 4.3 |
| 59.2 | 4.4 |
| 58.8 | 4.2 |
| 58.5 | 4.2 |
| 58.2 | 4.2 |
| 58.1 | 4.0 |
| 58.2 | 4.2 |

| | |
|-------------|------------|
| 58.2 | 4.3 |
|-------------|------------|

*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

| | | Average Retail Dealer Selling Price | Average Retail Dealer Margin |
|------|----------------|-------------------------------------------------|---------------------------------------|
| | | Cents per gallon, including tax | |
| 1975 | January | NA | NA |
| | February | 56.1 | NA |
| | March | 56.2 | NA |
| | April | 57.1 | NA |
| | May | 57.9 | NA |
| | June | 58.8 | NA |
| | July | 61.5 | NA |
| | August | 62.0 | NA |
| | September | 62.1 | NA |
| | October | 62.1 | NA |
| | November | 62.0 | NA |
| | December | 61.4 | NA |
| | AVERAGE | 59.8 | NA |
| 1976 | January | 61.2 | NA |
| | February | 60.6 | NA |
| | March | 60.1 | NA |
| | April | 60.4 | NA |
| | May | 61.1 | NA |
| | June | 62.9 | NA |
| | July | 63.2 | NA |
| | August | 63.9 | NA |
| | September | 64.0 | NA |
| | October | 64.0 | NA |
| | November | 63.9 | NA |
| | December | 63.9 | NA |
| | AVERAGE | 62.5 | NA |
| 1977 | January | 64.0 | NA |
| | February | 65.0 | NA |
| | March | 65.4 | NA |
| | April | 66.1 | NA |
| | May | 66.7 | NA |
| | June | 67.2 | NA |
| | July | 67.3 | NA |
| | August | 67.0 | 9.5 |
| | September | 67.0 | 9.5 |
| | October | 67.0 | 9.7 |
| | November | 67.0 | 9.6 |
| | December | 67.2 | 9.9 |
| | AVERAGE | 66.4 | 9.6 |
| 1978 | January | 65.8 | NA |
| | February | 65.7 | NA |
| | March | R65.8 | NA |
| | April* | 66.1 | NA |

Unleaded Regular Gasoline—Self Serve

| | Average Retail Dealer Selling Price | Average Retail Dealer Margin |
|------|-------------------------------------------------|---------------------------------------|
| | Cents per gallon, including tax | |
| 1975 | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| 1976 | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| 1977 | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | NA | NA |
| | 63.7 | 6.5 |
| | 63.7 | 6.5 |
| | 63.6 | 6.6 |
| | 63.4 | 6.4 |
| | 63.6 | 6.7 |
| 1978 | 61.6 | NA |
| | 61.8 | NA |
| | 61.8 | 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 | | |
|------|----------------|-------------------------------------------------|---------------------------------------|-------------|------------|
| | | Cents per gallon, including tax | | | |
| 1975 | January | 57.1 | NA | NA | NA |
| | February | 57.3 | NA | NA | NA |
| | March | 57.5 | NA | NA | NA |
| | April | 58.2 | NA | NA | NA |
| | May | 59.0 | NA | NA | NA |
| | June | 60.3 | NA | NA | NA |
| | July | 63.1 | NA | NA | NA |
| | August | 63.6 | NA | NA | NA |
| | September | 63.8 | NA | NA | NA |
| | October | 63.4 | NA | NA | NA |
| | November | 63.2 | NA | NA | NA |
| | December | 62.9 | NA | NA | NA |
| | AVERAGE | 60.9 | NA | NA | NA |
| 1976 | January | 62.7 | NA | 59.6 | NA |
| | February | 62.1 | NA | 58.9 | NA |
| | March | 61.6 | NA | 58.4 | NA |
| | April | 61.6 | NA | 58.5 | NA |
| | May | 62.4 | NA | 59.6 | NA |
| | June | 63.9 | NA | 61.4 | NA |
| | July | 64.6 | NA | 61.8 | NA |
| | August | 65.2 | NA | 62.0 | NA |
| | September | 65.3 | NA | 61.9 | NA |
| | October | 65.2 | NA | 61.9 | NA |
| | November | 65.2 | NA | 61.9 | NA |
| | December | 65.0 | NA | 61.6 | NA |
| | AVERAGE | 63.8 | NA | 60.7 | NA |
| 1977 | January | 65.2 | NA | 61.7 | NA |
| | February | 66.1 | NA | 62.7 | NA |
| | March | 66.8 | NA | 63.3 | NA |
| | April | 67.6 | NA | 64.1 | NA |
| | May | 68.4 | NA | 64.8 | NA |
| | June | 68.9 | NA | 65.2 | NA |
| | July | 68.9 | NA | 65.2 | NA |
| | August | 68.9 | 9.9 | 65.8 | 7.2 |
| | September | 68.9 | 10.0 | 65.8 | 7.3 |
| | October | 68.9 | 10.1 | 65.7 | 7.3 |
| | November | 68.9 | 10.1 | 65.6 | 7.3 |
| | December | 69.1 | 10.2 | 65.8 | 7.4 |
| | AVERAGE | 68.1 | 10.1 | 64.7 | 7.3 |
| 1978 | January | 67.7 | NA | 63.5 | NA |
| | February | 67.7 | NA | 64.0 | NA |
| | March | 68.0 | NA | 63.9 | NA |
| | April* | 68.3 | 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 | 63.6 |
| 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 | 67.3 |
| Nonmajor | 62.6 | 62.8 |
| National Average | R65.8 | 66.1 |

Leaded Regular Gasoline—Self Serve

| | Selling Price | |
|------------------|---------------|------|
| | Mar | Apr* |
| Major | 58.3 | 58.6 |
| Nonmajor | 55.8 | 56.3 |
| National Average | 57.0 | 57.4 |

Unleaded Regular Gasoline—Self Serve

| | Selling Price | |
|------------------|---------------|------|
| | Mar | Apr* |
| Major | 63.4 | 63.7 |
| Nonmajor | R59.5 | 59.8 |
| National Average | 61.8 | 62.0 |

Leaded Premium Gasoline—Full Serve

| | Selling Price | |
|------------------|---------------|------|
| | Mar | Apr* |
| Major | 69.1 | 69.5 |
| Nonmajor | R64.4 | 65.2 |
| National Average | R67.9 | 68.3 |

Unleaded Premium Gasoline—Full Serve

| | Selling Price | |
|------------------|---------------|------|
| | Mar | Apr* |
| Major | 69.7 | 70.0 |
| Nonmajor | R70.6 | 70.5 |
| National Average | 69.7 | 70.0 |

Leaded Premium Gasoline—Self Serve

| | Selling Price | |
|------------------|---------------|------|
| | Mar | Apr* |
| Major | R66.3 | 66.5 |
| Nonmajor | R61.2 | 61.8 |
| National Average | 63.9 | 64.2 |

Unleaded Premium Gasoline—Self Serve

| | Selling Price | |
|------------------|---------------|------|
| | Mar | Apr* |
| Major | R67.0 | 66.4 |
| 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 | Renego- tiated or Amended | New Contracts | Renego- tiated or Amended | New Contracts | Renego- tiated or Amended | New Contracts | Renego- tiated or Amended | New Contracts | Renego- tiated 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 | 185.8 |
| 1977 | January | 213.8 |
| | February | 217.0 |
| | March | 219.9 |
| | April | 223.7 |
| | May | 227.0 |
| | June | 227.3 |
| | July | 229.9 |
| | August | 230.1 |
| | September | 230.4 |
| | October | 235.1 |
| | November | 238.4 |
| | December | 237.3 |
| 1978 | January | 241.6 |
| | February | 243.0 |
| | March | 247.0 |
| | April | 248.7 |
| | May | 255.2 |

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 |

Source: Federal Power Commission Form 423.

Utility Fossil Fuels (Continued)

COST OF FOSSIL FUELS DELIVERED TO STEAM ELECTRIC UTILITY PLANTS

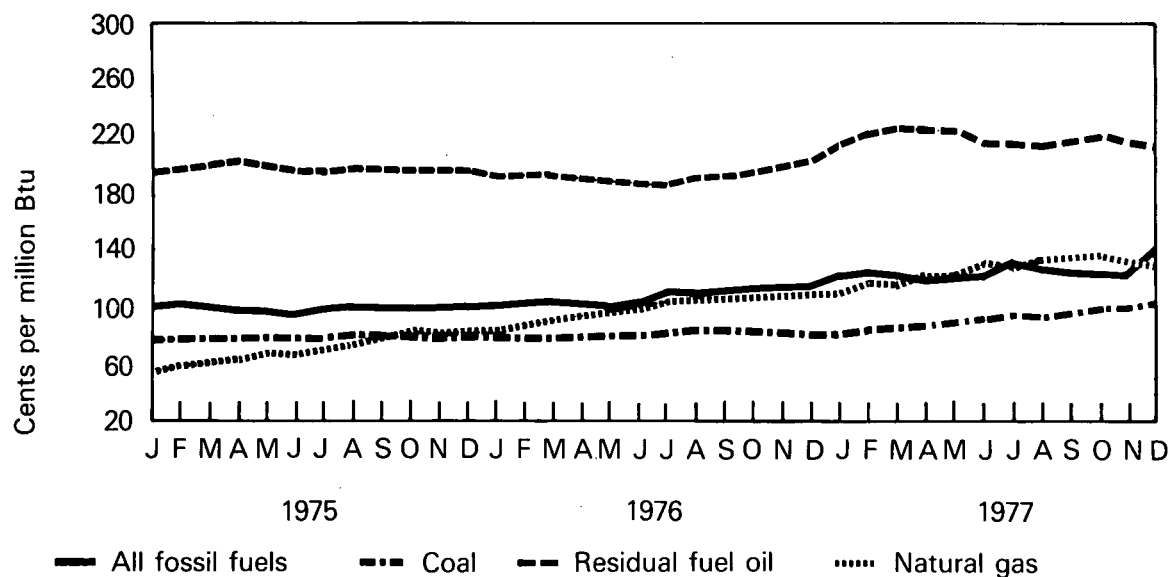
All Fossil Fuels*

| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |

Residual Fuel Oil*

| Region | 1976 | 1977 | | | | | | | | | | | |
|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |

Natural Gas**

| Region | 1976 | 1977 | | | | | | | | | | | |
|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |

*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.

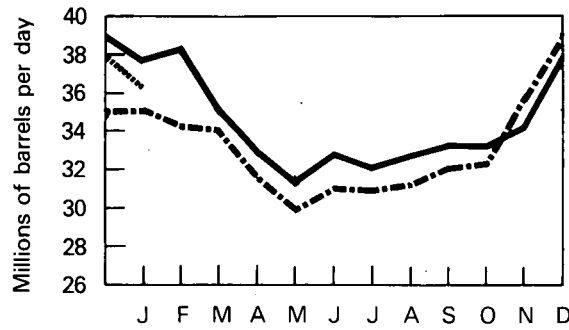
R=Revised data.

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.

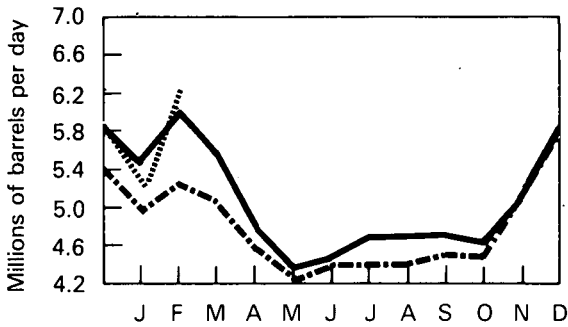
Source: Central Intelligence Agency, National Foreign Assessment Center, *International Energy Statistical Review*, 14 June 1978.

Petroleum Consumption

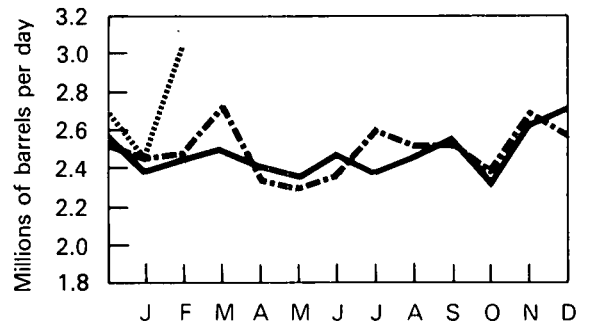
Total IEA



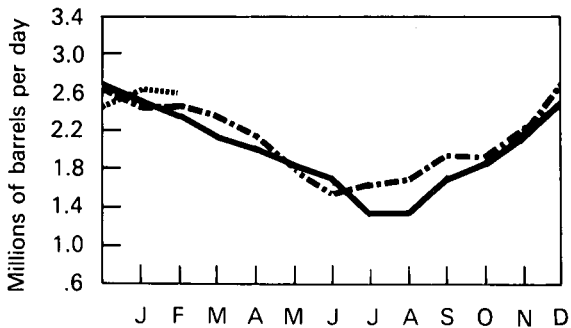
Japan*



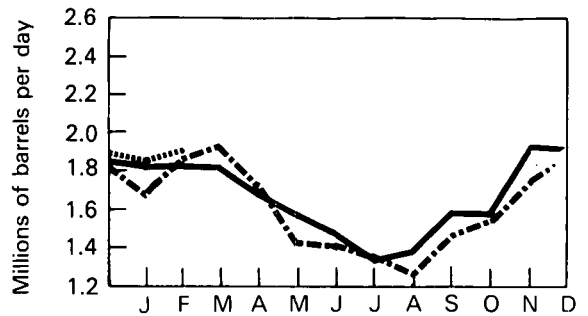
West Germany



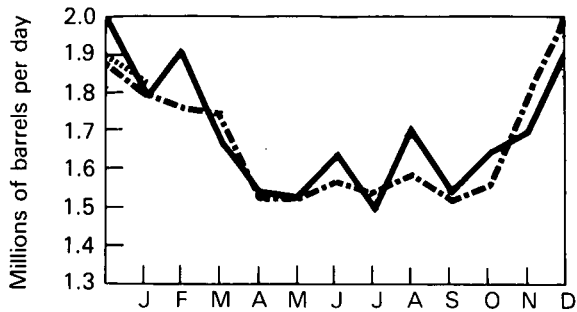
France**



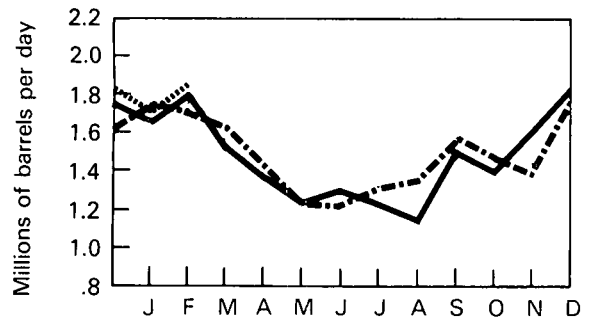
United Kingdom



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** | 1978 April | 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.

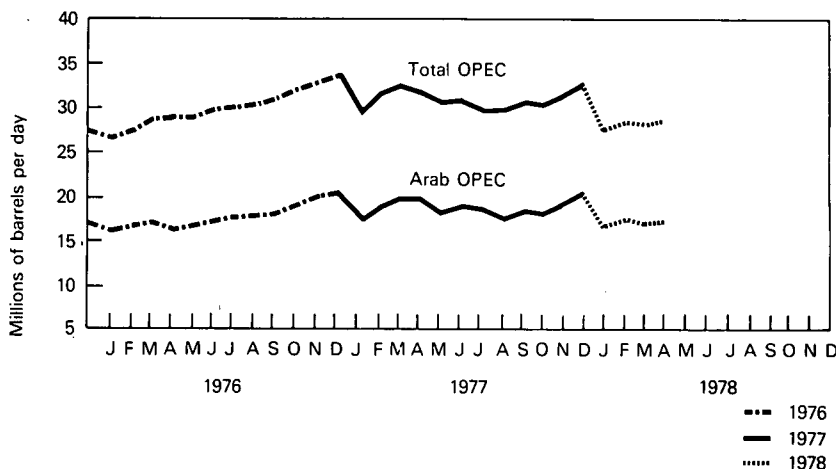
**Estimated.

***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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