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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 Forecasting at FEA – October 1975

Curtailments of Natural Gas Service – January 1976

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

Trends in United States Petroleum Imports – September 1976

Contents

| | |
|--|-----------|
| Part 1 – Overview | 1 |
| Part 2 – Crude Oil and Refined Products | 5 |
| Crude Oil | 6 |
| Total Refined Petroleum Products | 8 |
| Total Petroleum Imports | 8 |
| Motor Gasoline | 10 |
| Jet Fuel | 12 |
| Distillate Fuel Oil | 14 |
| Distillate Oil Heating Degree-Days | 16 |
| Residual Fuel Oil | 18 |
| Natural Gas Liquids | 20 |
| U.S. Petroleum Supply and Demand – 1976 | 22 |
| Part 3 – Natural Gas | 23 |
| Part 4 – Coal | 27 |
| Bituminous and Lignite | 28 |
| Anthracite | 30 |
| Part 5 – Electric Utilities | 31 |
| Part 6 – Nuclear Power | 37 |
| Part 7 – Consumption | 41 |
| Energy Consumption | 42 |
| Petroleum Consumption and Forecast | 48 |
| Part 8 – Resource Development | 49 |
| Oil and Gas Exploration | 50 |
| Part 9 – Price | 53 |
| Motor Gasoline | 54 |
| Diesel Fuel | 60 |
| Heating Oil | 62 |
| Residual Fuel Oil | 65 |
| Aviation Fuels | 65 |
| Crude Oil | 66 |
| Natural Gas | 72 |
| Utility Fossil Fuels | 74 |
| Part 10 – International | 77 |
| Petroleum Consumption | 78 |
| Crude Oil Production | 80 |
| Definitions | 81 |
| Explanatory Notes | 85 |
| Units of Measure | 88 |

Domestic energy production during the first 10 months of 1976 totaled 50.1 quadrillion Btu (or 164 trillion Btu per day) only 0.4 percent below the average daily production rate for the comparable period of 1975. Declines in crude oil and natural gas production of 3.0 percent and 1.3 percent, respectively, were almost entirely offset by a 2.8-percent gain in average daily coal production and a 9.1-percent rise in nuclear electric power output. No change was reported for hydroelectric power production during the period.

Imports of fossil fuels averaged 43.8 trillion Btu per day during the first 10 months of the year compared with 37.7 trillion during the same months last year. Crude oil imports increased 27.2 percent and accounted for two-thirds of the total fuels imported over the 10-month period. Refined product imports, which comprised one-fourth of the import total, declined by 2.1 percent. Imports of natural gas were estimated to have grown about 2 percent.

The major sources of crude oil imports in October were Saudi Arabia and Nigeria, providing 23 percent and 20 percent of the total, respectively. Imports from all members of the Organization of Petroleum Exporting Countries (OPEC) amounted to 85 percent of total crude oil imports.

Energy consumption in the United States totaled 54.3 quadrillion Btu (or 198 trillion Btu per day) during the first 3 quarters of 1976, up 3.2 percent from the average consumption level for the first 3 quarters of 1975. Average daily consumption of refined petroleum products and of coal were both 5.0 percent higher. Natural gas consumption, on the other hand, trailed last year's by nearly 1.0 percent.

Inventories of crude oil rose to a record level of 292.5 million barrels at the end of October and were equal to 22 days of refinery input. Primary stocks of fuel oils appeared adequate for the winter heating season and were equivalent to the following days of supply: distillate, 80 days; residual, 26 days.

Temperatures across the Nation in October were considerably colder than usual, resulting in an accumulation of 48 percent more distillate oil heating degree-days than the normal for the month and 84 percent

more than last October. (Distillate oil heating degree-day information will be published regularly during the heating season, October through April.)

Electric utilities produced 7.7 percent more power during October than during the same month a year ago, reflecting in part the increase in heating requirements due to colder weather. Production during the first 10 months of the year is running 5.7 percent ahead of last year's.

Retail gasoline prices were unchanged in October. A gallon of regular gasoline cost an average of 60.2 cents at full service outlets, only 1.3 cents more than during October 1975. Upper tier and lower tier crude prices remain frozen at their June levels. However, minor changes in the production ratios of old and new oil and the decontrol of stripper well oil caused the domestic average price of crude to rise 36 cents in September to \$8.39 per barrel.

Total world crude oil production posted a new high in September of 58.1 million barrels per day, as buyers continued to line up supplies before the expected OPEC price increase in January. The previous production record was 57.8 million barrels per day in September 1973, just prior to the Arab oil embargo.

| | Domestic Production of Energy* | Imports of Fossil Fuels** | Domestic Consumption of Energy*** | |
|-------------------------------------|-----------------------------------|------------------------------|--------------------------------------|-----------------------------|
| Quadrillion (10 ¹⁵) Btu | | | | |
| 1974 | January | 5.393 | 1.072 | 6.796 |
| | February | 4.979 | 0.945 | 6.205 |
| | March | 5.294 | 1.053 | 6.264 |
| | April | 5.199 | 1.142 | 5.759 |
| | May | 5.374 | 1.266 | 5.754 |
| | June | 4.945 | 1.197 | 5.535 |
| | July | 5.141 | 1.266 | 5.867 |
| | August | 5.157 | 1.237 | 5.900 |
| | September | 5.000 | 1.138 | 5.597 |
| | October | 5.264 | 1.210 | 6.066 |
| | November | 4.542 | 1.284 | 6.128 |
| | December | 4.849 | 1.305 | 6.732 |
| | TOTAL | 61.135 | 14.114 | 72.602 |
| 1975 | January | 5.195 | 1.330 | 6.955 |
| | February | 4.805 | 1.093 | 6.108 |
| | March | 5.130 | 1.128 | 6.297 |
| | April | 4.998 | 0.970 | 5.704 |
| | May | 5.123 | 1.023 | 5.384 |
| | June | 5.016 | 1.028 | 5.344 |
| | July | 4.862 | 1.169 | 5.581 |
| | August | 4.954 | 1.213 | 5.655 |
| | September | 4.897 | 1.273 | 5.413 |
| | October | R5.132 | 1.226 | R5.824 |
| | November | R4.879 | 1.200 | 5.767 |
| | December | R5.104 | 1.219 | 6.819 |
| | TOTAL | R60.094 | 13.870 | 70.853 |
| 1976 | January | 5.069 | 1.296 | R7.215 |
| | February | 4.850 | R1.210 | R6.162 |
| | March | 5.212 | R1.301 | R6.391 |
| | April | 4.955 | R1.245 | R5.738 |
| | May | 5.050 | 1.232 | R5.667 |
| | June | 5.052 | R1.391 | R5.703 |
| | July | R4.790 | 1.515 | R5.859 |
| | August | R4.974 | R1.416 | R††5.880 |
| | September | R†5.046 | R†1.336 | ††5.701 |
| | October | †5.088 | †1.419 | NA |
| | TOTAL | 50.087 (10 months) | 13.363 (10 months) | 54.316 (9 months) |

*See Explanatory Note 1.

**See Explanatory Note 2.

***See Explanatory Note 3.

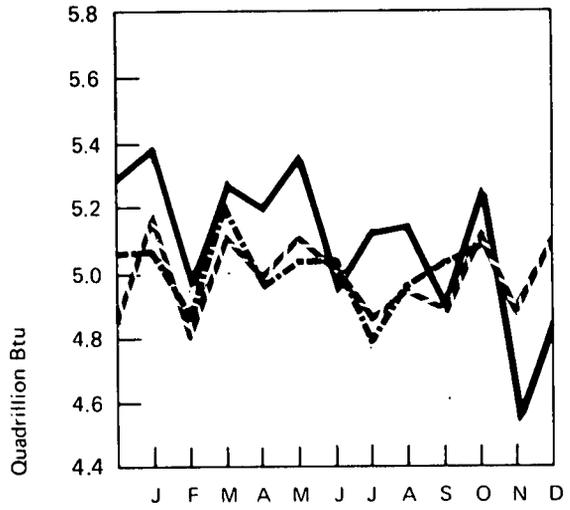
†Preliminary data.

††Partially estimated.

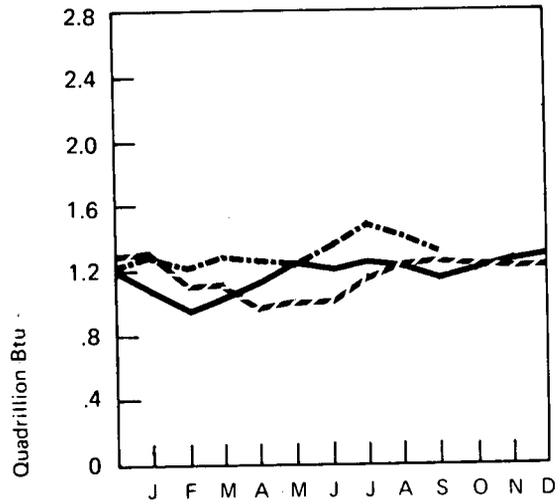
R=Revised data.

NA=Not available.

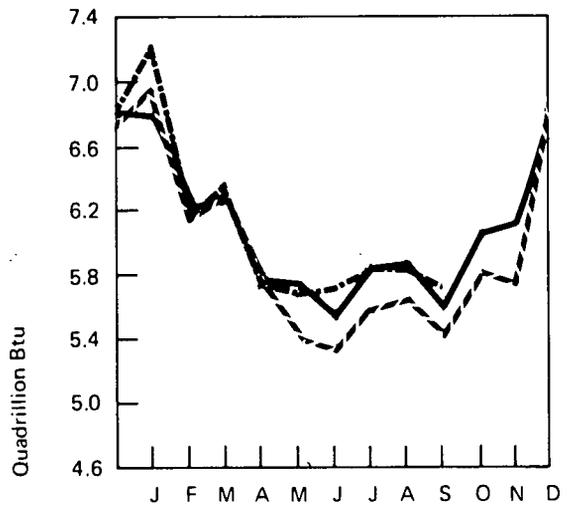
Domestic Production of Energy



Imports of Fossil Fuels



Domestic Consumption of Energy



— 1974
 - - 1975
 - · - 1976

Crude Oil and Refined Petroleum Products

Crude oil production in October was 8.08 million barrels per day, slightly less than the average production rate for the first 10 months of the year (8.13 million barrels per day). The current 10-month average is 3.0 percent less than the output rate for the corresponding 1975 period.

Crude oil input to refineries fell seasonally to 13.10 million barrels per day in October from 13.53 million in September, as some refining capacity was shut down for maintenance prior to converting facilities to maximize fuel oil output. The 10-month average was 13.17 million barrels per day, a 6.4-percent increase over the average for the first 10 months of 1975.

Crude oil imports for the January through October period averaged 5.11 million barrels per day, 27.2 percent more than during the similar period in 1975. According to Bureau of the Census data, Saudi Arabia and Nigeria were the major sources of imported crude oil in October, accounting for 23 and 20 percent of the total, respectively. OPEC countries were the source of 85 percent of the crude oil import total.

Crude oil inventories at the end of October reached an alltime high of 292.5 million barrels. This was equivalent to 22.3 days of crude input to refineries during the month, a record since the Arab embargo.

Domestic demand averaged 16.96 million barrels per day during the first 10 months of 1976, exceeding demand for the same period in 1975 by 4.4 percent.

Imports of refined products during the January through October period averaged 1.91 million barrels per day, 2.1 percent less than that during the first 10 months of 1975.

Distillate Oil Heating Degree-Days

October was much colder than usual throughout most of the country. Oil heating degree-days for the month were 48 percent above normal, and 84 percent above the level for the same month last year. Distillate

oil heating requirements in New England were 32 percent above normal; in the Middle Atlantic States, 46 percent above normal; and in the Midwest, 57 percent above normal. The West Coast States, however, had warmer than usual weather, with distillate oil heating requirements 16 percent below normal.

Since July 1, 1976, oil heating degree-days for the continental States have been 38 percent greater than normal and 42 percent greater than last year, indicating much colder than usual weather.

Natural Gas Liquids

Domestic demand for natural gas liquids in August was 1.2 percent below August 1975 demand. Demand during the first 8 months of 1976, however, was 1.9 percent greater than it was during the same period of 1975.

Production of natural gas liquids in August was down 2.4 percent from the August 1975 level. Production during the first 8 months was approximately equal to production for the same months of 1975.

Imports of natural gas liquids were down 1.6 percent in August, but up 6.9 percent during the first 8 months of 1976 compared to the levels for the corresponding periods last year.

Stocks of natural gas liquids at the end of August reached a record high of 144 million barrels and were 5.3 percent above August 1975 stocks.

art 2

Crude Oil and Refined
Petroleum Products

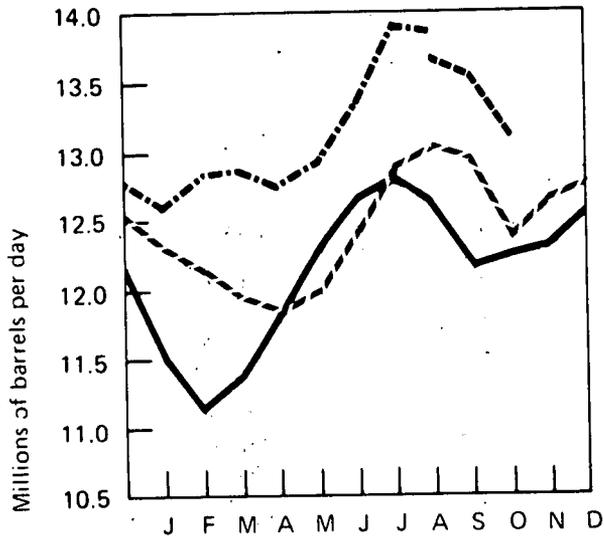
Oil

| | | Crude Input to Refineries | | Domestic Production | | Imports | | Stocks | |
|------|--------------------------------|------------------------------|---------------|---------------------|--------------|---------|--------------|---------|---------|
| | | Thousands of barrels per day | | | | | | | |
| | | BOM | API | BOM | API | BOM | API | BOM | API |
| 1974 | January | 11,491 | | 8,934 | | 2,382 | | 233,035 | |
| | February | 11,102 | | 9,142 | | 2,248 | | 240,723 | |
| | March | 11,355 | | 8,965 | | 2,462 | | 244,665 | |
| | April | 11,823 | | 8,954 | | 3,267 | | 256,385 | |
| | May | 12,333 | | 8,911 | | 3,908 | | 269,455 | |
| | June | 12,697 | | 8,780 | | 3,925 | | 268,765 | |
| | July | 12,811 | | 8,780 | | 4,091 | | 268,686 | |
| | August | 12,644 | | 8,699 | | 3,924 | | 264,840 | |
| | September | 12,124 | | 8,443 | | 3,797 | | 266,726 | |
| | October | 12,286 | | 8,611 | | 3,810 | | 269,437 | |
| | November | 12,332 | | 8,569 | | 3,958 | | 271,144 | |
| | December | 12,519 | | 8,527 | | 3,869 | | 265,020 | |
| | | AVERAGE | 12,133 | | 8,774 | | 3,477 | | |
| 1975 | January | 12,297 | | 8,439 | | 4,029 | | 270,462 | |
| | February | 12,135 | | 8,575 | | 3,828 | | 276,755 | |
| | March | 11,905 | | 8,476 | | 3,656 | | 279,989 | |
| | April | 11,803 | | 8,440 | | 3,378 | | 284,990 | |
| | May | 11,983 | | 8,371 | | 3,486 | | 276,110 | |
| | June | 12,417 | | 8,409 | | 3,905 | | 276,132 | |
| | July | 12,915 | | 8,327 | | 4,193 | | 264,157 | |
| | August | 13,046 | | 8,237 | | 4,581 | | 256,616 | |
| | September | 12,945 | | 8,266 | | 4,689 | | 259,446 | |
| | October | 12,365 | | 8,310 | | 4,389 | | 269,584 | |
| | November | 12,689 | | 8,271 | | 4,623 | | 270,950 | |
| | December | 12,779 | | 8,239 | | 4,476 | | 271,354 | |
| | | AVERAGE | 12,442 | | 8,362 | | 4,105 | | |
| 1976 | January | 12,560 | | 8,211 | | 4,595 | | 289,296 | |
| | February | 12,834 | | 8,196 | | 4,208 | | 277,414 | |
| | March | 12,877 | | 8,175 | | 4,738 | | 283,112 | |
| | April | 12,727 | | 8,080 | | 4,790 | | 286,628 | |
| | May | 12,920 | | 8,168 | | 4,669 | | 283,982 | |
| | June | 13,351 | | 8,144 | | 5,621 | | 281,715 | |
| | July | 13,901 | | 8,104 | | 5,792 | | 282,559 | |
| | August | 13,888 | | 8,075 | | 5,556 | | 277,272 | |
| | September | | 13,693 | | 8,165 | | 5,525 | | 278,801 |
| | October | | 13,529 | | 8,095 | | 5,488 | | 282,893 |
| | | | 13,099 | | 8,083 | | 5,580 | | 292,537 |
| | AVERAGE* (10 months) | | 13,170 | | 8,133 | | 5,108 | | |

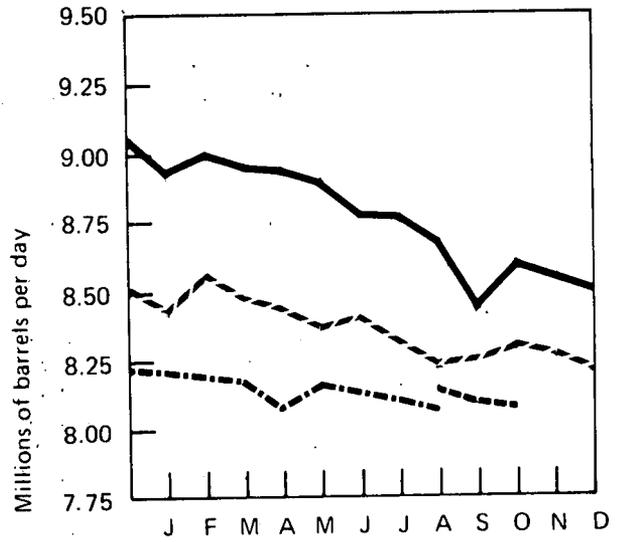
*Ten-month average is based on Bureau of Mines data for January through August and American Petroleum Institute data for September and October.

Sources: Bureau of Mines (BOM) and American Petroleum Institute (API) as indicated.

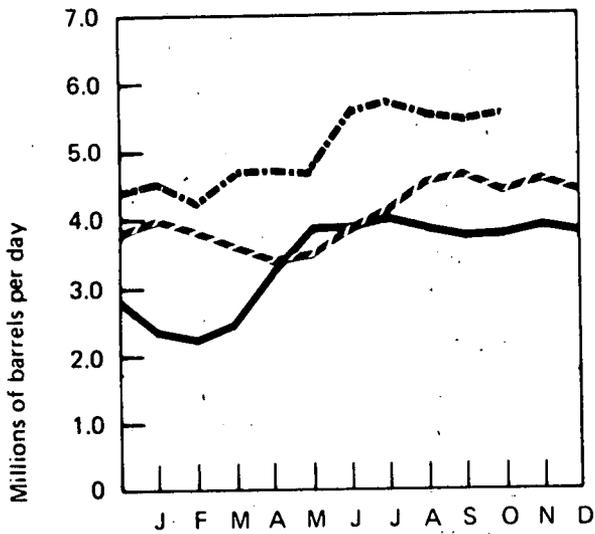
Crude Input to Refineries



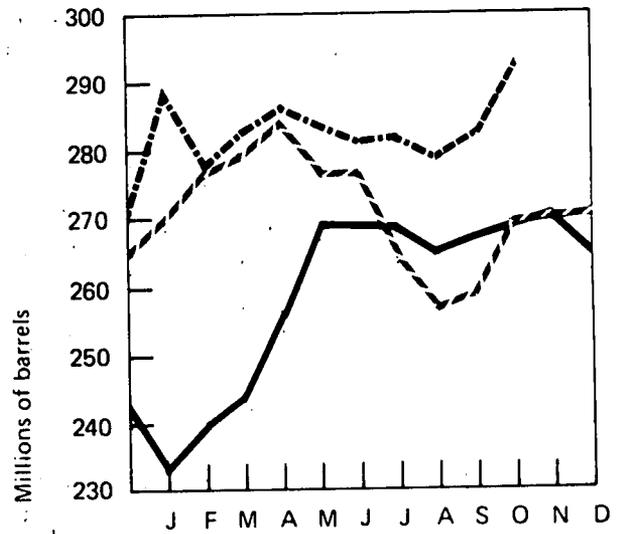
Domestic Production



Imports



Stocks



- 1974 BOM
- - - 1975 BOM
- · · 1976 BOM
- · - 1976 API

Total Refined Petroleum Products

Total Petroleum Imports

| | | Domestic Demand | | Imports* | | | |
|------|----------------------------------|------------------------------|---------------|----------|--------------|------------------------------|--------------|
| | | Thousands of barrels per day | | | | Thousands of barrels per day | |
| | | BOM | API | BOM | API | BOM | API |
| 1974 | January | 17,286 | | 2,989 | | 5,371 | |
| | February | 17,366 | | 2,968 | | 5,216 | |
| | March | 16,104 | | 2,812 | | 5,274 | |
| | April | 15,929 | | 2,713 | | 5,980 | |
| | May | 15,726 | | 2,586 | | 6,494 | |
| | June | 16,117 | | 2,435 | | 6,360 | |
| | July | 16,349 | | 2,445 | | 6,536 | |
| | August | 16,550 | | 2,438 | | 6,362 | |
| | September | 16,024 | | 2,255 | | 6,052 | |
| | October | 17,050 | | 2,366 | | 6,176 | |
| | November | 17,351 | | 2,840 | | 6,798 | |
| | December | 18,013 | | 2,798 | | 6,667 | |
| | | AVERAGE | 16,653 | | 2,635 | | 6,112 |
| 1975 | January | 17,983 | | 2,811 | | 6,840 | |
| | February | 17,248 | | 2,348 | | 6,176 | |
| | March | 16,316 | | 2,074 | | 5,730 | |
| | April | 16,041 | | 1,655 | | 5,033 | |
| | May | 15,118 | | 1,690 | | 5,176 | |
| | June | 15,611 | | 1,502 | | 5,407 | |
| | July | 15,762 | | 1,789 | | 5,982 | |
| | August | 15,767 | | 1,681 | | 6,262 | |
| | September | 15,769 | | 2,116 | | 6,805 | |
| | October | 16,344 | | 1,907 | | 6,296 | |
| | November | 15,721 | | 1,739 | | 6,362 | |
| | December | 17,987 | | 1,751 | | 6,227 | |
| | | AVERAGE | 16,291 | | 1,920 | | 6,025 |
| 1976 | January | 18,599 | | 2,070 | | 6,665 | |
| | February | R17,429 | | R2,423 | | R6,631 | |
| | March | R17,299 | | R1,946 | | R6,684 | |
| | April | R16,672 | | R1,805 | | R6,595 | |
| | May | 15,977 | | 1,654 | | 6,323 | |
| | June | 16,836 | | 1,858 | | 7,479 | |
| | July | 16,613 | | 2,098 | | 7,890 | |
| | August | 16,642 | **16,441 | 1,826 | **1,572 | 7,382 | **7,097 |
| | September | | R16,743 | | R1,692 | | R7,180 |
| | October | | 16,802 | | 1,786 | | 7,366 |
| | AVERAGE*** (10 months) | | 16,960 | | 1,914 | | 7,021 |

*See definitions.

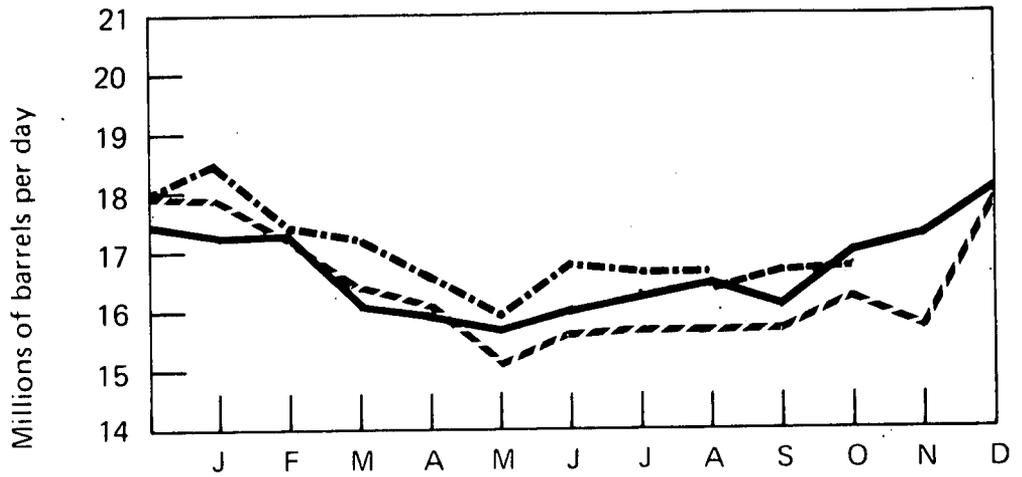
**FEA estimate.

***Ten-month average is based on Bureau of Mines data for January through August and American Petroleum Institute data for September and October.

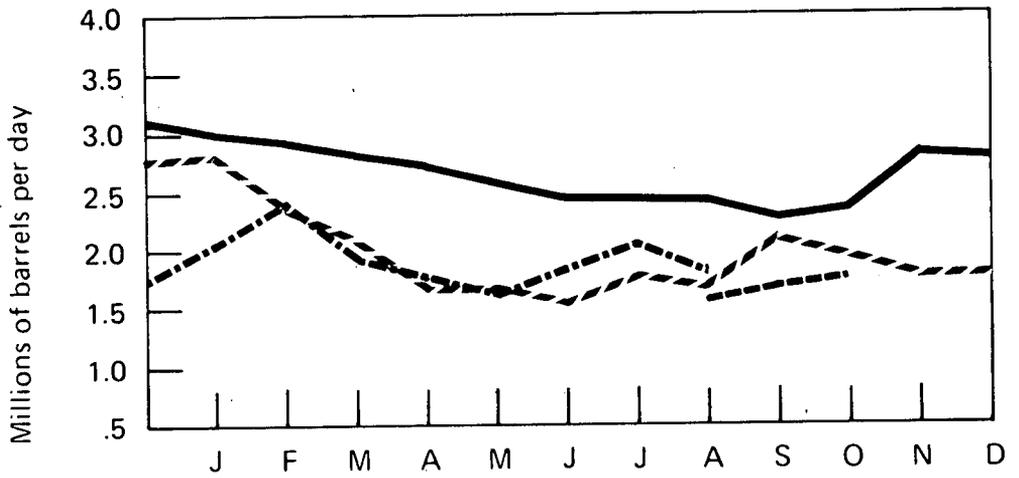
R=Revised data.

Sources: Bureau of Mines (BOM), American Petroleum Institute (API), and FEA.

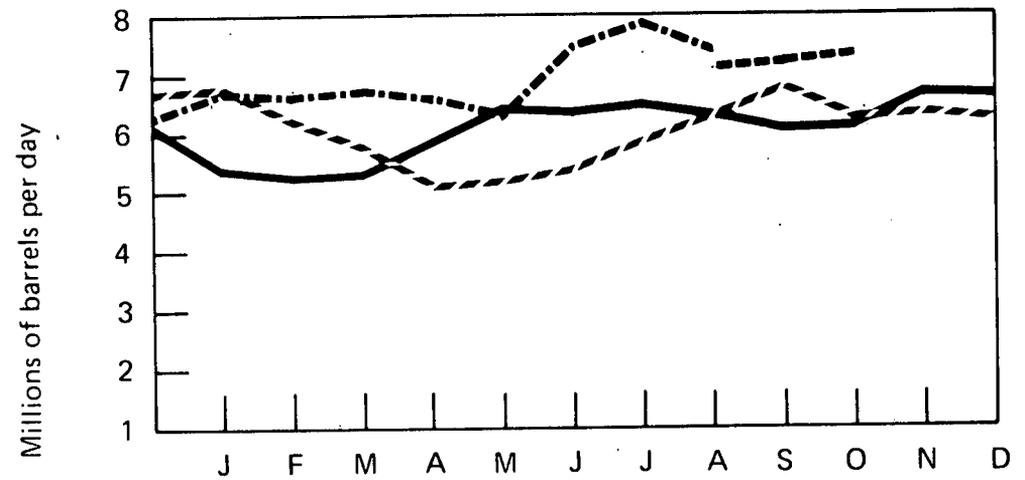
Total Refined Product Domestic Demand



Refined Product Imports



Total Petroleum Imports



- 1974 BOM
- - - 1975 BOM
- ... 1976 BOM
- . - . 1976 API

Motor Gasoline

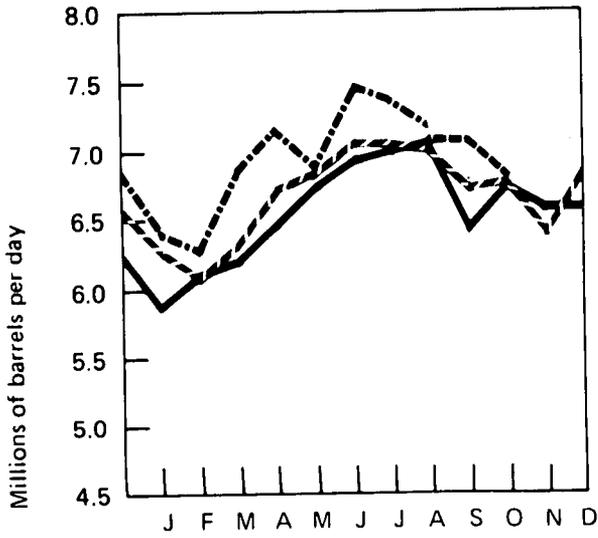
| | | Domestic Demand | | Production* | | Imports | | Stocks* | |
|------|-----------|---------------------------------|--------------|--------------|--------------|--------------|------------|------------|---------|
| | | Thousands of barrels per day | | | | | | | |
| | | BOM | API | BOM | API | BOM | API | BOM | API |
| | | Thousands of barrels | | | | | | | |
| 1974 | January | 5,804 | | 5,900 | | 163 | | 217,463 | |
| | February | 6,100 | | 5,969 | | 184 | | 219,058 | |
| | March | 6,162 | | 5,982 | | 225 | | 220,307 | |
| | April | 6,457 | | 6,311 | | 260 | | 223,752 | |
| | May | 6,745 | | 6,329 | | 250 | | 218,670 | |
| | June | 6,919 | | 6,663 | | 211 | | 217,381 | |
| | July | 6,959 | | 6,793 | | 212 | | 218,838 | |
| | August | 7,061 | | 6,815 | | 253 | | 218,951 | |
| | September | 6,388 | | 6,453 | | 202 | | 227,031 | |
| | October | 6,712 | | 6,336 | | 171 | | 220,748 | |
| | November | 6,547 | | 6,292 | | 174 | | 218,385 | |
| | December | 6,558 | | 6,419 | | 141 | | 224,719 | |
| | | AVERAGE | 6,537 | | 6,358 | | 204 | | |
| 1975 | January | 6,206 | | 6,509 | | 262 | | 242,285 | |
| | February | 6,096 | | 6,276 | | 171 | | 251,915 | |
| | March | 6,326 | | 6,070 | | 150 | | 248,685 | |
| | April | 6,718 | | 6,046 | | 133 | | 232,556 | |
| | May | 6,871 | | 6,126 | | 142 | | 213,947 | |
| | June | 7,076 | | 6,669 | | 177 | | 207,114 | |
| | July | 7,041 | | 7,003 | | 209 | | 212,454 | |
| | August | 7,008 | | 6,872 | | 232 | | 215,480 | |
| | September | 6,729 | | 6,822 | | 269 | | 226,447 | |
| | October | 6,778 | | 6,409 | | 207 | | 221,493 | |
| | November | 6,389 | | 6,602 | | 139 | | 232,091 | |
| | December | 6,808 | | 6,786 | | 119 | | 234,925 | |
| | | AVERAGE | 6,674 | | 6,518 | | 184 | | |
| 1976 | January | 6,398 | | 6,483 | | 92 | | 240,464 | |
| | February | 6,263 | | 6,472 | | 84 | | 248,854 | |
| | March | 6,890 | | 6,455 | | 123 | | 239,049 | |
| | April | 7,159 | | 6,562 | | 99 | | 223,965 | |
| | May | 6,853 | | 6,774 | | 112 | | 225,037 | |
| | June | 7,482 | | 7,303 | | 188 | | 225,365 | |
| | July | 7,354 | | 7,218 | | 190 | | 229,405 | |
| | August | 7,168 | 7,071 | 7,149 | 7,115 | 141 | 104 | 230,578 | 229,187 |
| | September | | 7,064 | | 6,856 | | 104 | | 225,970 |
| | October | | 6,798 | | 6,596 | | 109 | | 222,928 |
| | | AVERAGE** (10 months) | | 6,944 | | 6,788 | | 124 | |

*See definitions.

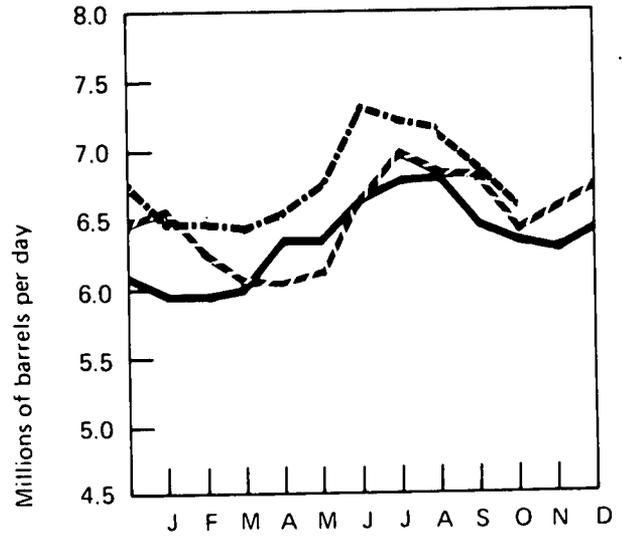
**Ten-month average is based on Bureau of Mines data for January through August and American Petroleum Institute data for September and October.

Sources: Bureau of Mines (BOM) and American Petroleum Institute (API) as indicated.

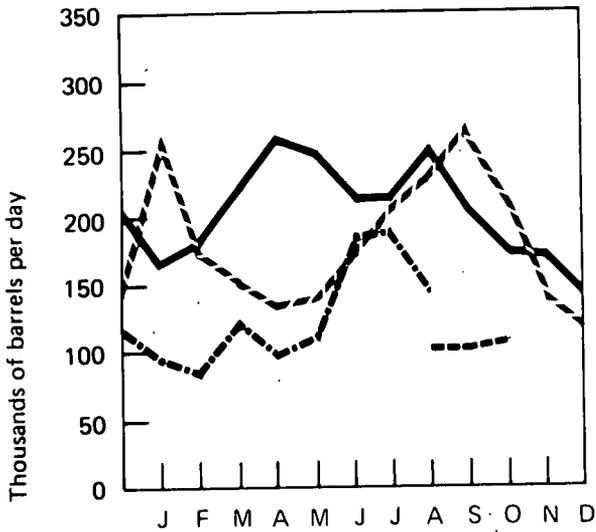
Domestic Demand



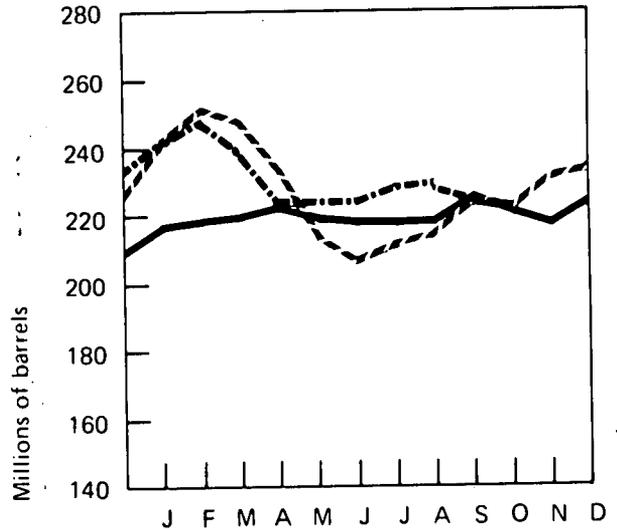
Production



Imports



Stocks



- 1974 BOM
- - - 1975 BOM
- . - . 1976 BOM
- · · 1976 API

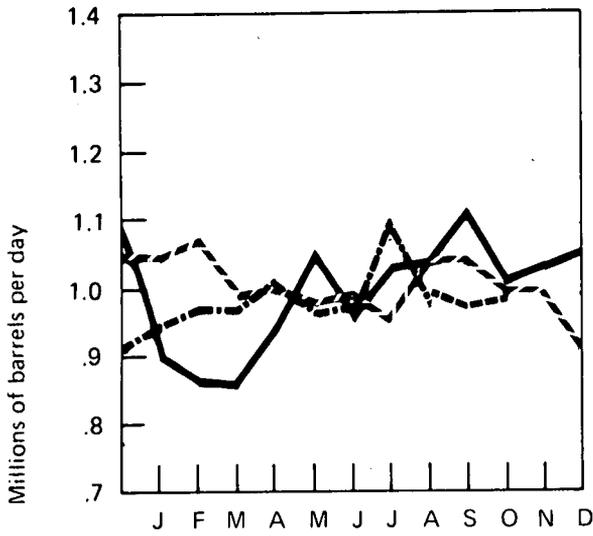
Jet Fuel

| | | Domestic Demand | | Production | | Imports | | Stocks | | |
|------|-----------|--------------------------------|--------------|------------|------------|------------|------------|-----------|--------|----------------------|
| | | Thousands of barrels per day | | | | | | | | Thousands of barrels |
| | | BOM | API | BOM | API | BOM | API | BOM | API | |
| 1974 | January | 895 | | 800 | | 136 | | 29,732 | | |
| | February | 860 | | 783 | | 75 | | 29,617 | | |
| | March | 956 | | 832 | | 139 | | 29,996 | | |
| | April | 941 | | 868 | | 132 | | 31,725 | | |
| | May | 1,053 | | 868 | | 205 | | 32,324 | | |
| | June | 952 | | 810 | | 141 | | 32,200 | | |
| | July | 1,028 | | 802 | | 214 | | 31,671 | | |
| | August | 1,031 | | 805 | | 206 | | 30,989 | | |
| | September | 1,109 | | 867 | | 217 | | 30,186 | | |
| | October | 1,011 | | 868 | | 161 | | 30,564 | | |
| | November | 1,032 | | 863 | | 140 | | 29,616 | | |
| | December | 1,043 | | 861 | | 178 | | 29,776 | | |
| | | AVERAGE | 993 | | 836 | | 163 | | | |
| 1975 | January | 1,041 | | 831 | | 229 | | 30,321 | | |
| | February | 1,075 | | 835 | | 200 | | 29,133 | | |
| | March | 982 | | 896 | | 130 | | 30,456 | | |
| | April | 1,006 | | 864 | | 138 | | 30,263 | | |
| | May | 977 | | 861 | | 133 | | 30,719 | | |
| | June | 989 | | 839 | | 106 | | 29,337 | | |
| | July | 954 | | 883 | | 88 | | 29,798 | | |
| | August | 1,046 | | 958 | | 132 | | 31,103 | | |
| | September | 1,040 | | 907 | | 140 | | 31,291 | | |
| | October | 997 | | 863 | | 106 | | 30,410 | | |
| | November | 999 | | 864 | | 89 | | 28,977 | | |
| | December | 911 | | 849 | | 109 | | 30,380 | | |
| | | AVERAGE | 1,001 | | 871 | | 133 | | | |
| 1976 | January | 948 | | 889 | | 69 | | 30,618 | | |
| | February | 966 | | 918 | | 72 | | 31,180 | | |
| | March | 965 | | 927 | | 86 | | 32,619 | | |
| | April | 1,010 | | 927 | | 108 | | 33,332 | | |
| | May | 960 | | 899 | | 106 | | 34,664 | | |
| | June | 972 | | 879 | | 68 | | 33,879 | | |
| | July | 1,099 | | 933 | | 130 | | 32,732 | | |
| | August | 965 | 990 | 942 | 948 | 38 | 59 | 33,121 | 31,500 | |
| | September | | 970 | | 932 | | 48 | | 31,751 | |
| | October | | 982 | | 898 | | 94 | | 31,877 | |
| | | AVERAGE* (10 months) | | 984 | | 914 | | 82 | | |

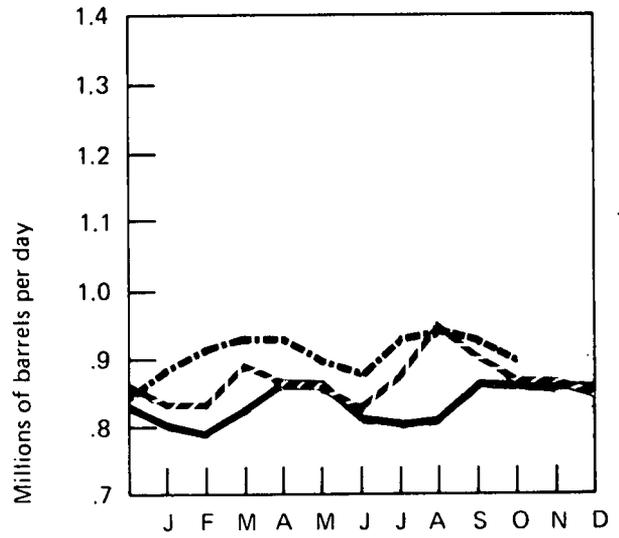
*Ten-month average is based on Bureau of Mines data for January through August and American Petroleum Institute data for September and October.

Sources: Bureau of Mines (BOM) and American Petroleum Institute (API) as indicated.

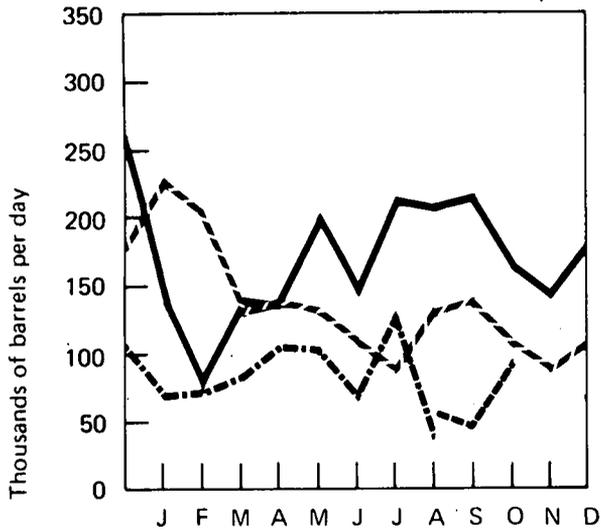
Domestic Demand



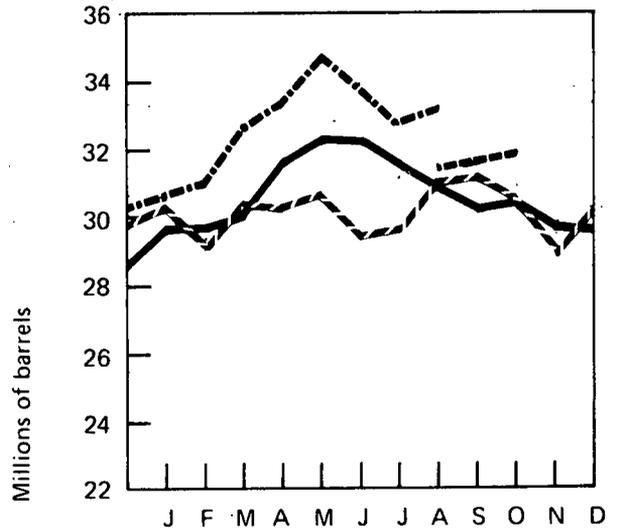
Production



Imports



Stocks



— 1974 BOM
 - - - 1975 BOM
 - · - · 1976 BOM
 - - - 1976 API

Distillate Fuel Oil

| | Domestic Demand | | Production* | | Imports | | Stocks* | | |
|------|---------------------------------|--------------|--------------|-------|--------------|-----|------------|---------|---------|
| | Thousands of barrels per day | | | | | | | | |
| | BOM | API | BOM | API | BOM | API | BOM | API | |
| 1974 | January | 3,835 | 2,880 | | 464 | | 181,179 | | |
| | February | 3,849 | 2,399 | | 306 | | 149,125 | | |
| | March | 3,164 | 2,226 | | 287 | | 128,822 | | |
| | April | 2,852 | 2,522 | | 220 | | 125,553 | | |
| | May | 2,450 | 2,704 | | 268 | | 141,806 | | |
| | June | 2,377 | 2,783 | | 220 | | 160,645 | | |
| | July | 2,309 | 2,792 | | 221 | | 182,458 | | |
| | August | 2,309 | 2,705 | | 125 | | 198,673 | | |
| | September | 2,385 | 2,552 | | 152 | | 208,269 | | |
| | October | 2,887 | 2,700 | | 237 | | 209,908 | | |
| | November | 3,157 | 2,801 | | 454 | | 212,875 | | |
| | December | 3,853 | 2,924 | | 515 | | 223,717 | | |
| | AVERAGE | 2,948 | 2,668 | | 289 | | | | |
| 1975 | January | 3,953 | 2,852 | | 324 | | 199,715 | | |
| | February | 3,967 | 2,679 | | 302 | | 176,696 | | |
| | March | 3,293 | 2,531 | | 256 | | 161,111 | | |
| | April | 3,094 | 2,486 | | 110 | | 146,214 | | |
| | May | 2,382 | 2,431 | | 136 | | 152,027 | | |
| | June | 2,266 | 2,574 | | 68 | | 163,306 | | |
| | July | 2,112 | 2,589 | | 106 | | 181,472 | | |
| | August | 2,173 | 2,592 | | 92 | | 197,323 | | |
| | September | 2,163 | 2,812 | | 129 | | 220,732 | | |
| | October | 2,675 | 2,744 | | 103 | | 226,113 | | |
| | November | 2,544 | 2,767 | | 96 | | 235,749 | | |
| | December | 3,778 | 2,783 | | 124 | | 208,787 | | |
| | AVERAGE | 2,849 | 2,653 | | 153 | | | | |
| 1976 | January | 4,298 | 2,734 | | 164 | | 165,428 | | |
| | February | 3,687 | 2,961 | | 207 | | 150,439 | | |
| | March | R3,336 | 2,793 | | R151 | | 138,306 | | |
| | April | 2,788 | 2,655 | | 96 | | 137,249 | | |
| | May | 2,519 | 2,738 | | 97 | | 147,057 | | |
| | June | 2,436 | 2,885 | | 151 | | 165,064 | | |
| | July | 2,255 | 2,959 | | 126 | | 190,861 | | |
| | August | 2,237 | 2,354 | 2,982 | 2,900 | 131 | 58 | 217,930 | 207,757 |
| | September | | 2,604 | | 2,881 | | 75 | | 218,343 |
| | October | | 2,785 | | 2,865 | | 87 | | 223,590 |
| | AVERAGE** (10 months) | | 2,892 | | 2,845 | | 128 | | |

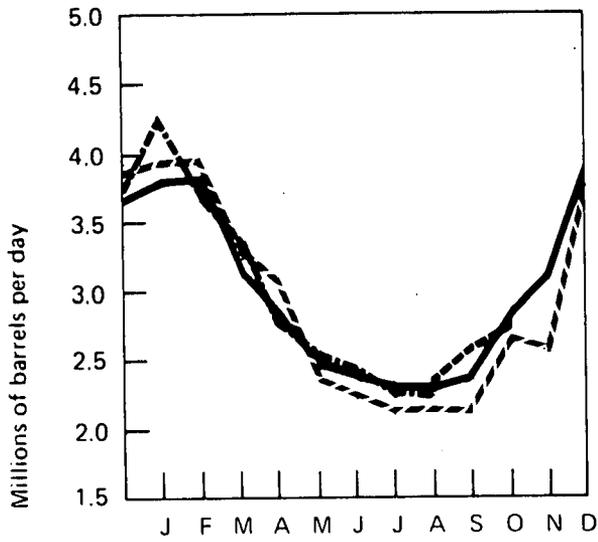
*See definitions.

**Ten-month average is based on Bureau of Mines data for January through August and American Petroleum Institute data for September and October.

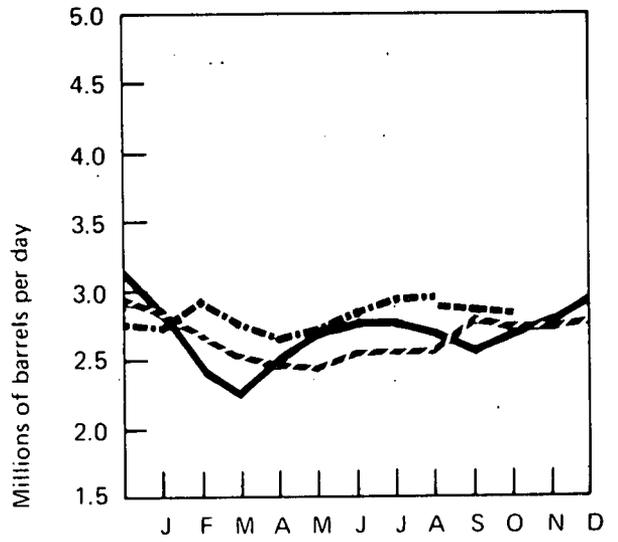
R=Revised data.

Sources: Bureau of Mines (BOM) and American Petroleum Institute (API) as indicated.

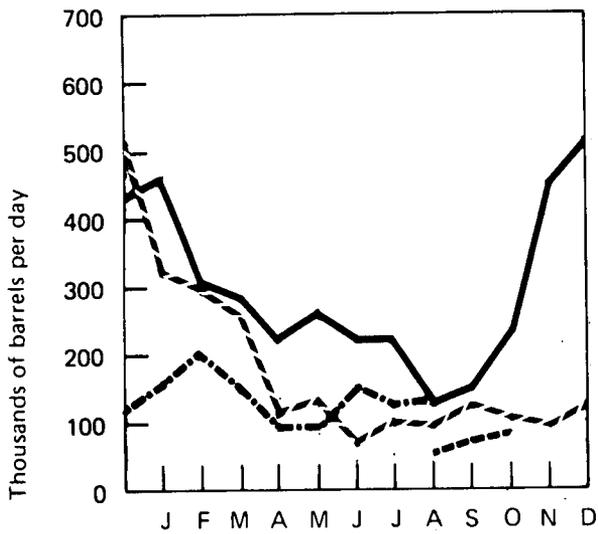
Domestic Demand



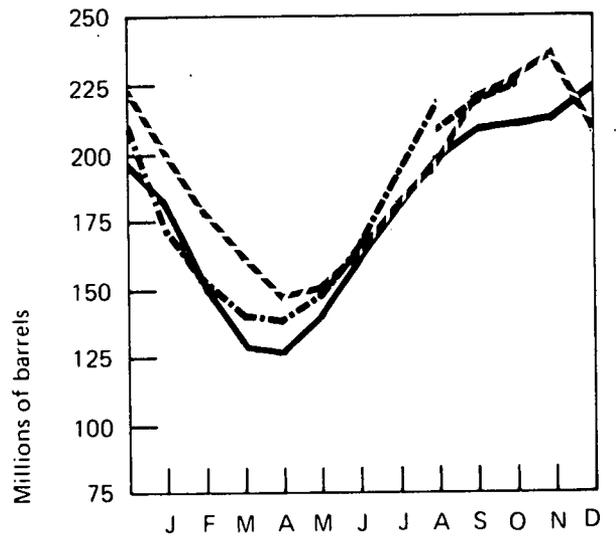
Production



Imports



Stocks



- 1974 BOM
- - - 1975 BOM
- · · 1976 BOM
- - - 1976 API

Distillate Oil Heating Degree-Days *

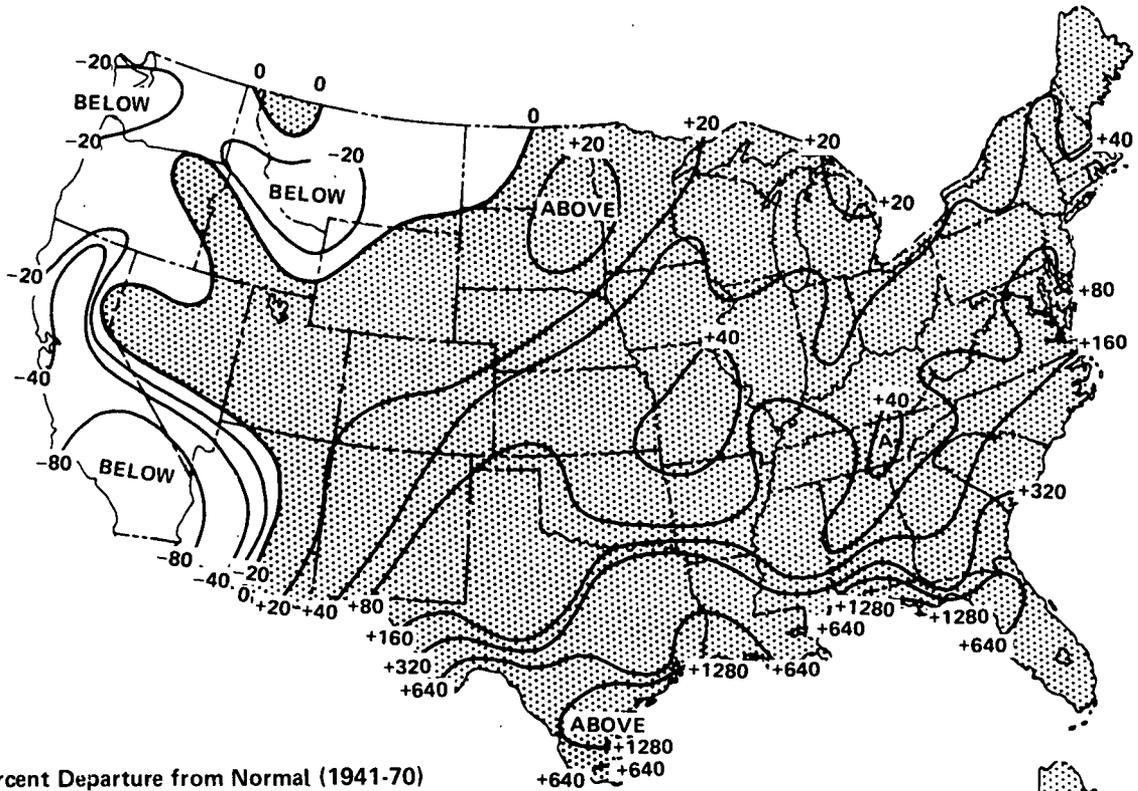
| Petroleum Administration for Defense (PAD) Districts | OCTOBER (October 3 - October 31) | | | | 1976 | Cumulative Since July 1 | | | | |
|---|----------------------------------|--------------|--------------------|--------------|---------------|-------------------------|--------------------|---------------|--------------|---------------|
| | 1976 | 1975** | Normal (1941-70)** | | | 1975** | Normal (1941-70)** | | | |
| PAD District I | 357.3 | 190.8 | (87.3) | 245.3 | (45.6) | 465.6 | 306.7 | (51.8) | 330.4 | (40.9) |
| New England Conn., Maine, Mass., N.H., R.I., Vt. | 445.7 | 282.1 | (58.0) | 336.7 | (32.4) | 615.5 | 445.2 | (38.3) | 488.1 | (26.1) |
| Middle Atlantic Del., Md., N.J., N.Y., Pa. | 404.3 | 212.7 | (90.1) | 276.2 | (46.3) | 528.4 | 349.3 | (51.3) | 364.9 | (44.8) |
| Lower Atlantic Fla., Ga., N.C., S.C., Va., W.Va. | 170.5 | 55.1 | (209.6) | 90.2 | (88.9) | 185.1 | 80.8 | (129.0) | 103.4 | (79.0) |
| PAD District II Ill., Ind., Iowa, Kan., Ky., Mich., Minn., Mo., Nebr., N. Dak., Ohio, Okla., S. Dak., Tenn., Wisc. | 547.4 | 287.0 | (90.8) | 349.3 | (56.7) | 709.9 | 534.2 | (32.9) | 501.2 | (41.6) |
| PAD District III Ala., Ark., La., Miss., N. Mex., Tex. | 209.3 | 47.7 | (338.9) | 83.4 | (151.1) | 214.2 | 81.1 | (164.1) | 87.9 | (143.7) |
| PAD District IV Colo., Idaho, Mont., Utah, Wyo. | 490.6 | 449.8 | (9.1) | 437.2 | (12.2) | 650.2 | 639.5 | (1.7) | 653.9 | (-0.6) |
| PAD District V Ariz., Calif., Nev., Oreg., Wash. | 223.4 | 285.3 | (-21.7) | 265.8 | (-15.9) | 357.3 | 432.7 | (-17.4) | 488.3 | (-26.8) |
| U.S. TOTAL | 389.3 | 211.2 | (84.3) | 262.9 | (48.1) | 505.5 | 354.7 | (42.5) | 365.3 | (38.4) |

*See Explanatory Note 4 for explanation of oil heating degree-days.

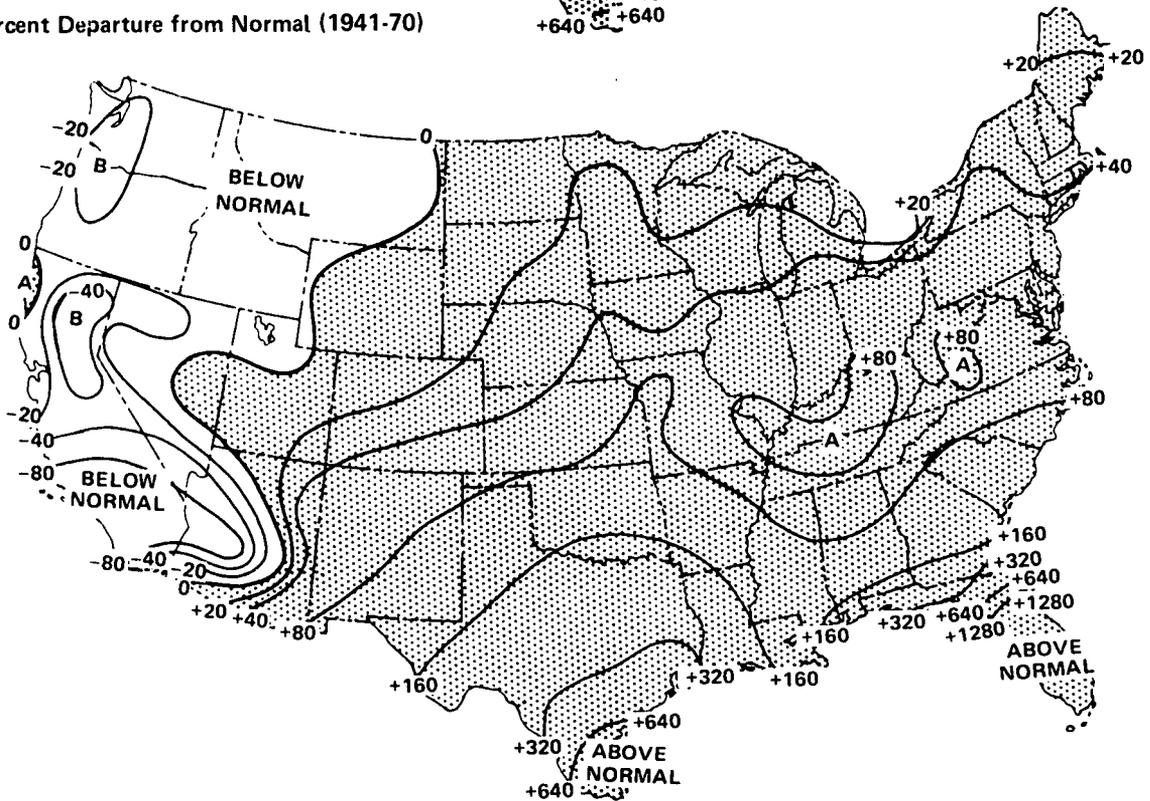
**Percentage change in parentheses.

Heating Degree-Days Accumulated from July 1, 1976 through October 31, 1976

Percent Departure from 1975



Percent Departure from Normal (1941-70)



Note: Above normal heating degree-days correspond to below normal temperatures.
 Source: Department of Commerce-NOAA.

Residual Fuel Oil

| | | Domestic Demand | | Production | | Imports | | Stocks | |
|------|-----------|---------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------|
| | | Thousands of barrels per day | | | | | | | |
| | | BOM | API | BOM | API | BOM | API | BOM | API |
| 1974 | January | 3,035 | | 1,072 | | 1,733 | | 46,548 | |
| | February | 2,991 | | 1,029 | | 1,904 | | 45,004 | |
| | March | 2,556 | | 912 | | 1,713 | | 47,222 | |
| | April | 2,437 | | 985 | | 1,593 | | 51,339 | |
| | May | 2,260 | | 995 | | 1,362 | | 54,356 | |
| | June | 2,405 | | 1,026 | | 1,500 | | 57,891 | |
| | July | 2,473 | | 1,056 | | 1,474 | | 59,787 | |
| | August | 2,529 | | 1,067 | | 1,520 | | 60,988 | |
| | September | 2,475 | | 1,032 | | 1,421 | | 60,251 | |
| | October | 2,611 | | 1,099 | | 1,465 | | 58,679 | |
| | November | 2,935 | | 1,229 | | 1,753 | | 60,363 | |
| | December | 2,983 | | 1,335 | | 1,630 | | 74,939 | |
| | | AVERAGE | 2,639 | | 1,070 | | 1,587 | | |
| 1975 | January | 3,242 | | 1,415 | | 1,647 | | 60,233 | |
| | February | 2,849 | | 1,354 | | 1,402 | | 66,495 | |
| | March | 2,668 | | 1,299 | | 1,292 | | 64,148 | |
| | April | 2,225 | | 1,245 | | 1,047 | | 66,340 | |
| | May | 2,049 | | 1,151 | | 1,123 | | 73,498 | |
| | June | 2,179 | | 1,152 | | 904 | | 69,660 | |
| | July | 2,239 | | 1,155 | | 1,144 | | 71,526 | |
| | August | 2,118 | | 1,146 | | 982 | | 71,857 | |
| | September | 2,329 | | 1,183 | | 1,312 | | 76,938 | |
| | October | 2,238 | | 1,165 | | 1,221 | | 81,858 | |
| | November | 2,349 | | 1,214 | | 1,169 | | 83,131 | |
| | December | 2,728 | | 1,354 | | 1,099 | | 74,126 | |
| | | AVERAGE | 2,433 | | 1,235 | | 1,194 | | |
| 1976 | January | R3,069 | | 1,415 | | 1,406 | | 66,592 | |
| | February | R3,007 | | 1,394 | | R1,703 | | 68,859 | |
| | March | R2,779 | | 1,311 | | R1,342 | | 65,132 | |
| | April | R2,496 | | 1,283 | | R1,258 | | 66,458 | |
| | May | R2,479 | | 1,257 | | 1,134 | | 65,147 | |
| | June | R2,565 | | 1,241 | | 1,240 | | 64,272 | |
| | July | 2,555 | | 1,266 | | 1,460 | | 69,812 | |
| | August | 2,678 | *2,432 | 1,321 | 1,226 | 1,307 | *1,169 | 68,490 | 67,111 |
| | September | | R2,459 | | 1,219 | | R1,311 | | 69,355 |
| | October | | 2,644 | | 1,260 | | 1,347 | | 68,150 |
| | | AVERAGE** (10 months) | | 2,673 | | 1,297 | | 1,349 | |

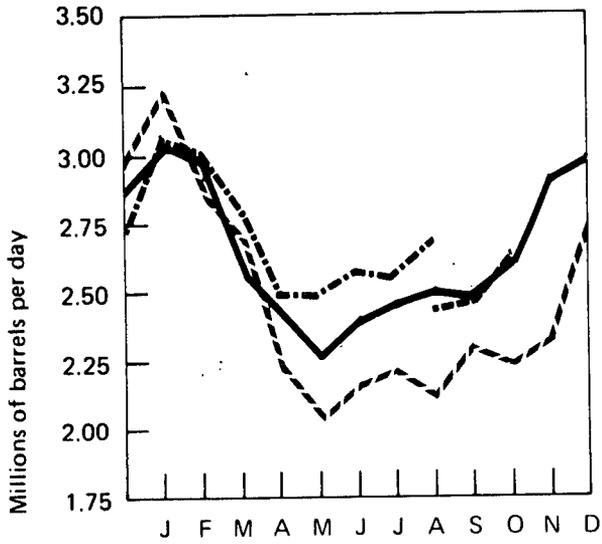
*FEA estimate.

**Ten-month average is based on Bureau of Mines data for January through August and American Petroleum Institute data for September and October.

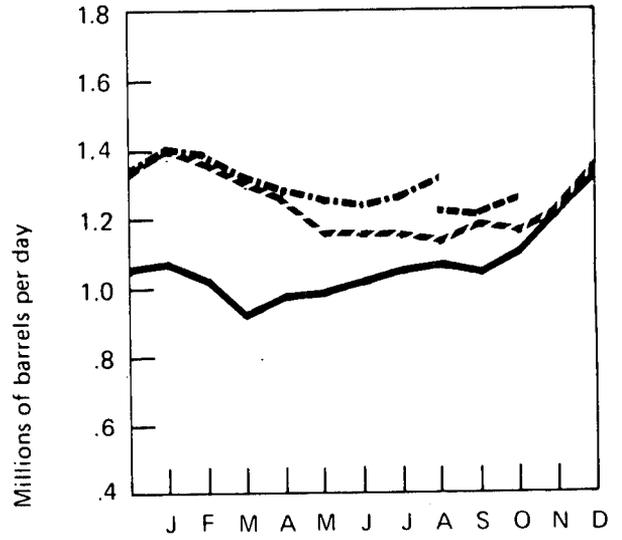
R=Revised data.

Sources: Bureau of Mines (BOM), American Petroleum Institute (API), and FEA.

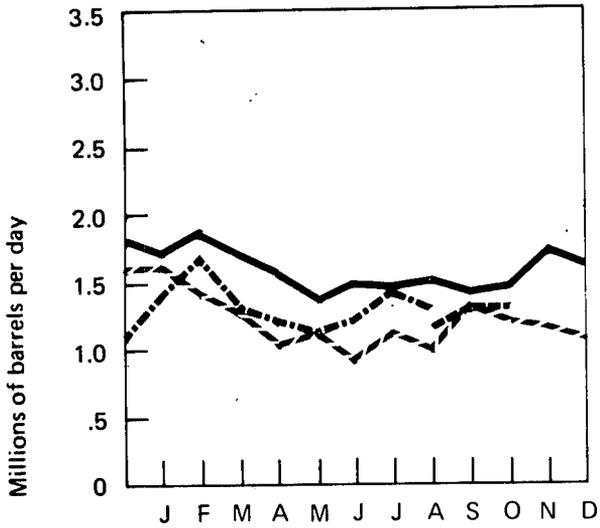
Domestic Demand



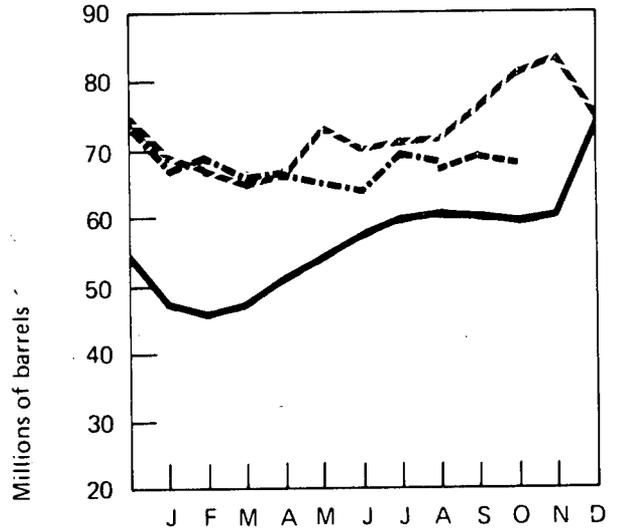
Production



Imports



Stocks



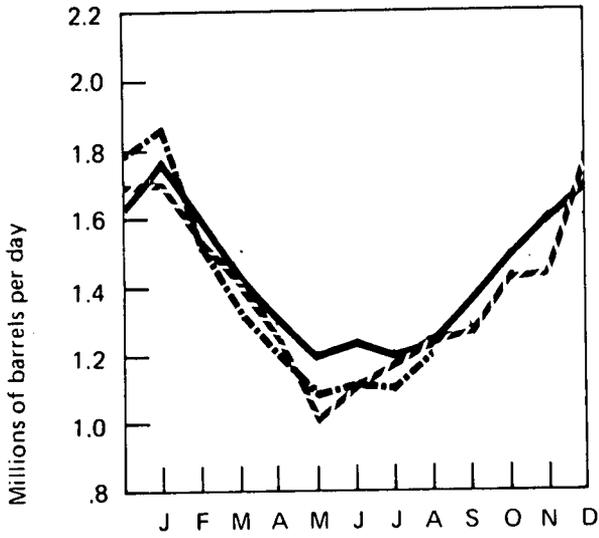
— 1974 BOM
- - 1975 BOM
- · - 1976 BOM
- - - 1976 API

Natural Gas Liquids

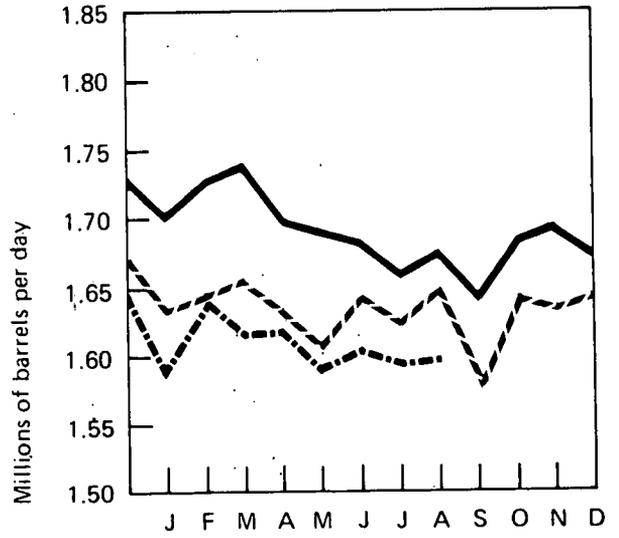
| | | Domestic Demand* | Production* | | Used at Refineries* | Imports | Stocks* |
|------|-----------|-------------------------------|-------------------------|------------------|------------------------|------------|-------------------------|
| | | | At processing plants | At refineries | | | |
| | | Thousands of barrels per day | | | | | Thousands of barrels |
| 1974 | January | 1,778 | 1,699 | 327 | 794 | 304 | 91,210 |
| | February | 1,593 | 1,728 | 337 | 777 | 294 | 90,145 |
| | March | 1,408 | 1,741 | 341 | 720 | 224 | 94,817 |
| | April | 1,321 | 1,696 | 353 | 690 | 215 | 101,352 |
| | May | 1,180 | 1,690 | 340 | 678 | 182 | 110,881 |
| | June | 1,242 | 1,684 | 368 | 718 | 199 | 117,915 |
| | July | 1,187 | 1,657 | 364 | 723 | 163 | 125,427 |
| | August | 1,221 | 1,676 | 361 | 742 | 163 | 131,675 |
| | September | 1,360 | 1,638 | 348 | 738 | 166 | 133,215 |
| | October | 1,493 | 1,686 | 330 | 788 | 200 | 130,557 |
| | November | 1,604 | 1,694 | 301 | 795 | 208 | 124,447 |
| | December | 1,692 | 1,670 | 286 | 796 | 230 | 114,295 |
| | | AVERAGE | 1,422 | 1,688 | 338 | 746 | 212 |
| 1975 | January | 1,708 | 1,630 | 307 | 756 | 257 | 105,400 |
| | February | 1,512 | 1,646 | 296 | 734 | 181 | 100,945 |
| | March | 1,404 | 1,658 | 280 | 731 | 178 | 99,168 |
| | April | 1,242 | 1,635 | 273 | 667 | 176 | 100,408 |
| | May | 1,002 | 1,607 | 299 | 628 | 97 | 112,737 |
| | June | 998 | 1,646 | 323 | 659 | 166 | 125,215 |
| | July | 1,191 | 1,621 | 336 | 701 | 173 | 131,359 |
| | August | 1,227 | 1,650 | 357 | 690 | 163 | 137,074 |
| | September | 1,278 | 1,577 | 326 | 703 | 209 | 140,278 |
| | October | 1,429 | 1,643 | 310 | 729 | 198 | 138,981 |
| | November | 1,444 | 1,635 | 309 | 759 | 196 | 135,976 |
| | December | 1,787 | 1,646 | 310 | 768 | 232 | 124,278 |
| | | AVERAGE | 1,352 | 1,633 | 311 | 710 | 186 |
| 1976 | January | 1,885 | 1,585 | 305 | 728 | 240 | 109,450 |
| | February | 1,518 | 1,640 | 316 | 793 | 270 | 106,647 |
| | March | 1,303 | 1,615 | 333 | 674 | 194 | 111,483 |
| | April | 1,201 | 1,616 | 349 | 716 | 171 | 116,788 |
| | May | 1,074 | 1,588 | 376 | 695 | 144 | 124,369 |
| | June | 1,110 | 1,606 | 356 | 718 | 163 | 132,359 |
| | July | 1,103 | 1,592 | 354 | 710 | 147 | 139,521 |
| | August | 1,213 | 1,596 | 362 | 695 | 160 | 144,352 |
| | | AVERAGE (8 months) | 1,308 | 1,604 | 344 | 713 | 186 |

*See Explanatory Note 5.
Source: Bureau of Mines.

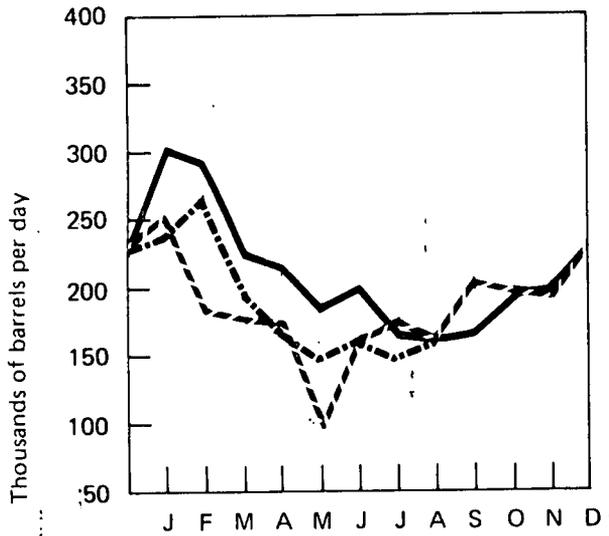
Domestic Demand



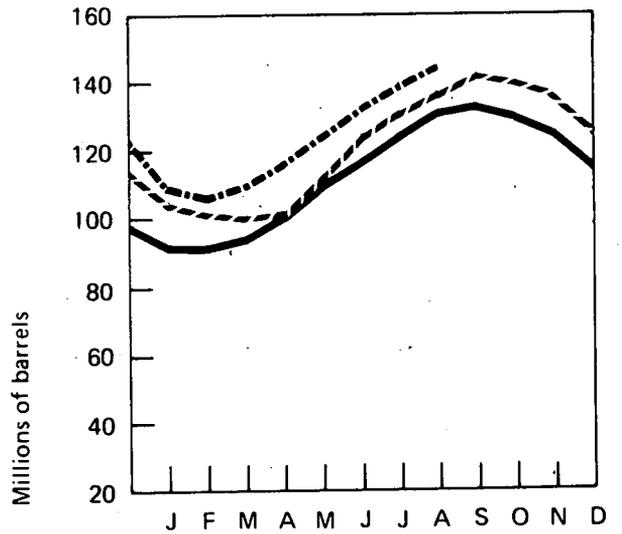
Production at Processing Plants



Imports



Stocks



— 1974
 - - 1975
 - · - 1976

U.S. Petroleum Supply and Demand—1976

| | Actual* | | | Forecast** |
|---|---------------|---------------|---------------|---------------|
| | 1st Qtr. | 2nd Qtr. | 3rd Qtr. | 4th Qtr. |
| Thousands of barrels per day | | | | |
| Supply | | | | |
| Crude oil and lease condensate production | 8,194 | 8,131 | 8,122 | 7,947 |
| Natural gas plant liquids production | 1,612 | 1,604 | 1,578 | 1,592 |
| Other hydrocarbon supply | 37 | 38 | 37 | 36 |
| Crude oil imports | 4,520 | 5,023 | 5,547 | 5,612 |
| Refined products imports*** | 2,140 | 1,771 | 1,874 | 2,130 |
| Total new supply | <u>16,503</u> | <u>16,567</u> | <u>17,158</u> | <u>17,317</u> |
| Processing gain | 485 | 495 | 500 | 488 |
| Stock change—all oils | -797 | +363 | +842 | -395 |
| Total net supply | <u>17,785</u> | <u>16,699</u> | <u>16,816</u> | <u>18,200</u> |
| Unaccounted for crude oil† | +204 | +8 | +63 | 0 |
| Demand | | | | |
| Crude oil and refined products exports | 192 | 204 | 200 | 195 |
| Crude oil losses | 14 | 14 | 14 | 13 |
| Domestic demand for refined products†† | <u>17,783</u> | <u>16,489</u> | <u>16,665</u> | <u>17,992</u> |
| Total demand | <u>17,989</u> | <u>16,707</u> | <u>16,879</u> | <u>18,200</u> |

*Partially estimated.

**See Explanatory Note 6 for discussion of basic assumptions for forecast.

***Includes plant condensate and unfinished oils.

†Balancing item resulting from statistical inconsistencies.

††Includes international bunkers.

Note: Data for all four Quarters have been partially revised.

Sources: 1st and 2nd Quarters—BOM; 3rd Quarter—BOM, API, FEA estimates; 4th Quarter—FEA forecast.

Natural Gas

Marketed production of natural gas in October was estimated at 1,650 billion cubic feet, up 0.2 percent from production during the same month in 1975. Estimated production for the first 10 months of the year, however, was 1.3 percent below production during the corresponding period of 1975.

Natural gas imports in October were estimated at 82 billion cubic feet, 2.5 percent above the October 1975 level. Estimated imports during the first 10 months of 1976 were 2.2 percent above the import level for the same period of 1975.

Estimated domestic consumption of natural gas was down 0.9 percent in October and down 0.6 percent during the first 10 months of the year compared with consumption for the corresponding periods of 1975.

Net injections of natural gas into underground storage reservoirs totaled 242 billion cubic feet in September 1976 compared with 194 billion cubic feet for the same month of 1975. The amount of working gas in underground storage reservoirs at the end of September 1976 was 9.3 percent above the volume in storage at the end of September 1975.

The Federal Power Commission has established new nationwide base ceiling rates of \$1.42 per thousand cubic feet (Mcf) and 93 cents per Mcf for two classes of "new" natural gas sold by producers in interstate commerce. The \$1.42-ceiling applies to gas from wells commenced after January 1, 1975. This ceiling escalated to \$1.43 on October 1, 1976, and will escalate 1 cent per quarter thereafter. The 93-cent ceiling applies to gas from wells commenced during 1973 and 1974. This ceiling will rise to 94 cents on January 1, 1977, and will escalate 1 cent per Mcf each year thereafter. The base ceiling rates are to be adjusted for Btu content of the gas, State and Federal severance and production taxes, and gathering allowances.

A 52-cent per Mcf base rate, with 1 cent annual escalations and subject to the same adjustments listed above, was established for

gas from wells recompleted* after January 1, 1973, in wells commenced prior to 1973. Small producers selling less than 10 billion cubic feet annually in the interstate market are permitted to charge 130 percent of the adjusted 93-cent and 52-cent ceiling prices.

*See definitions.

Natural Gas

| | | Domestic Consumption* | Marketed Production* | Domestic Producer Sales to Major Interstate Pipelines | Imports |
|--------------------|-----------------------------|--------------------------|-------------------------|--|------------|
| Billion cubic feet | | | | | |
| 1974 | January | 2,230 | 1,928 | 1,033 | 86 |
| | February | 2,054 | 1,759 | 941 | 79 |
| | March | 2,003 | 1,886 | 1,027 | 85 |
| | April | 1,691 | 1,793 | 987 | 83 |
| | May | 1,608 | 1,846 | 981 | 80 |
| | June | 1,439 | 1,740 | 928 | 74 |
| | July | 1,514 | 1,818 | 947 | 74 |
| | August | 1,510 | 1,790 | 932 | 76 |
| | September | 1,537 | 1,755 | 870 | 70 |
| | October | 1,706 | 1,767 | 936 | 83 |
| | November | 1,827 | 1,729 | 921 | 82 |
| | December | 2,104 | 1,790 | 959 | 87 |
| | TOTAL | 21,223 | 21,601 | 11,462 | 959 |
| 1975 | January | 2,248 | 1,778 | 950 | 81 |
| | February | 1,939 | 1,640 | 867 | 75 |
| | March | 1,903 | 1,740 | 948 | 83 |
| | April | 1,575 | 1,677 | 906 | 82 |
| | May | 1,331 | 1,689 | 898 | 80 |
| | June | 1,257 | 1,634 | 859 | 76 |
| | July | 1,313 | 1,677 | 873 | 80 |
| | August | 1,369 | 1,677 | 882 | 75 |
| | September | 1,370 | 1,603 | 836 | 74 |
| | October | 1,544 | 1,646 | 877 | 80 |
| | November | 1,640 | 1,618 | 853 | 81 |
| | December | 2,049 | 1,730 | 903 | 86 |
| | TOTAL | 19,538 | 20,109 | 10,652 | 953 |
| 1976 | January | 2,297 | 1,745 | 894 | 83 |
| | February | 1,823 | 1,641 | 850 | 79 |
| | March | 1,822 | 1,709 | 894 | 85 |
| | April | 1,504 | 1,633 | 849 | 85 |
| | May | 1,434 | 1,668 | 860 | 83 |
| | June | 1,330 | 1,637 | 815 | R77 |
| | July | 1,330 | R1,671 | 822 | ***81 |
| | August | 1,350 | R**1,631 | NA | ***76 |
| | September | 1,370 | ***1,610 | NA | ***75 |
| | October | 1,530 | ***1,650 | NA | ***82 |
| | TOTAL (10 months) | 15,790 | 16,595 | 5,984 (7 months) | 806 |

*See Explanatory Note 7.

**Preliminary data.

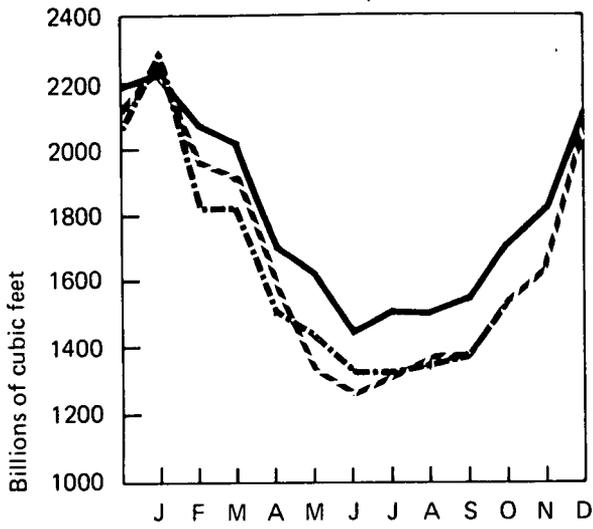
***Projected data.

R=Revised data. NA=Not available.

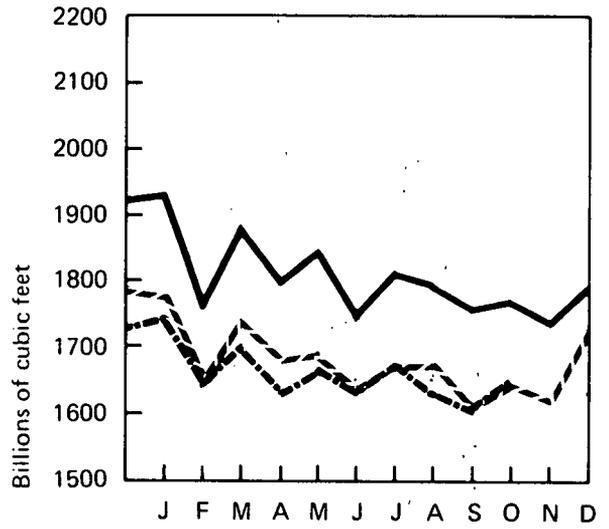
Note: All monthly Domestic Consumption data are estimated.

Sources: Consumption, Marketed Production, and Imports—Bureau of Mines; Domestic Producer Sales—Federal Power Commission.

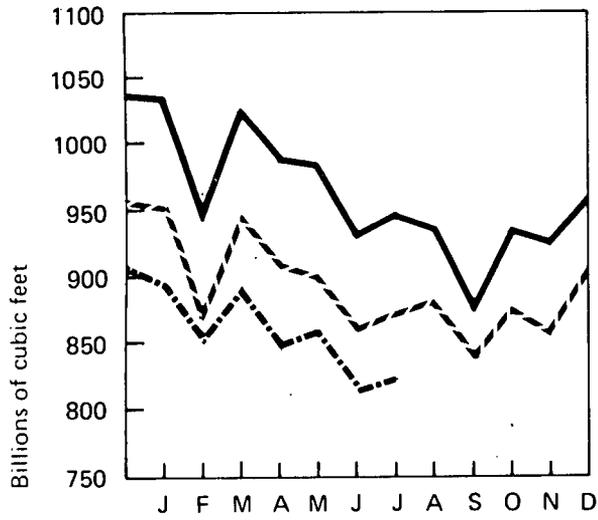
Domestic Consumption



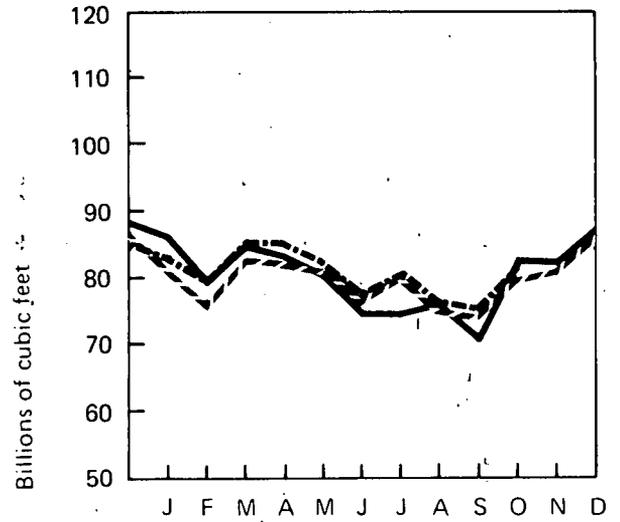
Marketed Production



Domestic Producer Sales to Major Interstate Pipelines



Imports



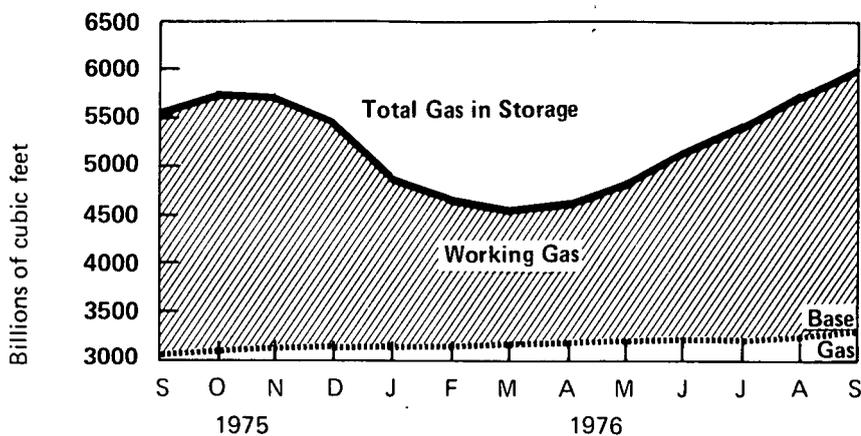
— 1974
- - 1975
- · - 1976

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 | | | | | | | |
| 1974 | October ** | 5,445 | 3,042 | 2,403 | *** | *** | *** |
| 1975 | September | 5,558 | 3,084 | 2,474 | 232 | 38 | 194 |
| | October | 5,770 | 3,128 | 2,642 | 185 | 51 | 134 |
| | November | 5,760 | 3,172 | 2,588 | 99 | 150 | -51 |
| | December | 5,423 | 3,173 | 2,250 | 41 | 394 | -353 |
| 1976 | January | 4,868 | 3,194 | 1,674 | 19 | 630 | -611 |
| | February | 4,660 | 3,197 | 1,463 | 73 | 292 | -219 |
| | March | 4,543 | 3,195 | 1,348 | 85 | 217 | -132 |
| | April | 4,650 | 3,208 | 1,443 | 181 | 68 | 113 |
| | May | 4,878 | 3,214 | 1,664 | 248 | 23 | 225 |
| | June | 5,163 | 3,220 | 1,943 | 308 | 19 | 289 |
| | July | 5,476 | 3,244 | 2,232 | 318 | 19 | 299 |
| | August | 5,759 | 3,272 | 2,487 | 296 | 15 | 281 |
| | September | 6,021 | 3,317 | 2,704 | 262 | 20 | 242 |

Gas in Storage



*See Explanatory Note 8.

**Data reported as of November 1, 1974.

***Between November 1, 1974, and August 31, 1975, a total of 1,658 billion cubic feet of gas was injected into storage and 1,686 billion cubic feet was withdrawn, for net storage injections of -28 billion cubic feet.

R=Revised data.

Sources: Federal Energy Administration and Federal Power Commission.

Coal

Production of bituminous coal and lignite for the period January through October 1976 amounted to 550.9 million tons, a gain of only 16.4 million tons, or 3.1 percent, from the production level for the same period in 1975. This increase is modest primarily because of the continuing slow rate of economic recovery, the month-long wildcat coal miners' strike, and the softness in the coal export market.

Coal exports were 43.5 million tons during the first 9 months of 1976, down 11.1 percent from the amount exported during the corresponding period in 1975. Exports to Japan, the largest U.S. coal importer, were 28.4 percent lower during the period. The primary reasons for this large decline are (1) a lessening in the relative importance of the United States as a supplier of coal to Japan, and (2) reduced industrial activity in that country.

Domestic consumption of bituminous coal and lignite during the first 8 months of 1976 was 389.8 million tons, an increase of 5.3 percent from the amount consumed during the first 8 months of 1975.

End-of-June coal stocks, at 140.2 million tons, were the largest monthly inventories held so far this year. Stockpiles at electric utilities accounted for 87.1 percent of the June total.

Bituminous and Lignite

| | | Domestic Consumption* | Production* | Exports | Stocks |
|-------------------------|-----------|--------------------------|------------------------------|-------------------------------|-----------------------------|
| Thousands of short tons | | | | | |
| 1974 | January | 50,046 | 53,712 | 2,813 | 97,836 |
| | February | 44,929 | 50,053 | 4,627 | 95,812 |
| | March | 45,858 | 51,278 | 3,179 | 101,568 |
| | April | 43,595 | 54,402 | 4,944 | 107,167 |
| | May | 44,951 | 57,662 | 6,032 | 112,882 |
| | June | 44,315 | 48,065 | 6,369 | 111,935 |
| | July | 48,605 | 49,392 | 5,307 | 106,160 |
| | August | 48,579 | 51,808 | 5,088 | 105,478 |
| | September | 43,844 | 52,686 | 4,893 | 109,173 |
| | October | 45,868 | 60,495 | 7,342 | 118,670 |
| | November | 44,598 | 33,702 | 6,744 | 109,192 |
| | December | 47,521 | 40,151 | 2,587 | 95,528 |
| | | TOTAL** | 552,709 | 603,406 | 59,926 |
| 1975 | January | 49,841 | 54,885 | 4,254 | 95,512 |
| | February | 45,699 | 51,135 | 4,470 | 97,028 |
| | March | 47,202 | 51,910 | 5,653 | 97,832 |
| | April | 43,537 | 53,135 | 6,159 | 102,663 |
| | May | 42,658 | 55,370 | 7,011 | 109,666 |
| | June | 44,698 | 55,730 | 6,269 | 114,857 |
| | July | 47,454 | 45,560 | 4,691 | 109,133 |
| | August | 49,190 | 51,160 | 5,859 | 108,522 |
| | September | 44,032 | 55,560 | 4,529 | 111,922 |
| | October | 44,929 | R60,030 | 4,647 | 120,344 |
| | November | 45,946 | R52,410 | 7,593 | 125,808 |
| | December | 51,036 | R53,115 | 4,534 | 127,115 |
| | | TOTAL** | 556,222 | 640,000 | 65,669 |
| 1976 | January | R52,919 | 51,495 | 3,697 | R119,149 |
| | February | R46,800 | 52,630 | 3,050 | R118,970 |
| | March | R48,607 | 60,050 | 3,979 | R123,441 |
| | April | R45,554 | 57,850 | 5,780 | R128,408 |
| | May | R45,675 | 56,605 | 5,667 | R134,621 |
| | June | R47,708 | 58,430 | 6,569 | R140,237 |
| | July | R***51,092 | 43,250 | 4,879 | R***130,744 |
| | August | ***51,398 | 53,440 | 4,223 | ***124,734 |
| | September | NA | 59,675 | 5,613 | NA |
| | October | NA | †57,445 | NA | NA |
| | | TOTAL | 389,753 (8 months) | 550,870 (10 months) | 43,458 (9 months) |

*See Explanatory Note 9.

**Totals may not add due to rounding.

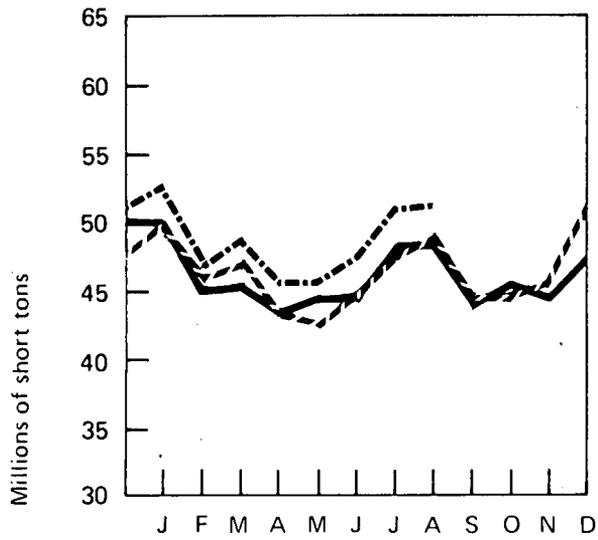
***FEA estimate based on data provided by Bureau of Mines and Federal Power Commission.

†Preliminary data.

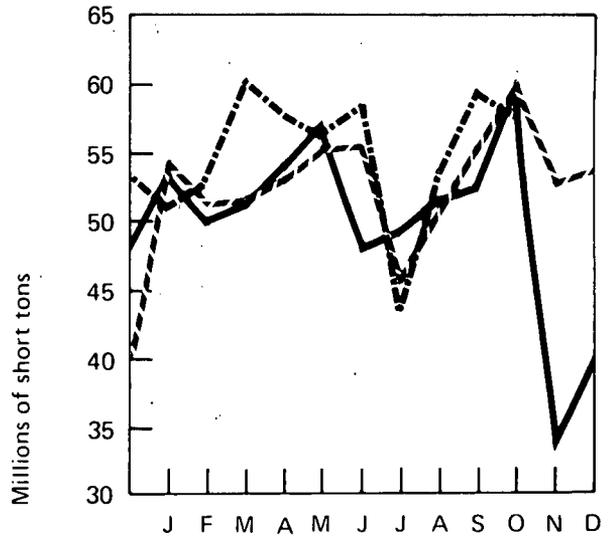
R=Revised data. NA=Not available.

Source: Bureau of Mines.

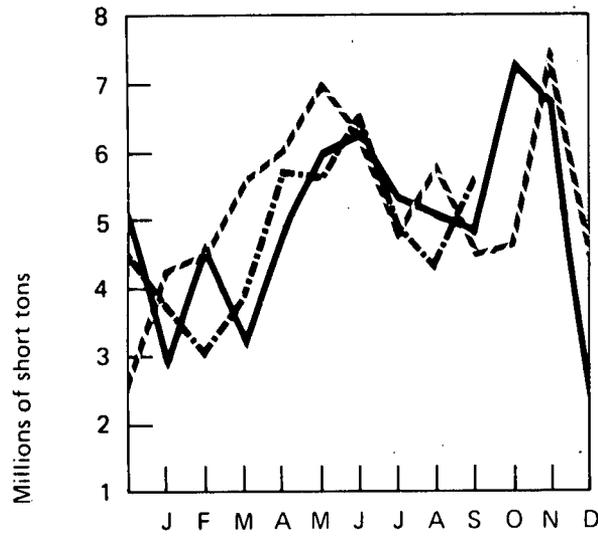
Domestic Consumption



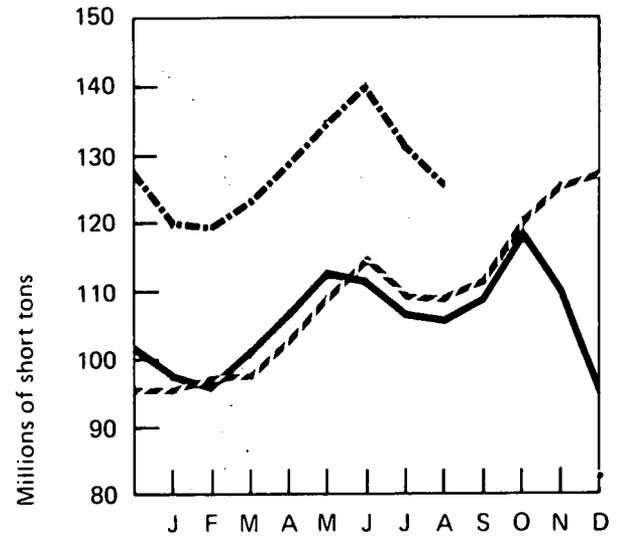
Production



Exports



Stocks

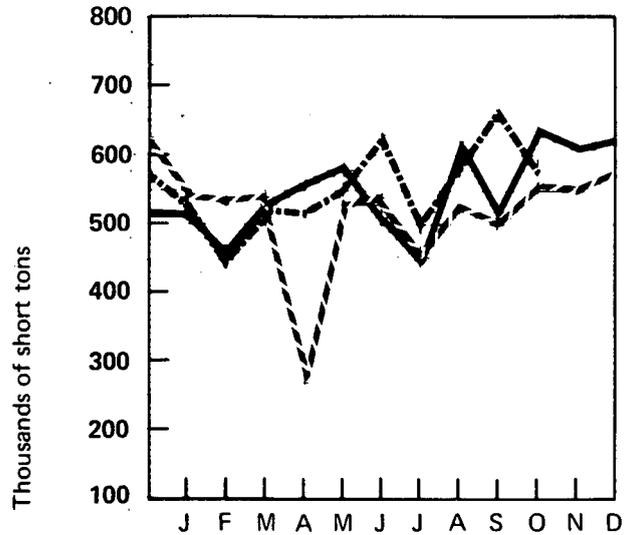


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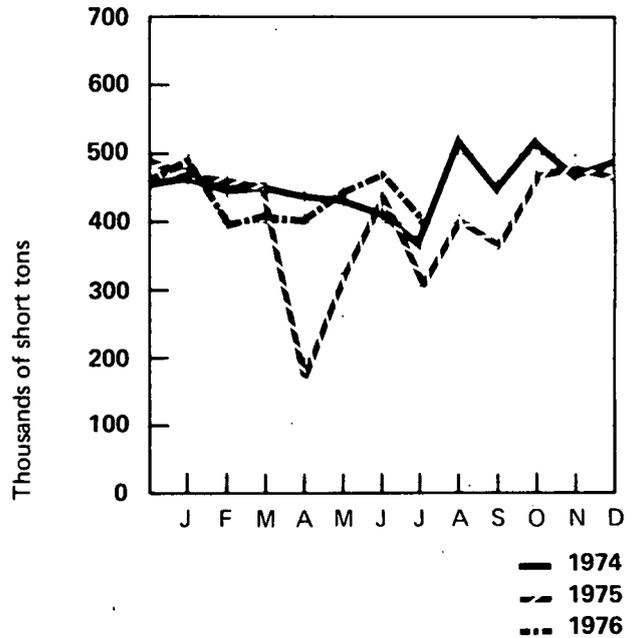
Anthracite

| | | Production | Apparent Domestic Consumption |
|--------------|--------------|-------------------------|-------------------------------|
| | | Thousands of short tons | |
| 1974 | January | 516 | 466 |
| | February | 458 | 441 |
| | March | 531 | 457 |
| | April | 563 | 437 |
| | May | 589 | 435 |
| | June | 505 | 412 |
| | July | 443 | 360 |
| | August | 620 | 526 |
| | September | 516 | 441 |
| | October | 641 | 522 |
| | November | 610 | 463 |
| | December | 625 | 488 |
| | TOTAL | | 6,617 |
| 1975 | January | 540 | 475 |
| | February | 535 | 466 |
| | March | 544 | 457 |
| | April | 270 | 164 |
| | May | 535 | 326 |
| | June | 544 | 450 |
| | July | 455 | 305 |
| | August | 535 | 414 |
| | September | 500 | 365 |
| | October | R560 | R478 |
| | November | 550 | 479 |
| | December | 575 | 461 |
| | TOTAL | | R6,143 |
| 1976 | January | 530 | 493 |
| | February | 440 | 390 |
| | March | 525 | 416 |
| | April | 520 | 403 |
| | May | 555 | 452 |
| | June | 630 | 478 |
| | July | 490 | 400 |
| | August | 590 | NA |
| | September | 665 | NA |
| | October | 575 | NA |
| TOTAL | | 5,520 | 3,032 |
| | | (10 months) | (7 months) |

Production



Apparent Domestic Consumption



NA=Not available.

Sources: Production data are from Bureau of Mines; consumption data are FEA estimates based on figures provided by Bureau of Mines.

Electric Utilities

Production of electricity by utilities for October is estimated at 166.8 billion kilowatt hours, 7.7 percent above the level for October 1975. Production during the first 10 months of 1976 is estimated at 1.686 trillion kilowatt hours, a 5.7-percent increase over the amount produced during the same 10-month period in 1975.

Electric utilities consumed 9.3 percent more coal and 3.8 percent more oil during the first 8 months of 1976 than during the corresponding period in 1975. Utility natural gas consumption, however, was 1.0 percent lower.

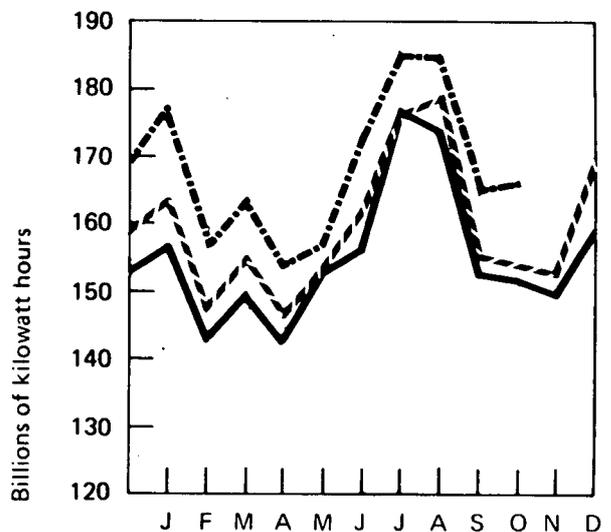
Sales of electricity to industrial customers during the period January-August 1976 totaled 483.8 billion kilowatt hours, up 10.4 percent from the level for the corresponding months of 1975. Sales to commercial customers during the same period were up 5.0 percent, while sales to residential customers dropped 0.2 percent.

The primary cause of the increase in industrial sales appears to be the 8.6-percent growth in industrial output during the period. Another contributing factor was the relatively constant real price of electricity to industrial users. Commercial sales grew at their historical rate. Factors affecting the growth positively were the 1.5-percent increase in the number of commercial customers as well as the increase in activity in the services sector of the economy (4.4 percent based upon employment data). Factors affecting the growth negatively were a 3.3-percent increase in the real price of electricity to commercial customers, and more moderate weather during the period reflected by a decline in the number of degree-days. The slight decrease in residential sales is due in part to a 2.0-percent real increase in residential electricity rates and the decline in degree-days noted above.

Electric Utilities

| | | Total Net Production | Percentage Produced from Each Source | | | | | |
|-------------|-----------------------------|----------------------------|--------------------------------------|-------------|-------------|------------|----------------|------------|
| | | Millions of kilowatt hours | Coal | Oil | Gas | Nuclear | Hydro-electric | Other* |
| 1974 | January | 157,235 | 46.9 | 16.6 | 13.2 | 4.8 | 18.4 | 0.1 |
| | February | 142,469 | 46.5 | 15.8 | 13.3 | 5.7 | 18.6 | 0.1 |
| | March | 150,036 | 45.2 | 14.7 | 15.7 | 5.9 | 18.4 | 0.1 |
| | April | 142,019 | 44.3 | 14.0 | 16.9 | 5.0 | 19.6 | 0.2 |
| | May | 153,501 | 44.2 | 14.7 | 18.5 | 4.3 | 18.2 | 0.1 |
| | June | 156,140 | 43.3 | 14.7 | 20.3 | 4.6 | 17.0 | 0.1 |
| | July | 177,925 | 43.0 | 15.5 | 20.9 | 5.7 | 14.8 | 0.1 |
| | August | 173,819 | 43.1 | 15.6 | 20.3 | 7.1 | 13.8 | 0.1 |
| | September | 152,170 | 42.9 | 16.4 | 19.3 | 7.2 | 14.0 | 0.2 |
| | October | 151,885 | 44.2 | 16.8 | 18.6 | 7.1 | 13.2 | 0.1 |
| | November | 149,749 | 44.9 | 18.4 | 15.2 | 7.3 | 14.1 | 0.1 |
| | December | 159,616 | 45.5 | 19.2 | 12.4 | 8.3 | 14.4 | 0.2 |
| | TOTAL | 1,866,564 | AVG. 44.5 | 16.0 | 17.1 | 6.1 | 16.1 | 0.2 |
| 1975 | January | 164,228 | 45.6 | 18.6 | 12.0 | 8.5 | 15.2 | 0.1 |
| | February | 147,002 | 45.8 | 16.9 | 12.3 | 8.6 | 16.3 | 0.1 |
| | March | 155,430 | 44.5 | 14.9 | 12.9 | 9.5 | 18.0 | 0.2 |
| | April | 146,194 | 44.1 | 14.5 | 13.9 | 9.1 | 18.2 | 0.2 |
| | May | 153,183 | 42.3 | 13.7 | 16.8 | 8.9 | 18.1 | 0.2 |
| | June | 162,707 | 43.3 | 14.1 | 17.7 | 8.0 | 16.7 | 0.2 |
| | July | 176,791 | 43.2 | 14.2 | 19.3 | 8.7 | 14.4 | 0.2 |
| | August | 179,459 | 44.0 | 15.5 | 19.0 | 8.7 | 12.6 | 0.2 |
| | September | 155,150 | 44.2 | 13.8 | 19.4 | 9.2 | 13.2 | 0.2 |
| | October | 154,817 | 44.6 | 14.2 | 17.0 | 9.4 | 14.6 | 0.2 |
| | November | 152,751 | 46.1 | 14.2 | 14.3 | 9.2 | 16.0 | 0.2 |
| | December | 169,313 | 46.5 | 15.9 | 12.2 | 9.8 | 15.4 | 0.2 |
| | TOTAL | 1,917,025 | AVG. 44.5 | 15.0 | 15.6 | 9.0 | 15.7 | 0.2 |
| 1976 | January | 178,140 | 47.0 | 18.1 | 11.1 | 8.9 | 14.7 | 0.2 |
| | February | 156,703 | 46.9 | 15.8 | 12.2 | 9.2 | 15.7 | 0.2 |
| | March | 164,159 | 46.6 | 15.5 | 13.0 | 8.5 | 16.2 | 0.2 |
| | April | 153,174 | 47.4 | 15.2 | 14.2 | 7.2 | 15.8 | 0.2 |
| | May | 157,216 | 46.1 | 13.8 | 16.1 | 7.5 | 16.3 | 0.2 |
| | June | 173,154 | 44.4 | 14.5 | 17.1 | 9.0 | 14.8 | 0.2 |
| | July | 185,928 | 44.7 | 14.5 | 17.1 | 9.5 | 14.0 | 0.2 |
| | August | 185,812 | 45.0 | 15.0 | 16.9 | 10.1 | 12.8 | 0.2 |
| | September | 164,999 | NA | NA | NA | 10.5 | NA | NA |
| | October | 166,780 | NA | NA | NA | 10.9 | NA | NA |
| | TOTAL (10 months) | 1,686,065 | | | | | | |

Total Net Production



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

NA=Not available.

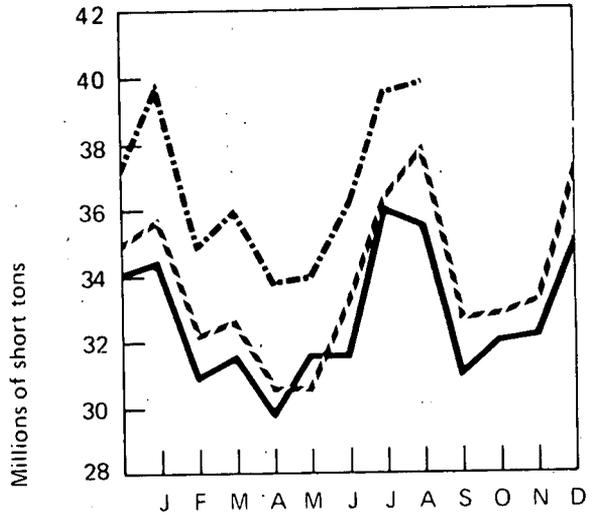
Sources: Federal Power Commission; data for latest 2 months are from Edison Electric Institute and U.S. Nuclear Regulatory Commission.

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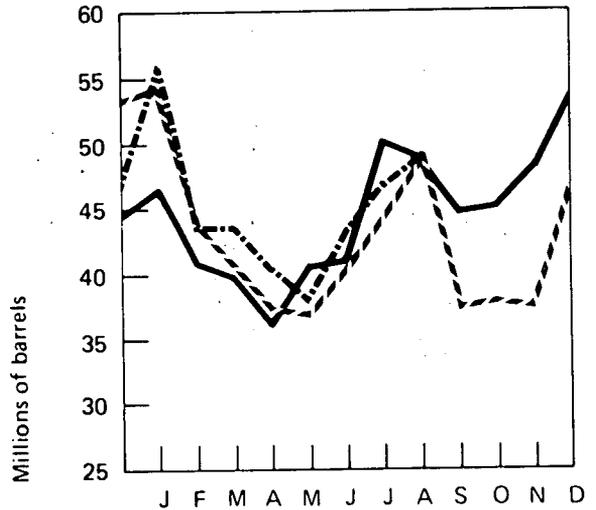
Fuel Consumption

| | | Coal | Oil | Gas |
|--------------|------------|-------------------------|----------------------|------------------------|
| | | Thousands of short tons | Thousands of barrels | Millions of cubic feet |
| 1974 | January | 34,599 | 46,727 | 219,318 |
| | February | 30,857 | 40,657 | 201,611 |
| | March | 31,638 | 39,633 | 253,833 |
| | April | 29,680 | 35,953 | 359,308 |
| | May | 31,701 | 40,816 | 306,985 |
| | June | 31,720 | 41,233 | 346,617 |
| | July | 36,113 | 50,160 | 403,455 |
| | August | 35,552 | 48,981 | 380,651 |
| | September | 30,976 | 44,549 | 313,015 |
| | October | 32,124 | 45,260 | 298,327 |
| | November | 32,210 | 48,558 | 238,888 |
| | December | 35,177 | 53,644 | 207,070 |
| TOTAL | | 392,347 | 536,171 | 3,429,079 |
| 1975 | January | 35,835 | 54,174 | 204,591 |
| | February | 32,089 | 43,663 | 188,446 |
| | March | 32,785 | 40,536 | 210,202 |
| | April | 30,543 | 37,125 | 213,740 |
| | May | 30,571 | 37,067 | 273,920 |
| | June | 33,450 | 41,020 | 306,798 |
| | July | 36,560 | 44,440 | 360,534 |
| | August | 37,959 | 49,306 | 359,273 |
| | September | 32,605 | 37,112 | 315,122 |
| | October | 32,845 | 38,109 | 274,224 |
| | November | 33,326 | 37,619 | 227,101 |
| | December | 37,384 | 46,928 | 212,923 |
| TOTAL | | 405,952 | 507,099 | 3,146,874 |
| 1976 | January | 39,978 | 56,186 | 204,944 |
| | February | 34,958 | 43,230 | 198,117 |
| | March | 36,079 | 43,946 | 221,152 |
| | April | 33,799 | 40,262 | 226,433 |
| | May | 33,943 | 37,930 | 264,941 |
| | June | 36,374 | 43,532 | 310,186 |
| | July | 39,672 | 47,070 | 335,021 |
| | August | 39,948 | 48,509 | 336,612 |
| TOTAL | | 294,751 | 360,665 | 2,097,406 |
| | (8 months) | | | |

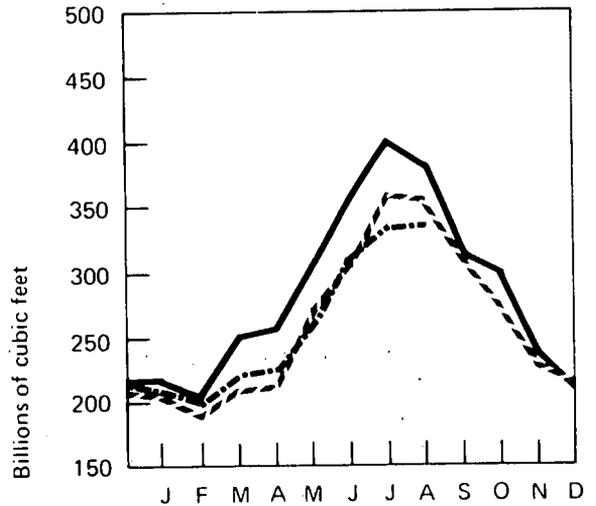
Coal Consumption



Oil Consumption



Gas Consumption



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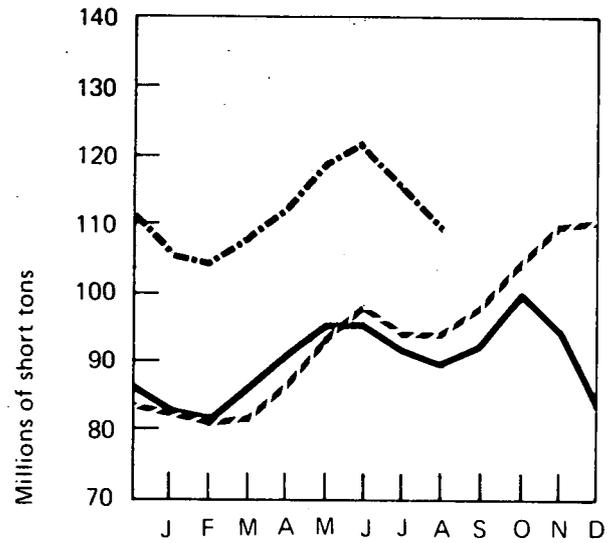
Source: Federal Power Commission.

Electric Utilities (Continued)

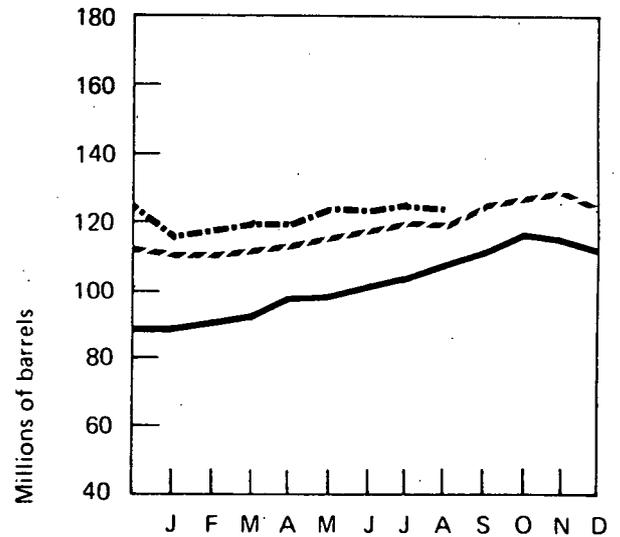
Stocks at End of Month

| | | Coal | Oil |
|------|-----------|-------------------------|----------------------|
| | | Thousands of short tons | Thousands of barrels |
| 1974 | January | 82,540 | 89,468 |
| | February | 81,720 | 91,652 |
| | March | 86,166 | 93,879 |
| | April | 91,018 | 98,051 |
| | May | 95,601 | 99,591 |
| | June | 95,895 | 102,395 |
| | July | 91,522 | 105,633 |
| | August | 89,474 | 109,674 |
| | September | 92,973 | 112,502 |
| | October | 100,506 | 118,027 |
| | November | 94,165 | 117,382 |
| | December | 83,527 | 112,894 |
| 1975 | January | 82,073 | 111,273 |
| | February | 80,957 | 111,478 |
| | March | 81,872 | 113,621 |
| | April | 86,811 | 114,276 |
| | May | 93,845 | 117,205 |
| | June | 98,007 | 118,915 |
| | July | 94,261 | 121,148 |
| | August | 94,199 | 120,595 |
| | September | 98,078 | 126,213 |
| | October | 105,397 | 128,756 |
| | November | 110,295 | 130,203 |
| | December | 110,734 | 125,022 |
| 1976 | January | 105,508 | 117,732 |
| | February | 104,862 | 118,646 |
| | March | 108,431 | 120,069 |
| | April | 112,841 | 120,158 |
| | May | 119,518 | 125,668 |
| | June | 122,875 | 125,482 |
| | July | 115,160 | 126,189 |
| | August | 109,133 | 125,520 |

Coal Stocks



Oil Stocks



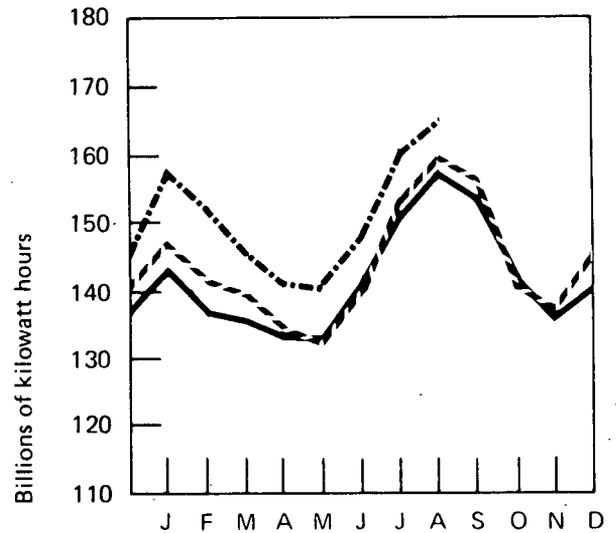
— 1974
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Source: Federal Power Commission.

Sales

| | | Residential | Commercial | Industrial | Other* | Total |
|----------------------------|----------------------------|----------------|----------------|----------------|---------------|------------------|
| Millions of kilowatt hours | | | | | | |
| 1974 | January | 52,878 | 30,647 | 55,457 | 5,004 | 143,986 |
| | February | 47,779 | 29,563 | 54,799 | 4,596 | 136,737 |
| | March | 46,096 | 29,345 | 55,814 | 4,697 | 135,952 |
| | April | 43,193 | 29,089 | 56,115 | 4,610 | 133,007 |
| | May | 41,105 | 30,061 | 57,226 | 4,685 | 133,077 |
| | June | 46,597 | 32,989 | 57,702 | 4,643 | 141,931 |
| | July | 53,541 | 35,498 | 57,503 | 4,969 | 151,511 |
| | August | 56,699 | 36,702 | 59,641 | 5,070 | 158,112 |
| | September | 52,948 | 35,801 | 59,893 | 4,977 | 153,619 |
| | October | 44,164 | 32,275 | 60,116 | 4,800 | 141,355 |
| | November | 42,671 | 30,986 | 57,157 | 4,952 | 135,784 |
| | December | 50,512 | 31,868 | 53,433 | 5,039 | 140,852 |
| | TOTAL | 578,183 | 384,824 | 684,874 | 58,042 | 1,705,923 |
| 1975 | January | 54,003 | 32,405 | 55,505 | 5,954 | 147,867 |
| | February | 50,219 | 31,459 | 54,328 | 5,544 | 141,550 |
| | March | 47,968 | 31,194 | 54,437 | 5,639 | 139,238 |
| | April | 44,762 | 30,473 | 53,910 | 5,269 | 134,414 |
| | May | 41,077 | 30,926 | 54,767 | 5,404 | 132,174 |
| | June | 45,766 | 35,210 | 55,369 | 5,384 | 141,729 |
| | July | 56,829 | 37,891 | 53,973 | 5,052 | 153,745 |
| | August | 59,979 | 38,768 | 56,067 | 5,223 | 160,037 |
| | September | 56,983 | 37,550 | 56,797 | 5,320 | 156,650 |
| | October | 45,142 | 33,329 | 56,486 | 5,194 | 140,151 |
| | November | 44,019 | 32,288 | 56,174 | 5,235 | 137,716 |
| | December | 51,900 | 33,183 | 55,532 | 5,357 | 145,972 |
| | TOTAL | 598,647 | 404,676 | 663,345 | 64,575 | 1,731,243 |
| 1976 | January | 60,091 | 34,833 | 57,448 | 6,380 | 158,752 |
| | February | 54,264 | 33,583 | 58,228 | 5,874 | 151,949 |
| | March | 47,060 | 32,273 | 60,516 | 5,990 | 145,839 |
| | April | 43,551 | 31,598 | 60,106 | 5,407 | 140,662 |
| | May | 41,036 | 32,347 | 61,271 | 5,478 | 140,132 |
| | June | 44,157 | 35,707 | 62,419 | 5,344 | 147,627 |
| | July | 53,312 | 40,415 | 61,417 | 5,871 | 161,015 |
| | August | 56,311 | 40,898 | 62,444 | 5,999 | 165,652 |
| | TOTAL (8 months) | 399,782 | 281,654 | 483,849 | 46,343 | 1,211,628 |

Total Sales



*Includes street lighting and trolley cars.

Source: Federal Power Commission; data for latest 2 months are from Edison Electric Institute.

— 1974
 - - - 1975
 ... 1976

Nuclear Power

The 54 domestic reactors in commercial operation, with a total maximum dependable capacity of 36,010 megawatts, performed at 66 percent of capacity during October. Since June, commercial reactors have been producing power at an average of 65 percent of rated capacity, the highest continuous performance in U.S. history.

Total domestic nuclear generating capacity amounts to 42,887 megawatts. In addition to commercial reactors, this includes seven reactors (5,805 megawatts) in power ascension* and Hanford-N (800 megawatts), the government-owned reactor in Washington State.

The Houston Lighting and Power Company disclosed that one unit of its planned Allens Creek plant will be cancelled due to financial problems and uncertainty in future demand for electricity. No construction permit has been issued for the remaining unit, which is a 1,213-megawatt boiling water reactor, and no definite completion date has yet been projected.

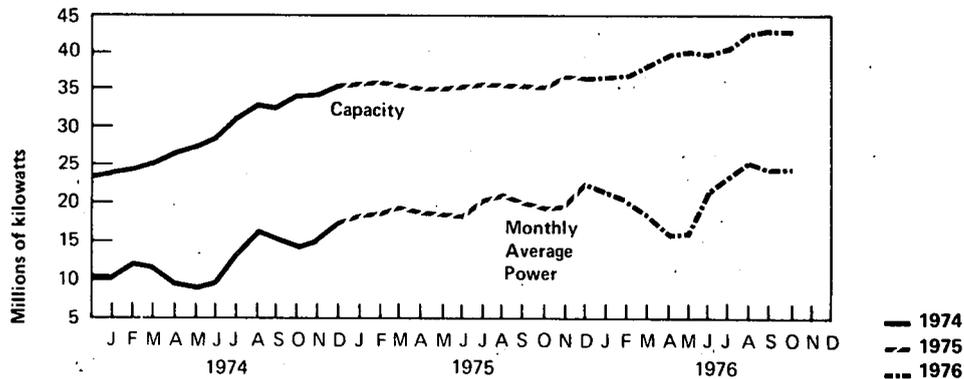
During the last 2 years, 24 nuclear reactors totaling 27,668 megawatts capacity have been cancelled, and 145 reactors totaling 156,655 megawatts capacity have been delayed 6 months to 8 years. Of the 89 reactors currently under construction, 29 are greater than 25 percent completed, while the other 60 are less than 25 percent completed or have just begun construction.

*See definitions.

U.S. Nuclear Powerplant Operations*

| | | Maximum Dependable Capacity | Average Power | Percent of Total Domestic Electricity Generation |
|----------------------------|-------------------------------|-----------------------------|---------------|--|
| Thousands of net kilowatts | | | | |
| 1974 | January | 24,006 | 10,222 | 4.8 |
| | February | 24,776 | 12,106 | 5.7 |
| | March | 25,305 | 11,819 | 5.9 |
| | April | 26,862 | 9,914 | 5.0 |
| | May | 27,670 | 8,832 | 4.3 |
| | June | 28,748 | 9,844 | 4.6 |
| | July | 31,374 | 13,672 | 5.7 |
| | August | 33,045 | 16,547 | 7.1 |
| | September | 32,609 | 15,258 | 7.2 |
| | October | 34,464 | 14,504 | 7.1 |
| | November | 34,480 | 15,193 | 7.3 |
| | December | 35,317 | 17,733 | 8.3 |
| | AVERAGE | 29,921 | 12,982 | 6.1 |
| 1975 | January | 35,691 | 18,641 | 8.5 |
| | February | 35,899 | 18,869 | 8.6 |
| | March | 35,686 | 19,926 | 9.5 |
| | April | 35,017 | 18,444 | 9.1 |
| | May | 35,017 | 18,442 | 8.9 |
| | June | 35,322 | 18,065 | 8.0 |
| | July | 35,596 | 20,661 | 8.7 |
| | August | 35,589 | 21,047 | 8.7 |
| | September | 35,540 | 19,890 | 9.2 |
| | October | 35,540 | 19,464 | 9.4 |
| | November | 36,752 | 19,586 | 9.2 |
| | December | 36,424 | 22,321 | 9.8 |
| | AVERAGE | 35,671 | 19,626 | 9.0 |
| 1976 | January | 36,750 | 21,315 | 8.9 |
| | February | 36,879 | 20,605 | 9.2 |
| | March | 38,072 | 18,816 | 8.5 |
| | April | 39,763 | 15,238 | 7.2 |
| | May | 39,902 | 15,899 | 7.5 |
| | June | 39,781 | 21,799 | 9.0 |
| | July | 40,168 | 23,662 | 9.5 |
| | August | 42,067 | R25,136 | R10.1 |
| | September | 42,896 | **24,138 | **10.5 |
| | October | **42,887 | **24,465 | **10.9 |
| | AVERAGE (10 months) | 40,116 | 21,117 | 9.2 |

U.S. Nuclear Powerplants



*Includes all units licensed to operate, whether in commercial operation or power ascension status.

**Preliminary data.

R=Revised data.

Sources: Average Power for latest 2 months and Capacity are from U.S. Nuclear Regulatory Commission; Percent of Total Domestic Electricity Generation for latest 2 months is based on data from Edison Electric Institute; remaining data are from Federal Power Commission.

Status of Nuclear Powerplants — October 31, 1976

| Status | Number of Plants | | | | Total | Design Capacity |
|-----------------------------|------------------------|-------------------------------|----------------------------|-----------|------------|--------------------------|
| | Boiling Water Reactors | High Temperature Gas Reactors | Pressurized Water Reactors | Other* | | Net Electrical Megawatts |
| Licensed to operate | 24 | 1 | 37 | 0 | 62 | 45,000 |
| Construction permit granted | 20 | 0 | 52 | 0 | 72 | 76,000 |
| Construction permit pending | 21 | 0 | 41 | 5 | 67 | 74,000 |
| Orders placed for plant | 3 | 0 | 13 | 0 | 16 | 18,000 |
| Publicly announced | — | — | — | 19 | 19 | 23,000 |
| TOTAL | 68 | 1 | 143 | 24 | 236 | 236,000 |

*Includes 1 Liquid Metal Fast Breeder Reactor and 23 announced intentions to order for which a reactor type has not been chosen.

Source: U.S. Nuclear Regulatory Commission.

U.S. Uranium Enrichment — October 1976

| | Domestic Customers | Foreign Customers | Total |
|---|--------------------|-------------------|-----------|
| Separative Work Performed (in metric tons of separative work units) | 338.505 | 683.634 | 1,022.139 |
| Cost (in millions of dollars) | 22.278 | 42.730 | 65.008 |
| Product Quantity (in metric tons of uranium) | 107.296 | 168.170 | 275.466 |
| Feed Requirement (in metric tons of uranium) | 578.159 | 866.975 | 1,445.134 |

Source: U.S. Energy Research and Development Administration.

Nuclear Power Generation by Major Non-Communist Countries — October 1976*

| Country | Number of Reactors | Capacity | Generation of Electricity | | | |
|-----------------------------|--------------------|---|----------------------------------|----------------------------|-----------|-----------|
| | | | Generation October | Percent of Design Capacity | | Year |
| | | Thousands of gross electrical kilowatts | Millions of gross kilowatt hours | October | 1974 | 1975 |
| Canada | 6 | 3,130 | 1,498 | 64 | 74 | 64 |
| Federal Republic of Germany | 10 | 6,410 | 2,607 | 55 | 57 | 72 |
| France | 10 | 3,070 | 961 | 42 | 57 | 68 |
| Great Britain | 30 | 6,900 | NA | NA | 61 | 57 |
| India | 3 | 620 | 251 | 54 | 55 | 46 |
| Italy | 3 | 630 | 384 | 82 | 61 | 69 |
| Japan | 12 | 6,600 | 2,761 | 56 | 61 | 36 |
| Spain | 3 | 1,120 | 684 | 82 | 75 | 77 |
| Sweden | 5 | 3,310 | 1,403 | 57 | 20 | 44 |
| Switzerland | 3 | 1,050 | 788 | 100 | 76 | 84 |
| United States | 59 | 43,200 | 18,270 | 57 | 57 | 60 |
| TOTAL | 144 | 76,040 | **29,607 | **58 | 58 | 58 |

*Includes only operational units; i.e., those which have generated electricity during, or prior to, the current month.

**Totals do not include Great Britain.

NA=Not available.

Source: *Nucleonics Week*.

Summary of Monthly Nuclear Fuel Cycle – September 1976

| Fuel Cycle Activity | Product | Processed Material* | Percent Utilization of Industry Capacity | Energy Content of Processed Material** | Energy Consumed in Fuel Cycle Activity*** | Cost Contribution to Electric Power |
|----------------------|--|--------------------------|--|--|---|-------------------------------------|
| | | | | | Billion Btu | |
| | | MTU except where noted | | | | Mills per kilowatt hour |
| Milling | Yellowcake (U ₃ O ₈) Deliveries | 433 | 38 | 149,000 | 244 | 1.27 |
| Conversion | Uranium Hexafluoride (UF ₆) Deliveries | 634 | 44 | 220,000 | 136 | 0.16 |
| Enrichment | Enriched UF ₆ Deliveries | 354 (1,085 MT-SWU) | †† | 735,000 | 8,600 | 1.53 |
| Fabrication | Finished Fuel Assemblies Shipped | 86 | 36 | 16,100 | 12 | 0.47 |
| Powerplant Operation | Electricity Generated | 18,277 (million kWhe) | 62 | 194,000 | 842 (million kWhe) | 10.93 |
| | Spent Fuel Discharged | NA | – | – | – | } †††1.57 |
| Reprocessing | Spent Fuel Received | 6 | – | – | – | |
| | Spent Fuel Reprocessed | 0 | – | – | – | |

*Units of measure are discussed in Explanatory Notes 10 and 11.

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

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

†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.

††ERDA's enrichment plans 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.

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

NA=Not available.

Source: ERDA.

Energy Consumption

Domestic energy consumption in September 1976 totaled 5.701 quadrillion Btu, 5.3 percent above the September 1975 level and 1.8 percent above September 1974. No sectoral breakdown is available for the month as yet.

The revised consumption total for August was 5.880 quadrillion Btu. Of the total, 2.029 quadrillion Btu was consumed by the combined residential and commercial sector, up 2.8 percent from August 1975 and up 4.3 percent from August 1974. Direct consumption of primary fuels amounted to 40 percent of the combined sector's total consumption (coal was 0.5 percent, dry natural gas was 13.6 percent, and petroleum products were 25.9 percent). Consumption of electricity accounted for the remaining 60 percent.

The industrial sector consumed 2.258 quadrillion Btu in August, 6.6 percent more than in August 1975, but 4.5 percent less than in August 1974. Coal accounted for 13.4 percent of the total, 32.2 percent was dry natural gas, 21.3 percent was petroleum products, and 33.1 percent was electricity.

Consumption in the transportation sector was 1.593 quadrillion Btu in August, up 1.9 percent from August 1975 and up 0.2 percent from August 1974. Petroleum products comprised 96.5 percent of the total. Natural gas used for pipeline transportation, and electricity used by railroads and for street and highway lighting accounted for the balance.

Petroleum Consumption and Forecast

Total domestic demand for petroleum products during October 1976 was 16.80 million barrels per day. This was 1.8 percent below the forecast level but 2.8 percent above the level for last October. Domestic demand for motor gasoline in October was 6.80 million barrels per day, which was 2.3 percent below the forecast level but about equal to demand for October 1975. Domestic demand for distillate fuel oil was 2.79 million barrels per day in October. This was 5.8 percent less than the forecast level but 4.1 percent greater than last October's distillate demand. Domestic demand for residual fuel oil was 2.64 million barrels per day during October, 16.3 percent higher

than the forecast level and 18.1 percent higher than demand during October 1975.

The large increases in demand for distillate and residual fuel oils compared with October 1975 demands are due in part to greater need for heating oil because of much colder weather. (See the heating degree-days section.)

Energy Consumption by Economic Sector and Primary Source – August 1976 [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 | 0.011 | 0.275 | 0.526 | – | – | 0.813 | 0.347 | 1.160 | 0.869 | 2.029 |
| Industrial | 0.303 | 0.726 | 0.480 | 0.003 | – | 1.511 | 0.213 | 1.724 | 0.534 | 2.258 |
| Transportation | 0.001 | 0.036 | 1.538 | – | (°) | 1.575 | 0.005 | 1.580 | 0.013 | 1.593 |
| Electric Utilities | 0.881 | 0.345 | 0.297 | 0.259 | 0.200 | 1.982 | – | – | – | – |
| TOTAL | 1.196 | 1.382 | 2.841 | 0.262 | 0.200 | 5.880 | 0.565 | 4.464 | 1.416 | 5.880 |

¹ See Explanatory Note 12 for definitions of the Residential and Commercial, Industrial, Transportation, and Electric Utilities Sectors.

² Data are from the Bureau of Mines. Includes anthracite and bituminous coal and lignite.

³ Aggregate data are from the Bureau of Mines. FPC provided data on natural gas consumed by electric utilities. Data from the American Gas Association are used for the Residential and Commercial Sector, adjusted to include a portion of the AGA "Other" category. Natural gas used in transportation, mostly for pipeline use, is estimated to be 3.5 percent of total natural gas consumption less electric utilities. This percentage is derived from 1974 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 are from the Bureau of Mines. FPC provided data on oil consumed by electric utilities.

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 Bureau of Mines data on consumption: Residential and Commercial - 52.3 percent; Industrial - 47.7 percent.

⁵ FPC hydroelectric power production plus net imports of electricity from Canada. These imports, estimated at 0.011 quadrillion Btu per month, were assumed to be from hydroelectric power sources. Monthly industrial hydroelectric power consumption is estimated to be one-twelfth of the preliminary Bureau of Mines annual figure for 1975.

⁶ FPC nuclear power production.

⁷ Electricity was distributed using Edison Electric Institute 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.

Percent Changes in Energy Consumption for August 1976 by Sources and Economic Sectors

| | August 1976 Consumption | Percent Change from August 1975 | Cumulative Percent Change from 1975 (January through August)* |
|---|------------------------------------|--|--|
| | Quadrillion Btu | | |
| Refined Petroleum Products | 2.846 | +5.5 | +4.4 |
| Motor Gasoline | 1.166 | +2.3 | +3.7 |
| Jet Fuel | 0.168 | -7.8 | -2.6 |
| Distillate | 0.404 | +2.9 | +1.1 |
| Residual | 0.522 | +26.4 | +10.1 |
| Other Petroleum Products | 0.586 | +5.1 | +6.6 |
| Natural Gas (Dry) | 1.382 | -1.4 | -0.8 |
| Coal (Anthracite, bituminous, and lignite) | 1.196 | +4.4 | +4.9 |
| Electricity (Sales) | 0.565 | +3.5 | +4.8 |
| TOTAL ENERGY USE | 5.880 | +4.0 | +2.9 |
| Economic Sector Consumption | | | |
| Residential and Commercial | 2.029 | +2.9 | +0.7 |
| Industrial | 2.258 | +6.6 | +5.1 |
| Transportation | 1.593 | +1.9 | +3.3 |

*Calculated on 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 ¹²) Btu | | | | | | |
| 1974 | January | 0.040 | 1.158 | 0.662 | 0.297 | 0.700 | 2.856 | 2.856 |
| | February | 0.034 | 1.027 | 0.590 | 0.274 | 0.601 | 2.526 | 5.381 |
| | March | 0.027 | 0.902 | 0.569 | 0.268 | 0.644 | 2.411 | 7.792 |
| | April | 0.019 | 0.754 | 0.530 | 0.258 | 0.598 | 2.158 | 9.950 |
| | May | 0.016 | 0.499 | 0.497 | 0.254 | 0.655 | 1.921 | 11.871 |
| | June | 0.015 | 0.357 | 0.503 | 0.283 | 0.687 | 1.845 | 13.717 |
| | July | 0.014 | 0.293 | 0.507 | 0.316 | 0.847 | 1.977 | 15.694 |
| | August | 0.021 | 0.265 | 0.519 | 0.331 | 0.809 | 1.945 | 17.639 |
| | September | 0.025 | 0.278 | 0.513 | 0.315 | 0.655 | 1.786 | 19.424 |
| | October | 0.027 | 0.395 | 0.589 | 0.272 | 0.636 | 1.920 | 21.345 |
| | November | 0.027 | 0.569 | 0.583 | 0.263 | 0.638 | 2.079 | 23.424 |
| | December | 0.031 | 0.930 | 0.628 | 0.293 | 0.742 | 2.624 | 26.048 |
| | TOTAL | 0.297 | 7.427 | 6.688 | 3.424 | 8.212 | 26.048 | |
| 1975 | January | 0.036 | 1.124 | 0.648 | 0.310 | 0.758 | 2.875 | 2.875 |
| | February | 0.023 | 1.105 | 0.553 | 0.292 | 0.646 | 2.619 | 5.495 |
| | March | 0.023 | 1.018 | 0.565 | 0.284 | 0.693 | 2.583 | 8.078 |
| | April | 0.011 | 0.905 | 0.506 | 0.270 | 0.632 | 2.323 | 10.401 |
| | May | 0.011 | 0.522 | 0.457 | 0.267 | 0.680 | 1.936 | 12.337 |
| | June | 0.014 | 0.338 | 0.451 | 0.297 | 0.758 | 1.858 | 14.194 |
| | July | 0.016 | R0.294 | 0.481 | 0.336 | 0.868 | 1.994 | 16.189 |
| | August | 0.016 | R0.267 | 0.460 | 0.350 | 0.879 | R1.973 | R18.161 |
| | September | 0.020 | 0.281 | 0.501 | 0.336 | 0.693 | 1.831 | R19.992 |
| | October | R0.024 | 0.353 | 0.555 | 0.280 | 0.677 | R1.889 | R21.881 |
| | November | 0.025 | 0.523 | 0.517 | 0.273 | 0.659 | 1.997 | R23.878 |
| | December | 0.034 | 0.910 | 0.642 | 0.303 | 0.780 | 2.669 | R26.547 |
| | TOTAL | 0.253 | R7.640 | 6.337 | 3.596 | 8.721 | R26.547 | |
| 1976 | January | 0.032 | 1.229 | 0.679 | 0.340 | 0.841 | R3.121 | R3.121 |
| | February | 0.019 | 1.106 | 0.595 | 0.314 | 0.687 | R2.722 | R5.843 |
| | March | 0.018 | 0.858 | R0.592 | 0.286 | R0.704 | R2.457 | R8.301 |
| | April | 0.014 | 0.704 | R0.518 | 0.270 | 0.629 | R2.136 | R10.437 |
| | May | 0.012 | 0.510 | 0.524 | 0.267 | 0.636 | 1.960 | R12.397 |
| | June | 0.014 | 0.369 | 0.507 | 0.286 | R0.752 | R1.929 | R14.325 |
| | July | R0.011 | 0.297 | 0.502 | 0.335 | R0.869 | 2.015 | R16.340 |
| | August | 0.011 | 0.275 | 0.526 | 0.347 | 0.870 | 2.029 | 18.369 |
| | TOTAL | 0.133 | 5.349 | 4.444 | 2.445 | 5.998 | 18.369 | |

(See footnotes on page 46) 9

Energy Consumption by the Industrial Economic Sector¹

| | | Coal | Natural Gas (dry) | Petroleum ³ | Hydroelectric | Electricity Distributed | Electrical Energy Loss Distributed | Total Energy Use | Cumulative Total Energy Use | |
|-------------|--------------|-------------------------------------|-------------------|------------------------|---------------|-------------------------|------------------------------------|------------------|-----------------------------|--|
| | | Quadrillion (10 ¹⁵) Btu | | | | | | | | |
| 1974 | January | 0.378 | 0.830 | 0.603 | 0.003 | 0.189 | 0.447 | 2.450 | 2.450 | |
| | February | 0.354 | 0.804 | 0.538 | 0.003 | 0.187 | 0.409 | 2.295 | 4.745 | |
| | March | 0.358 | 0.827 | 0.519 | 0.003 | 0.190 | 0.457 | 2.354 | 7.099 | |
| | April | 0.352 | 0.662 | 0.483 | 0.003 | 0.191 | 0.444 | 2.137 | 9.236 | |
| | May | 0.342 | 0.788 | 0.453 | 0.003 | 0.195 | 0.503 | 2.284 | 11.520 | |
| | June | 0.326 | 0.724 | 0.458 | 0.003 | 0.197 | 0.478 | 2.186 | 13.706 | |
| | July | 0.325 | 0.806 | 0.462 | 0.003 | 0.196 | 0.526 | 2.318 | 16.024 | |
| | August | 0.335 | 0.853 | 0.473 | 0.003 | 0.203 | 0.497 | 2.365 | 18.389 | |
| | September | 0.325 | 0.933 | 0.468 | 0.003 | 0.204 | 0.425 | 2.358 | 20.747 | |
| | October | 0.347 | 0.997 | 0.537 | 0.003 | 0.205 | 0.480 | 2.569 | 23.316 | |
| | November | 0.312 | 1.001 | 0.531 | 0.003 | 0.195 | 0.473 | 2.516 | 25.832 | |
| | December | 0.309 | 0.945 | 0.573 | 0.003 | 0.182 | 0.462 | 2.474 | 28.307 | |
| | TOTAL | 4.062 | 10.170 | 6.100 | 0.036 | 2.337 | 5.602 | 28.307 | | |
| 1975 | January | 0.344 | 0.897 | 0.591 | 0.003 | 0.189 | 0.464 | 2.488 | 2.488 | |
| | February | 0.344 | 0.626 | 0.505 | 0.003 | 0.185 | 0.410 | 2.074 | 4.562 | |
| | March | 0.365 | 0.656 | 0.515 | 0.003 | 0.186 | 0.453 | 2.178 | 6.740 | |
| | April | 0.340 | 0.440 | 0.461 | 0.003 | 0.184 | 0.431 | 1.859 | 8.599 | |
| | May | 0.322 | 0.524 | 0.417 | 0.003 | 0.182 | 0.464 | 1.912 | 10.512 | |
| | June | 0.300 | 0.600 | 0.411 | 0.003 | 0.185 | 0.470 | 1.969 | 12.481 | |
| | July | 0.287 | 0.647 | 0.439 | 0.003 | 0.184 | 0.476 | 2.036 | 14.517 | |
| | August | 0.294 | R0.730 | 0.420 | 0.003 | 0.191 | 0.481 | R2.119 | R16.636 | |
| | September | 0.294 | 0.761 | 0.457 | 0.003 | 0.194 | 0.400 | 2.109 | R18.745 | |
| | October | R0.306 | 0.902 | 0.506 | 0.003 | 0.193 | 0.465 | R2.375 | R21.120 | |
| | November | 0.319 | 0.872 | 0.471 | 0.003 | 0.192 | 0.463 | 2.320 | R23.440 | |
| | December | 0.338 | 0.904 | 0.585 | 0.003 | 0.189 | 0.488 | 2.507 | R25.947 | |
| | TOTAL | R3.853 | R8.558 | 5.780 | 0.036 | 2.254 | 5.465 | R25.947 | | |
| 1976 | January | R0.323 | 0.838 | 0.620 | 0.003 | 0.196 | 0.485 | R2.446 | R2.466 | |
| | February | R0.304 | 0.499 | R0.543 | 0.003 | 0.199 | R0.435 | R1.983 | R4.448 | |
| | March | R0.323 | 0.723 | R0.540 | 0.003 | 0.206 | 0.508 | R2.304 | R6.752 | |
| | April | R0.305 | 0.558 | R0.473 | 0.003 | 0.205 | 0.478 | R2.022 | R8.774 | |
| | May | R0.313 | 0.645 | 0.478 | 0.003 | 0.209 | 0.505 | R2.153 | R10.927 | |
| | June | R0.299 | 0.638 | R0.462 | 0.003 | 0.213 | R0.560 | R2.175 | R13.102 | |
| | July | R0.303 | 0.685 | 0.458 | 0.003 | 0.210 | R0.544 | R2.202 | R15.304 | |
| | August | 0.303 | 0.726 | 0.480 | 0.003 | 0.213 | 0.534 | 2.258 | 17.562 | |
| | TOTAL | 2.473 | 5.312 | 4.053 | 0.024 | 1.651 | 4.049 | 17.562 | | |

(See footnotes on page 46)

Energy Consumption (Continued)

Energy Consumption by the Transportation Economic Sector¹

| | | Coal | Natural Gas (dry) ⁴ | Petroleum | Electricity Distributed | Electrical Energy Loss Distributed | Total Energy Use | Cumulative Total Energy Use |
|-------------------------------------|--------------|--------------|--------------------------------|---------------|-------------------------|------------------------------------|------------------|-----------------------------|
| Quadrillion (10 ¹⁵) Btu | | | | | | | | |
| 1974 | January | 0.001 | 0.072 | 1.399 | 0.005 | 0.013 | 1.490 | 1.490 |
| | February | 0.001 | 0.066 | 1.300 | 0.005 | 0.011 | 1.384 | 2.874 |
| | March | 0.001 | 0.063 | 1.417 | 0.005 | 0.012 | 1.498 | 4.372 |
| | April | 0.001 | 0.051 | 1.397 | 0.005 | 0.011 | 1.465 | 5.837 |
| | May | 0.001 | 0.047 | 1.484 | 0.005 | 0.012 | 1.547 | 7.384 |
| | June | 0.001 | 0.039 | 1.448 | 0.005 | 0.011 | 1.503 | 8.887 |
| | July | 0.001 | 0.040 | 1.514 | 0.005 | 0.012 | 1.572 | 10.458 |
| | August | 0.001 | 0.041 | 1.533 | 0.005 | 0.012 | 1.590 | 12.049 |
| | September | 0.001 | 0.044 | 1.393 | 0.005 | 0.010 | 1.453 | 13.501 |
| | October | 0.001 | 0.051 | 1.507 | 0.005 | 0.012 | 1.576 | 15.077 |
| | November | 0.001 | 0.057 | 1.455 | 0.005 | 0.013 | 1.532 | 16.609 |
| | December | 0.001 | 0.068 | 1.546 | 0.006 | 0.014 | 1.634 | 18.243 |
| | TOTAL | 0.009 | 0.638 | 17.392 | 0.060 | 0.144 | 18.243 | |
| 1975 | January | 0.001 | 0.073 | 1.498 | 0.006 | 0.014 | 1.592 | 1.592 |
| | February | 0.001 | 0.063 | 1.334 | 0.005 | 0.012 | 1.415 | 3.006 |
| | March | 0.001 | 0.061 | 1.456 | 0.005 | 0.013 | 1.536 | 4.542 |
| | April | 0.001 | 0.049 | 1.455 | 0.005 | 0.012 | 1.522 | 6.064 |
| | May | 0.001 | 0.038 | 1.480 | 0.005 | 0.012 | 1.536 | 7.600 |
| | June | 0.001 | 0.034 | 1.466 | 0.005 | 0.012 | 1.517 | 9.116 |
| | July | 0.001 | 0.034 | 1.498 | 0.005 | 0.013 | 1.550 | 10.666 |
| | August | 0.001 | 0.036 | 1.509 | 0.005 | 0.012 | 1.563 | 12.229 |
| | September | 0.001 | 0.038 | 1.420 | 0.005 | 0.010 | 1.473 | 13.703 |
| | October | 0.001 | 0.045 | 1.495 | 0.005 | 0.013 | 1.559 | 15.262 |
| | November | 0.001 | 0.051 | 1.379 | 0.006 | 0.013 | 1.449 | 16.711 |
| | December | 0.001 | 0.066 | 1.556 | 0.006 | 0.015 | 1.643 | 18.354 |
| | TOTAL | 0.008 | 0.587 | 17.547 | 0.062 | 0.150 | 18.354 | |
| 1976 | January | 0.001 | 0.075 | 1.532 | 0.006 | 0.015 | 1.628 | 1.628 |
| | February | 0.001 | 0.058 | 1.380 | 0.006 | 0.012 | R1.457 | R3.085 |
| | March | 0.001 | 0.057 | R1.552 | 0.005 | 0.013 | R1.629 | R4.714 |
| | April | 0.001 | 0.046 | R1.517 | 0.005 | 0.012 | R1.580 | R6.293 |
| | May | 0.001 | 0.042 | 1.493 | 0.005 | 0.012 | 1.553 | R7.847 |
| | June | 0.001 | 0.037 | R1.546 | 0.005 | 0.012 | R1.600 | R9.446 |
| | July | 0.001 | 0.036 | 1.587 | 0.005 | R0.013 | 1.641 | R11.008 |
| | August | 0.001 | 0.036 | 1.538 | 0.005 | 0.013 | 1.593 | 12.681 |
| | TOTAL | 0.005 | 0.387 | 12.145 | 0.042 | 0.102 | 12.681 | |

¹ See Explanatory Note 12 for definitions of the Residential and Commercial, Industrial, and Transportation Sectors. The methodology used for sector calculation 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 52.3 percent for 1974, 1975, and 1976.

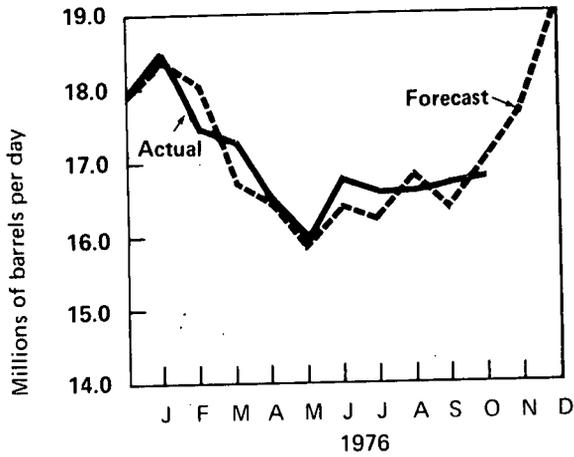
³ The percentage share used in calculating Industrial consumption of petroleum was 47.5 percent for 1973 and 47.7 percent for 1974, 1975, and 1976.

⁴ The percentage share used in calculating Transportation consumption of natural gas was 3.9 percent for 1973 and 3.5 percent for 1974, 1975, and 1976.

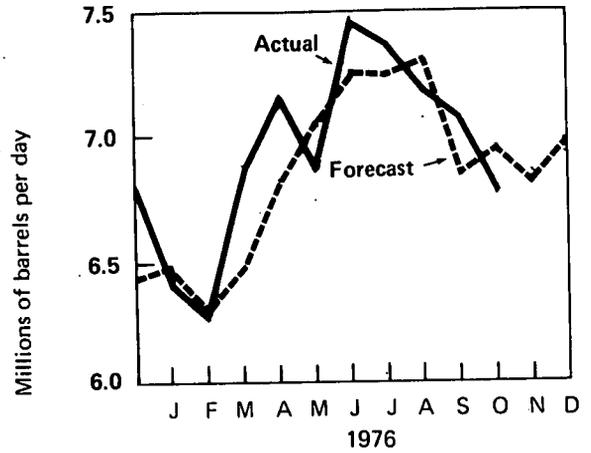
R=Revised data.

Petroleum Consumption and Forecast

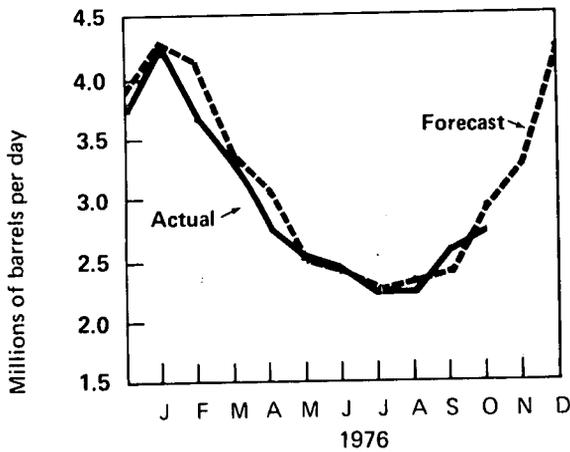
Total Domestic Demand for Petroleum Products



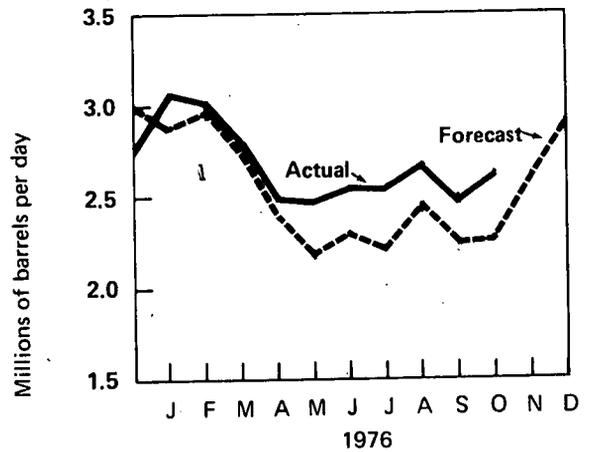
Domestic Demand for Motor Gasoline



Domestic Demand for Distillate Fuel Oil



Domestic Demand for Residual Fuel Oil



Notes:

Domestic Demand – Demand for products, in terms of real consumption, is not available; production plus imports plus withdrawals from primary stocks is used as a proxy for consumption. Secondary stocks, not measured by BOM and API, are substantial for some products.

Actuals – Based on BOM data for January through August and API data for September and October.

Forecast – See Explanatory Note 6 for discussion of basic assumptions for forecast.

Resource Development.

Oil and gas rotary drilling rig activity maintained a 15-year high during November with 1,840 rigs in operation. Only 3,269 wells were completed during October, however, compared with 3,625 during October 1975. This was the first year-to-year decline in well completions in nearly a year and a half. Nonetheless, cumulative completions since the first of the year are running about 11 percent ahead of last year.

There was a minor seasonal decline in seismic exploration activity during October. A total of 267 crews (246 land, 21 marine) were operating in the United States and its territorial waters during the month. This total reflects an increase of six land crews but a decrease of seven marine crews from the crew count for September. Last October, 270 crews were reported active.

Oil and Gas Exploration

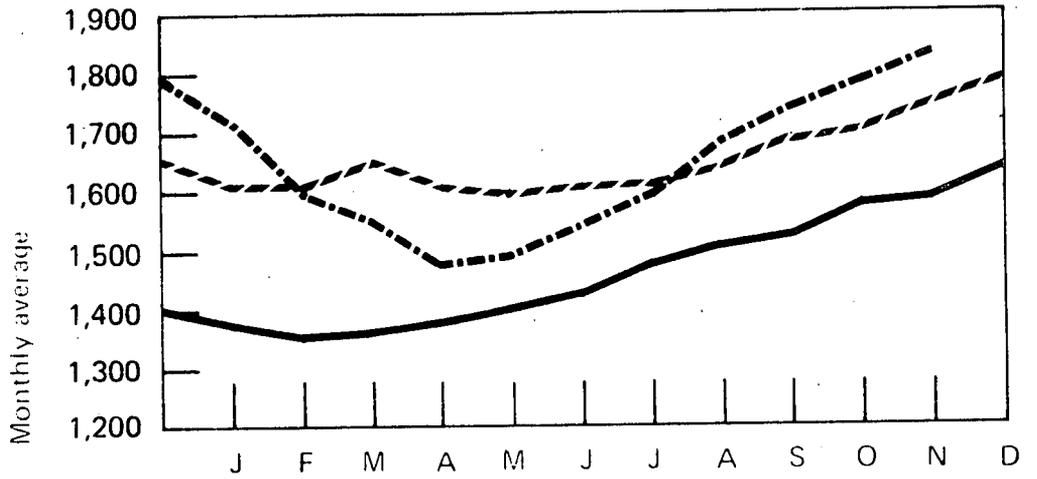
| | | Rotary Rigs in Operation | Wells Drilled | | | | Total Footage of Wells Drilled |
|------|----------------|-------------------------------|----------------------|-------------------------------------|---------------|---------------|-----------------------------------|
| | | Monthly average | Oil | Gas | Dry | Total | Thousands of feet |
| 1974 | January | 1,372 | 763 | 577 | 803 | 2,143 | 10,392 |
| | February | 1,355 | 901 | 600 | 816 | 2,317 | 12,160 |
| | March | 1,367 | 936 | 638 | 1,003 | 2,577 | 12,844 |
| | April | 1,381 | 947 | 700 | 945 | 2,592 | 13,349 |
| | May | 1,412 | 957 | 520 | 870 | 2,347 | 11,460 |
| | June | 1,432 | 1,238 | 586 | 982 | 2,806 | 12,976 |
| | July | 1,480 | 1,008 | 461 | 884 | 2,353 | 11,802 |
| | August | 1,518 | 1,210 | 555 | 968 | 2,733 | 12,410 |
| | September | 1,527 | 1,200 | 600 | 1,091 | 2,891 | 12,676 |
| | October | 1,584 | 1,131 | 551 | 1,241 | 2,923 | 14,081 |
| | November | 1,596 | 1,008 | 626 | 1,053 | 2,767 | 11,795 |
| | December | 1,643 | 1,339 | 791 | 1,274 | 3,404 | 15,707 |
| | AVERAGE | 1,475 | TOTAL* 12,784 | 7,240 | 11,674 | 31,698 | 150,551 |
| 1975 | January | 1,615 | 1,299 | 655 | 1,040 | 2,994 | 13,189 |
| | February | 1,611 | 1,097 | 458 | 933 | 2,488 | 12,071 |
| | March | 1,651 | 1,341 | 658 | 1,091 | 3,090 | 15,472 |
| | April | 1,604 | 1,181 | 506 | 1,071 | 2,758 | 13,545 |
| | May | 1,592 | 1,100 | 451 | 891 | 2,442 | 12,054 |
| | June | 1,613 | 1,246 | 509 | 1,022 | 2,777 | 13,540 |
| | July | 1,616 | 1,229 | 557 | 920 | 2,706 | 12,545 |
| | August | 1,645 | 1,272 | 587 | 1,122 | 2,981 | 14,221 |
| | September | 1,699 | 1,504 | 831 | 1,165 | 3,500 | 15,636 |
| | October | 1,716 | 1,633 | 682 | 1,310 | 3,625 | 16,689 |
| | November | 1,757 | 1,619 | 776 | 1,270 | 3,665 | 15,788 |
| | December | 1,793 | 1,817 | 832 | 1,424 | 4,073 | 17,556 |
| | 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 | NA | NA | NA | NA | NA |
| | | AVERAGE (11 months) | 1,640 | TOTAL* 14,197 (10 months) | 7,418 | 11,051 | 32,666 |

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

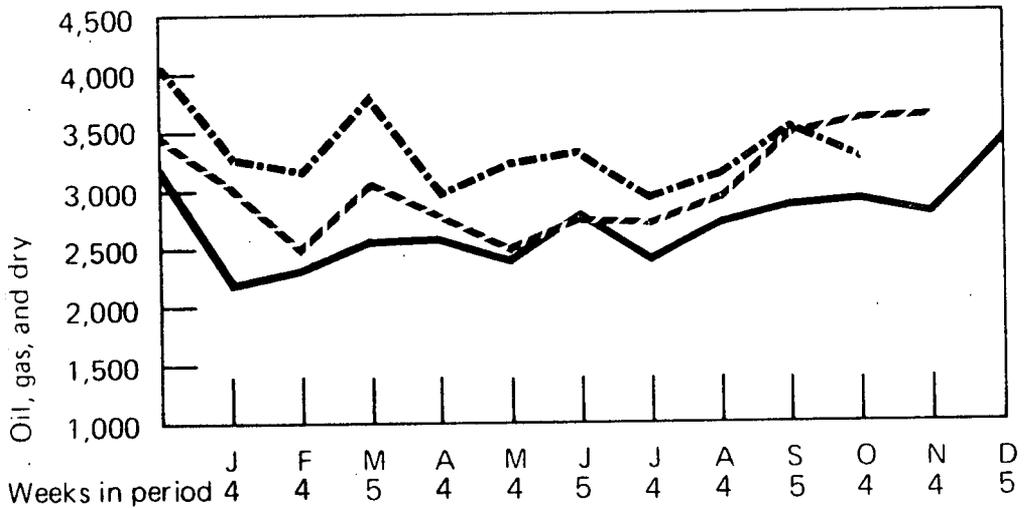
NA=Not available.

Sources: Rotary Rigs—Hughes Tool Company; Wells—American Petroleum Institute.

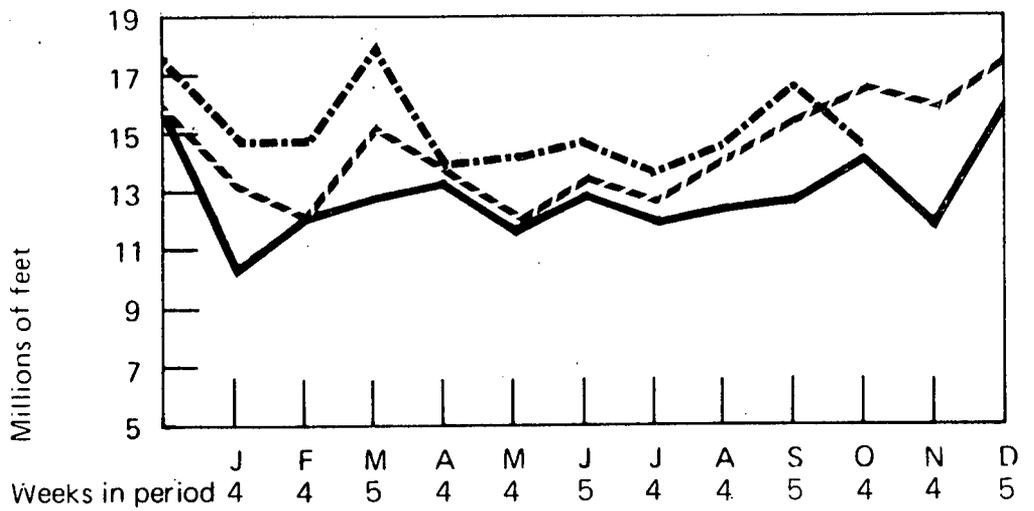
Rotary Rigs in Operation



Total Wells Drilled



Total Footage of Wells Drilled

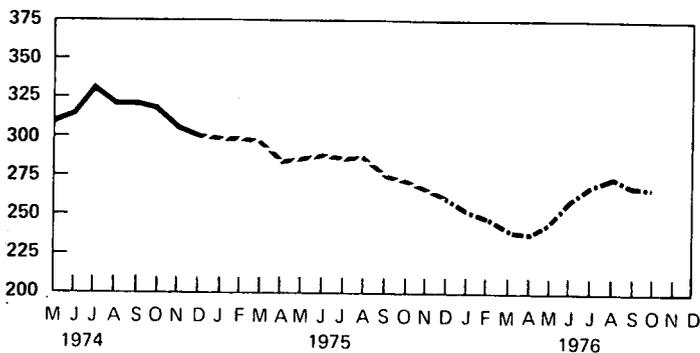


— 1974
 - - 1975
 ··· 1976

Oil and Gas Exploration (Continued)

| | | Crews Engaged in Seismic Exploration | | | Line Miles of Seismic Exploration | | |
|------|-------------------------------|--------------------------------------|------------|------------|-----------------------------------|---------|--------|
| | | Offshore | Onshore | Total | Offshore | Onshore | Total |
| | | Monthly average | | | Monthly average | | |
| 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 |
| 1974 | January-April | NA | NA | NA | | | |
| | May | 35 | 278 | 313 | | | |
| | June | 38 | 279 | 317 | | | |
| | July | 35 | 299 | 334 | | | |
| | August | 34 | 287 | 321 | | | |
| | September | 34 | 287 | 321 | | | |
| | October | 32 | 288 | 320 | | | |
| | November | 30 | 276 | 306 | | | |
| | December | 25 | 275 | 300 | | | |
| 1975 | January | 27 | 274 | 301 | | | |
| | February | 24 | 278 | 302 | | | |
| | March | 23 | 276 | 299 | | | |
| | April | 23 | 260 | 283 | | | |
| | May | 32 | 254 | 286 | | | |
| | June | 38 | 251 | 289 | | | |
| | July | 37 | 249 | 286 | | | |
| | August | 40 | 249 | 289 | | | |
| | September | 40 | 234 | 274 | | | |
| | October | 29 | 241 | 270 | | | |
| | November | 27 | 238 | 265 | | | |
| | December | 26 | 233 | 259 | | | |
| 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 | | | |
| | AVERAGE (10 months) | 23 | 233 | 256 | | | |

Total Seismic Crews



NA=Not available.

Source: Society of Exploration Geophysicists.

— 1974
 - - - 1975
 - · - · 1976

Motor Gasoline

The national average selling price for regular gasoline at full service retail outlets was unchanged in October at 60.2 cents per gallon. This was the first time since April that this price has not increased. The average price that retailers paid for regular gasoline was also unchanged (52.6 cents per gallon) as was the dealer margin (7.6 cents per gallon).

Heating Oil

Partial heating oil price data are now available for the period June through September 1976. The national average selling price for heating oil sold to residential users was 40.2 cents per gallon in September, an increase of 0.4 cent from the price in August. Selling prices have risen an average of 0.9 cent since June, the last month that middle distillates were subject to price controls. In September 1975, the average selling price was 38.4 cents per gallon.

Crude Oil

The preliminary average "upper tier" crude oil price during September was \$11.65 per barrel, 3 cents above the August price.

The September preliminary "lower tier" crude oil price was \$5.17 per barrel, down 1 cent from the August figure.

The preliminary average domestic crude oil price during September was \$8.39 per barrel, 36 cents above the price in August. This increase was primarily due to a substantial gain in the stripper oil price, which was exempt from price controls beginning September 1, and to the shift in crude oil production from "lower tier" to "upper tier," which resulted from a change in the definition of a property.

The preliminary refiner acquisition cost of domestic crude oil during September was \$8.93 per barrel, 28 cents above the revised August figure.

The preliminary refiner acquisition cost of imported crude oil decreased 8 cents in September to \$13.50 per barrel.

The preliminary estimate of the composite cost of crude oil purchased by refiners during September was \$11.08 per barrel, an increase of 30 cents over the August figure. This increase can be attributed to two factors: (1) an increase in the volume of foreign crude purchases; and (2) the increase in the cost of domestic crude oil mentioned above.

Banked Costs

Banked costs for aviation jet fuel and "other products" declined slightly in August, but gasoline banked costs increased by nearly \$90 million. The net result was a \$56 million increase in total unrecouped costs.

Utility Fossil Fuels

The national average cost of all fossil fuels delivered to utilities increased 1.2 cents in June to 107.0 cents per million Btu.

The national average cost of coal delivered to utilities declined 0.7 cent in June to 187.4 cents per million Btu.

The average cost of natural gas delivered to utilities during June rose 3.6 cents to 104.4 cents per million Btu.

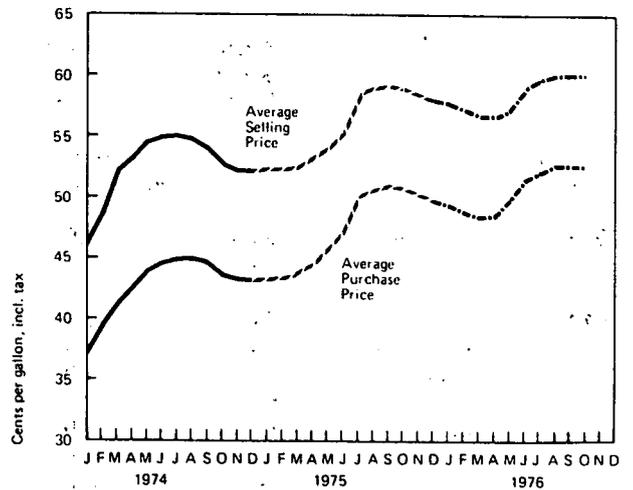
Note: Two additional price series have been incorporated in the price section this month, residual fuel oil and aviation fuels. These tables will be featured regularly.

Motor Gasoline

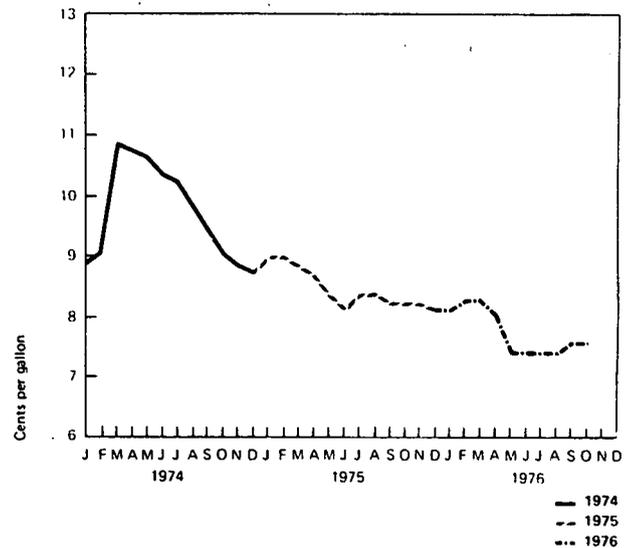
Regular Gasoline at Full Service Retail Outlets

| | | Average Selling Price | Average Purchase Price | Average Dealer Margin |
|----------------------------------|----------------|-----------------------------|------------------------------|-----------------------------|
| Cents per gallon, including tax* | | | | |
| 1974 | January | 46.3 | 37.4 | 8.9 |
| | February | 48.8 | 39.7 | 9.1 |
| | March | 52.3 | 41.4 | 10.9 |
| | April | 53.4 | 42.7 | 10.7 |
| | May | 54.7 | 44.1 | 10.6 |
| | June | 55.1 | 44.8 | 10.3 |
| | July | 55.2 | 45.0 | 10.2 |
| | August | 54.9 | 45.1 | 9.8 |
| | September | 54.2 | 44.8 | 9.4 |
| | October | 52.4 | 43.4 | 9.0 |
| | November | 52.0 | 43.2 | 8.8 |
| | December | 52.0 | 43.3 | 8.7 |
| | AVERAGE | 52.8 | 43.1 | |
| 1975 | January | 52.4 | 43.4 | 9.0 |
| | February | 52.5 | 43.5 | 9.0 |
| | March | 52.6 | 43.8 | 8.8 |
| | April | 53.5 | 44.9 | 8.6 |
| | May | 54.3 | 46.0 | 8.3 |
| | June | 55.6 | 47.5 | 8.1 |
| | July | 58.7 | 50.3 | 8.4 |
| | August | 59.2 | 50.8 | 8.4 |
| | September | 59.3 | 51.1 | 8.2 |
| | October | 58.9 | 50.7 | 8.2 |
| | November | 58.4 | 50.2 | 8.2 |
| | December | 58.0 | 49.9 | 8.1 |
| | AVERAGE | 56.2 | 47.8 | |
| 1976 | January | 57.7 | 49.6 | 8.1 |
| | February | 57.1 | 48.8 | 8.3 |
| | March | 56.6 | 48.3 | 8.3 |
| | April | 56.6 | 48.6 | 8.0 |
| | May | 57.4 | 50.0 | 7.4 |
| | June | 59.0 | 51.6 | 7.4 |
| | July | 59.6 | 52.2 | 7.4 |
| | August | 60.1 | 52.7 | 7.4 |
| | September | 60.2 | 52.6 | 7.6 |
| | October | 60.2 | 52.6 | 7.6 |

Average Retail Prices For Regular



Average Margins For Regular



*To derive prices excluding taxes, 12.2 cents per gallon may be deducted for 1974 and 1975, and 12.5 may be deducted for 1976.

Sources: FEA for January through December 1974; Lundberg Survey, Inc., for January 1975 forward.

Regular Gasoline at Self Service Retail Outlets

| | | Average Selling Price | Average Dealer Margin |
|-------------|-----------|------------------------------------|-----------------------------|
| | | Cents per gallon, including tax | |
| 1975 | November | 55.4 | 5.5 |
| | December | 54.9 | 5.3 |
| 1976 | January | 54.7 | 5.4 |
| | February | 53.8 | 5.4 |
| | March | 53.2 | 5.3 |
| | April | 53.2 | 4.9 |
| | May | 54.4 | 4.5 |
| | June | 56.3 | 4.8 |
| | July | 56.6 | 4.6 |
| | August | 56.7 | 4.4 |
| | September | 56.5 | 4.3 |
| | October | 56.5 | 4.4 |

Source: Lundberg Survey, Inc.

Motor Gasoline (Continued)

Average Selling Prices for Premium and Unleaded Gasoline at Full Service Retail Outlets

| | | Premium | Unleaded (Regular) |
|------------------------------------|-----------|---------|-----------------------|
| Cents per gallon, including tax | | | |
| 1974 | January | 50.1 | 48.8 |
| | February | 52.6 | 50.8 |
| | March | 56.0 | 53.6 |
| | April | 57.2 | 55.1 |
| | May | 58.5 | 57.1 |
| | June | 58.5 | 57.4 |
| | July | 59.0 | 57.2 |
| | August | 58.0 | 56.8 |
| | September | 58.2 | 55.8 |
| | October | 56.6 | 54.1 |
| | November | 56.3 | 53.9 |
| | December | 56.3 | 53.9 |
| 1975 | January | 57.1 | NA |
| | February | 57.3 | 56.1 |
| | March | 57.5 | 56.2 |
| | April | 58.2 | 57.1 |
| | May | 59.0 | 57.9 |
| | June | 60.3 | 58.8 |
| | July | 63.1 | 61.5 |
| | August | 63.6 | 62.0 |
| | September | 63.8 | 62.1 |
| | October | 63.4 | 62.1 |
| | November | 63.2 | 62.0 |
| | December | 62.9 | 61.4 |
| 1976 | January | 62.7 | 61.2 |
| | February | 62.1 | 60.6 |
| | March | 61.6 | 60.1 |
| | April | 61.6 | 60.4 |
| | May | 62.4 | 61.1 |
| | June | 63.9 | 62.9 |
| | July | 64.6 | 63.2 |
| | August | 65.2 | 63.9 |
| | September | 65.3 | 64.0 |
| | October | 65.2 | 64.0 |

Sources: FEA for January through December 1974;
Lundberg Survey, Inc., for January 1975 forward.

Average Selling Prices and Margins for Major and Independent Retail Dealers — October 1976

(Cents per gallon, including tax)

Regular Gasoline—Full Service

| | Selling Price | Margin |
|-------------------------|---------------|------------|
| Major | 61.0 | 7.9 |
| Independent | 55.6 | 5.8 |
| National Average | 60.2 | 7.6 |

Regular Gasoline—Self Service

| | Selling Price | Margin |
|-------------------------|---------------|------------|
| Major | 57.3 | 4.3 |
| Independent | 54.3 | 4.4 |
| National Average | 56.5 | 4.4 |

Premium Gasoline—Selling Prices

| | Full Service | Self Service |
|-------------------------|--------------|--------------|
| Major | 66.0 | 63.1 |
| Independent | 60.0 | 58.8 |
| National Average | 65.2 | 61.9 |

Unleaded Gasoline—Full Service Selling Prices

| | Regular | Premium |
|-------------------------|-------------|-------------|
| Major | 64.5 | 68.6 |
| Independent | 58.7 | 65.9 |
| National Average | 64.0 | 68.6 |

Source: Lundberg Survey, Inc.

Average Regional Selling Prices and Dealer Margins for Regular Gasoline at Full Service Retail Outlets — October 1976

| Region | Selling Price | Margin |
|-------------------------|---------------------------------|------------|
| | Cents per gallon, including tax | |
| 1A New England | 59.1 | 7.4 |
| 1B Mid Atlantic | 61.1 | 6.9 |
| 1C Lower Atlantic | 60.4 | 8.1 |
| 2 Mid Continent | 60.0 | 6.8 |
| 3 Gulf Coast | 57.7 | 9.0 |
| 4 Rocky Mountain | 61.8 | 9.5 |
| 5 West Coast | 62.0 | 8.1 |
| National Average | 60.2 | 7.6 |

Source: Lundberg Survey, Inc.

Motor Gasoline (Continued)

Retail Gasoline Price Changes for 21 Leading Refiners During October 1976
and Entitlement Position* During September 1976

| Company | Effective Date of Change | Amount of Change Cents per gallon | Entitlement Position (September) |
|----------------------------|-----------------------------|--|-------------------------------------|
| Amerada Hess | October 7 | - 1.00 | Seller |
| American Petrofina | | None | Buyer |
| Ashland | October 4 | - 1.00 (Atlanta, Baltimore) - 0.50 All other areas | Seller |
| Atlantic Richfield | | None | Seller |
| B.P. | October 1 | - 2.00 (PAD I, Consumers only) | Seller |
| | October 20 | - 0.25 (PAD I) | |
| Cities Service | October 5 | - 0.50 (PAD II) | Buyer |
| Champlin | October 1 | 3.00 (PAD I) | Buyer |
| Continental | | None | Buyer |
| Exxon | | None | Buyer |
| Getty | | None | Seller |
| Gulf | | None | Buyer |
| Kerr-McGee | October 11 | - 0.50 (PAD II); - 0.25 (PAD III) | Seller |
| Mobil | | None | Buyer |
| Phillips | | None | Seller |
| Shell | October 19 | - 1.00 (For direct stations in Ohio, except Cleveland, and Indiana, except Gary and Michigan City) - 0.50 (Jobbers only) | Buyer |
| Standard Oil of California | | None | Seller |
| Standard Oil of Indiana | | None | Buyer |
| Standard Oil of Ohio | October 20 | - 0.25 (PAD I) | Seller |
| Sun | | None | Buyer |
| Texaco | | None | Buyer |
| Union Oil of California | | None | Buyer |

*See definitions.

Source: FEA.

Jobber Prices for Regular Gasoline Sold by 21 Leading Refiners

| | | Northeast | Mid-Atlantic | Southeast | Central | Western | Southwest | Pacific | National Average |
|---------------------------------|-----------|-----------|--------------|-----------|---------|---------|-----------|---------|------------------|
| Cents per gallon, excluding tax | | | | | | | | | |
| 1974 | January | 21.4 | 21.4 | 21.1 | 21.3 | 22.2 | 20.1 | 21.0 | 21.2 |
| | February | 23.7 | 23.6 | 22.5 | 23.9 | 23.5 | 22.5 | 22.6 | 23.2 |
| | March | 25.4 | 25.2 | 24.1 | 25.3 | 24.5 | 24.2 | 25.2 | 24.8 |
| | April | 26.7 | 26.1 | 24.8 | 26.0 | 25.6 | 24.7 | 25.0 | 25.6 |
| | May | 28.5 | 28.4 | 26.8 | 28.2 | 27.7 | 26.3 | 26.3 | 27.5 |
| | June | 29.8 | 29.4 | 28.0 | 29.3 | 29.3 | 27.1 | 27.2 | 28.6 |
| | July | 29.9 | 29.3 | 28.0 | 29.4 | 28.9 | 27.8 | 28.0 | 28.8 |
| | August | 29.7 | 29.4 | 28.6 | 29.6 | 29.1 | 28.1 | 28.6 | 29.0 |
| | September | 29.3 | 28.9 | 28.0 | 28.8 | 28.7 | 27.4 | 27.8 | 28.4 |
| | October | 28.0 | 27.2 | 26.6 | 27.5 | 27.0 | 26.2 | 26.6 | 27.0 |
| | November | 27.8 | 27.3 | 26.6 | 27.5 | 27.5 | 26.3 | 27.3 | 27.2 |
| | December | 27.7 | 27.6 | 26.9 | 27.7 | 27.9 | 26.7 | 27.3 | 27.4 |
| AVERAGE | | | | | | | | | 26.7 |
| 1975 | January | 27.8 | 27.8 | 27.4 | 28.2 | 28.5 | 27.2 | 27.8 | 27.8 |
| | February | 28.4 | 28.2 | 27.8 | 28.7 | 28.3 | 27.6 | 27.5 | 28.1 |
| | March | 28.9 | 28.8 | 28.4 | 29.1 | 29.0 | 27.8 | 28.0 | 28.6 |
| | April | 29.6 | 29.9 | 29.4 | 30.4 | 29.8 | 29.2 | 29.8 | 29.7 |
| | May | 30.9 | 31.0 | 30.5 | 31.6 | 31.2 | 30.4 | 31.0 | 30.9 |
| | June | 32.4 | 32.5 | 32.0 | 33.1 | 32.6 | 31.6 | 32.6 | 32.4 |
| | July | 34.4 | 34.6 | 33.9 | 34.9 | 34.5 | 33.4 | 33.7 | 34.2 |
| | August | 35.3 | 35.1 | 34.6 | 35.6 | 35.2 | 34.1 | 34.5 | 34.9 |
| | September | 35.2 | 35.1 | 34.5 | 35.4 | 35.0 | 34.1 | 34.5 | 34.8 |
| | October | 34.3 | 34.6 | 34.0 | 34.9 | 34.3 | 33.8 | 34.2 | 34.3 |
| | November | 34.1 | 34.3 | 33.9 | 34.6 | 34.3 | 33.6 | 34.0 | 34.1 |
| | December | 33.7 | 34.1 | 33.6 | 34.3 | 33.8 | 33.3 | 33.7 | 33.8 |
| AVERAGE | | | | | | | | | 32.0 |
| 1976 | January | 33.3 | 33.9 | 33.2 | 34.0 | 33.2 | 33.1 | 33.5 | 33.5 |
| | February | 33.0 | 33.4 | 32.6 | 33.8 | 32.6 | 32.9 | 33.5 | 33.1 |
| | March | 32.4 | 33.0 | 31.8 | 33.4 | 32.5 | 32.6 | 33.2 | 32.7 |
| | April | 33.0 | 33.5 | 32.3 | 33.9 | 33.2 | 33.2 | 33.2 | 33.2 |
| | May | 34.4 | 34.9 | 33.6 | 35.3 | 34.8 | 34.8 | 34.7 | 34.6 |
| | June | 35.7 | 35.9 | 34.8 | 36.5 | 36.1 | 35.9 | 35.5 | 35.8 |
| | July | 36.1 | 36.3 | 35.4 | 36.8 | 36.3 | 36.3 | 36.3 | 36.2 |
| | August | 36.5 | 36.6 | 35.7 | 37.3 | 36.4 | 36.5 | 36.7 | 36.5 |
| | September | 35.8 | 36.1 | 35.3 | 36.9 | 35.9 | 36.6 | 36.5 | 36.2 |
| | October | 35.7 | 35.8 | 35.2 | 36.7 | 35.9 | 36.4 | 36.5 | 36.0 |

Source: FEA.

Diesel Fuel

Average Selling Prices and Margins for Diesel Fuel*

(Cents per gallon, including tax)

| | | Selling Price | | Margin | |
|------|-----------|---------------|------------------|-------------|------------------|
| | | Truck Stops | Service Stations | Truck Stops | Service Stations |
| 1974 | January | NA | 46.0 | NA | 6.7 |
| | February | NA | 45.9 | NA | 6.6 |
| | March | NA | 46.8 | NA | 7.2 |
| | April | NA | 48.3 | NA | 7.2 |
| | May | NA | 48.4 | NA | 7.2 |
| | June | NA | 49.3 | NA | 7.7 |
| | July | NA | 49.7 | NA | 7.3 |
| | August | NA | 49.9 | NA | 7.3 |
| | September | NA | 49.6 | NA | 7.4 |
| | October | NA | 49.3 | NA | 7.5 |
| | November | NA | 49.3 | NA | 7.2 |
| | December | NA | 49.2 | NA | 7.5 |
| 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 |

*See Explanatory Note 13.

Sources: FEA for January through December 1974; Lundberg Survey, Inc., for January 1975 forward.

Average Selling Prices and Margins for Major and Independent Retail Dealers – October 1976

(Cents per gallon, including tax)

Truck Stops

| | Selling Price | Margin |
|-------------------------|----------------------|---------------|
| Major | 53.5 | 5.5 |
| Independent | 51.3 | 6.9 |
| National Average | 52.4 | 5.8 |

Service Stations

| | Selling Price | Margin |
|-------------------------|----------------------|---------------|
| Major | 55.2 | 6.0 |
| Independent | 51.6 | 7.2 |
| National Average | 53.1 | 6.5 |

Source: Lundberg Survey, Inc.

Heating Oil

Residential Heating Oil Prices

| | | Average Selling Price* | Average Purchase Price* | Average Dealer Margin* |
|------------------|----------------|------------------------------|-------------------------------|------------------------------|
| Cents per gallon | | | | |
| 1974 | January | 31.1 | 23.4 | 7.7 |
| | February | 32.8 | 25.4 | 7.4 |
| | March | 33.8 | 25.9 | 7.9 |
| | April | 34.0 | 25.9 | 8.1 |
| | May | 35.1 | 26.8 | 8.3 |
| | June | 35.3 | 27.5 | 7.8 |
| | July | 35.2 | 28.1 | 7.1 |
| | August | 35.8 | 28.1 | 7.7 |
| | September | 36.3 | 28.7 | 7.6 |
| | October | 35.6 | 28.9 | 6.7 |
| | November | 37.9 | 29.1 | 8.8 |
| | December | 36.9 | 28.5 | 8.4 |
| | 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 | 40.1 | 32.4 | 7.7 |
| | February | 40.1 | 32.4 | 7.7 |
| | March | NA | NA | NA |
| | April | NA | NA | NA |
| | May | NA | NA | NA |
| | June | 39.3 | NA | NA |
| | July | 39.3 | NA | NA |
| | August | 39.8 | NA | NA |
| | September | 40.2 | NA | NA |

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

NA=Not available.

Source: FEA.

Residential Heating Oil Prices by Region

| | | New England | Mid Atlantic | Southeast | East North Central | East South Central | West North Central | West South Central | Mountain | West Coast |
|------|-----------|------------------|--------------|-----------|--------------------|--------------------|--------------------|--------------------|----------|------------|
| | | Cents per gallon | | | | | | | | |
| 1974 | January | 31.9 | 31.6 | 30.8 | 30.3 | 29.8 | 31.3 | NA | 30.4 | 30.5 |
| | February | 33.8 | 33.5 | 32.8 | 30.9 | 32.0 | 32.9 | NA | 37.2 | 32.8 |
| | March | 31.9 | 33.7 | 33.9 | 34.2 | 30.6 | 34.5 | NA | NA | NA |
| | April | 34.3 | 34.8 | 32.5 | 33.5 | 33.7 | 30.1 | NA | 34.2 | 32.6 |
| | May | 34.8 | 35.6 | 36.2 | 34.2 | 34.4 | 32.6 | NA | 34.8 | 37.8 |
| | June | 35.9 | 36.2 | 35.8 | 34.9 | 31.1 | 33.6 | NA | 35.9 | 39.1 |
| | July | 35.2 | 35.5 | 35.6 | 34.4 | 30.2 | 34.9 | NA | 36.1 | 36.3 |
| | August | 36.3 | 36.1 | 37.8 | 35.1 | 33.7 | 35.2 | NA | NA | 35.9 |
| | September | 37.2 | 36.5 | 36.1 | 35.0 | 33.6 | 35.8 | NA | 32.3 | 35.1 |
| | October | 36.7 | 35.9 | 36.9 | 33.3 | 34.1 | 33.8 | NA | 35.6 | 36.3 |
| | November | 39.0 | 38.7 | 37.4 | 36.4 | 35.3 | 35.6 | NA | 37.3 | 36.4 |
| | December | 38.3 | 38.7 | 36.8 | 34.2 | 34.7 | 33.5 | NA | 35.8 | 33.9 |
| 1975 | January | 40.2 | 38.9 | 36.5 | 33.2 | 34.7 | 34.0 | NA | 37.5 | 38.0 |
| | February | 39.2 | 38.4 | 36.8 | 33.4 | 34.7 | 33.3 | NA | 36.6 | 37.7 |
| | March | 38.0 | 37.8 | 36.4 | 34.2 | 33.2 | 34.3 | NA | NA | 36.8 |
| | April | 37.4 | 36.8 | 36.8 | 33.2 | 33.7 | 34.5 | NA | 38.9 | 36.8 |
| | May | 37.6 | 36.9 | 36.4 | 35.1 | 34.7 | 35.4 | NA | 37.0 | 37.8 |
| | June | 37.7 | 37.7 | 36.4 | 35.8 | NA | 35.9 | NA | 37.6 | 37.6 |
| | July | 37.9 | 36.9 | 36.9 | 36.4 | 34.7 | 36.8 | NA | NA | 38.8 |
| | August | 38.8 | 38.2 | 37.9 | 36.3 | 35.7 | 36.3 | NA | 41.3 | 39.3 |
| | September | 39.4 | 38.7 | 37.6 | 36.5 | 35.7 | 36.8 | NA | 38.9 | 40.1 |
| | October | 40.3 | 39.9 | 38.3 | 37.4 | 36.6 | 37.9 | NA | 39.0 | 41.0 |
| | November | 41.0 | 39.6 | 38.7 | 37.9 | NA | 38.1 | NA | 40.2 | 41.3 |
| | December | 41.0 | 41.1 | 39.0 | 38.5 | 34.1 | 38.0 | NA | 44.8 | 40.9 |
| 1976 | January | 41.3 | 40.6 | 39.9 | 38.6 | NA | 39.0 | NA | 40.2 | 42.0 |
| | February | 41.1 | 41.6 | 39.2 | 38.5 | 37.2 | 38.9 | NA | NA | 40.8 |

NA=Not available.

Source: FEA.

Average Distributor Purchase Prices for Heating Oil by Region

| | | New England | Mid Atlantic | Southeast | East North Central | East South Central | West North Central | West South Central | Mountain | West Coast |
|-------------|-----------|------------------|--------------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|----------|------------|
| | | Cents per gallon | | | | | | | | |
| 1974 | January | 22.3 | 23.4 | 23.3 | 23.8 | 23.5 | 24.0 | NA | 22.5 | 23.0 |
| | February | 24.9 | 25.5 | 25.3 | 24.8 | 25.2 | 26.4 | NA | 29.7 | 25.3 |
| | March | 24.9 | 25.0 | 26.3 | 25.6 | 24.0 | 27.0 | NA | NA | NA |
| | April | 25.7 | 26.0 | 26.0 | 27.1 | 26.3 | 24.0 | NA | 26.8 | 26.0 |
| | May | 26.3 | 27.0 | 27.5 | 27.3 | 27.4 | 25.8 | NA | 27.1 | 26.2 |
| | June | 27.5 | 27.6 | 27.8 | 29.0 | 25.4 | 27.4 | NA | 27.3 | 28.0 |
| | July | 28.1 | 28.2 | 28.3 | 27.5 | 25.2 | 28.5 | NA | 28.2 | 29.1 |
| | August | 28.1 | 28.2 | 27.9 | 27.5 | 29.3 | 28.8 | NA | NA | 28.2 |
| | September | 29.2 | 28.9 | 28.5 | 27.8 | 28.2 | 28.4 | NA | 29.3 | 28.8 |
| | October | 29.9 | 29.4 | 28.8 | 27.7 | 28.3 | 27.4 | NA | 29.9 | 29.2 |
| | November | 29.8 | 29.7 | 28.8 | 27.8 | 29.1 | 27.6 | NA | 27.9 | 29.8 |
| | December | 29.3 | 29.4 | 28.4 | 27.4 | 28.8 | 26.7 | NA | 29.3 | 27.0 |
| 1975 | January | 30.3 | 29.7 | 28.5 | 27.2 | 28.8 | 27.5 | NA | 28.5 | 29.7 |
| | February | 29.6 | 29.3 | 28.6 | 27.2 | 28.8 | 27.3 | NA | 29.4 | 28.5 |
| | March | 29.5 | 29.3 | 29.1 | 28.1 | 26.8 | 28.1 | NA | NA | 27.6 |
| | April | 29.4 | 29.5 | 29.7 | 28.3 | 27.8 | 29.5 | NA | 29.0 | 28.5 |
| | May | 30.5 | 30.0 | 30.0 | 30.0 | 28.8 | 29.4 | NA | 30.9 | 28.7 |
| | June | 30.4 | 30.2 | 30.6 | 30.5 | NA | 30.7 | NA | 31.8 | 29.0 |
| | July | 30.7 | 30.1 | 29.9 | 31.6 | 28.8 | 31.4 | NA | NA | 30.4 |
| | August | 31.6 | 30.8 | 30.9 | 31.2 | 29.8 | 30.2 | NA | 31.6 | 32.8 |
| | September | 31.4 | 30.9 | 30.7 | 30.6 | 29.8 | 30.6 | NA | 31.9 | 31.4 |
| | October | 32.0 | 31.9 | 31.3 | 31.5 | 31.1 | 31.4 | NA | 34.4 | 32.5 |
| | November | 32.5 | 31.7 | 32.0 | 32.1 | NA | 32.0 | NA | 34.1 | 32.3 |
| | December | 32.9 | 32.7 | 31.8 | 32.0 | 29.4 | 31.4 | NA | 33.9 | 32.8 |
| 1976 | January | 32.5 | 32.5 | 31.9 | 32.3 | NA | 32.3 | NA | 33.6 | 32.9 |
| | February | 32.8 | 32.9 | 31.6 | 31.9 | 31.3 | 32.1 | NA | NA | 31.1 |

NA=Not available.
Source: FEA.

Residual Fuel Oil

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 | 11.75 | 12.06 | 12.39 | 10.60 | 11.68 | 9.57 | 10.23 | 10.53 | 11.35 | 8.75 | 10.35 |
| | February | 10.49 | 11.59 | 12.42 | 12.78 | 10.88 | 11.86 | 9.70 | 10.36 | 10.73 | 11.52 | 8.64 | 10.27 |
| | March | 10.23 | 11.89 | 12.34 | 12.81 | 11.05 | 11.85 | 9.57 | 10.22 | 10.74 | 11.43 | 8.59 | 10.33 |
| | April | 10.30 | 11.58 | 11.49 | 12.34 | 10.93 | 11.77 | 9.53 | 10.29 | 10.38 | 11.43 | 8.79 | 10.12 |
| | May | 9.87 | 11.70 | 11.04 | 11.87 | 10.61 | 11.40 | 9.48 | 9.89 | 10.11 | 10.95 | 8.75 | 10.65 |
| | June | 9.97 | 11.23 | 11.21 | 12.23 | 10.17 | 11.35 | 9.74 | 10.01 | 10.12 | 11.04 | 8.58 | 10.09 |
| | July* | 9.69 | 11.61 | 11.73 | 12.12 | 10.23 | 11.38 | 9.84 | 10.04 | 10.26 | 11.04 | 9.22 | 10.34 |

*Preliminary 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.

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 | 31.0 | 32.1 | 29.5 |
| | September | 41.2 | 39.9 | 30.5 | 31.5 | 29.6 |
| | October | 41.1 | 41.2 | 30.5 | 31.7 | 30.0 |
| | November | 39.7 | 42.1 | 30.7 | 31.6 | 30.2 |
| | December | 40.9 | 40.9 | 31.0 | 31.9 | 30.5 |
| 1976 | January | 41.4 | 41.2 | 30.9 | 30.6 | 31.3 |
| | February | 41.2 | 42.0 | 31.2 | 31.1 | 31.2 |
| | March | 41.1 | 41.9 | 31.4 | 31.2 | 30.7 |
| | April | 41.2 | 42.5 | 30.4 | 31.9 | 30.5 |
| | May | 42.1 | 43.1 | 31.0 | 33.0 | 30.2 |
| | June | 42.6 | 42.3 | 31.3 | 32.1 | 30.3 |
| | July** | 43.6 | 44.2 | 31.4 | 32.8 | 30.8 |

*Nearly all naphtha-type aviation 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.

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 | — | 15 |
| | May | 57 | 29 | — | 14 |
| | June | 56 | 29 | — | 15 |
| | July | 56 | 30 | — | 14 |
| | August | 56 | 30 | — | 14 |
| | | Lower Tier | Upper Tier | Stripper | |
| September** | 53 | 34 | ***13 | | |

*Totals do not add to 100 due to rounding.

**Preliminary.

***The preliminary stripper oil percentage reported by purchasers may understate actual stripper oil production due to the extension of the certification requirement for stripper oil production through November 30, 1976. The figure will not be finalized until reports are received after November 30, 1976, and purchasers have had sufficient time to receive all certifications from stripper oil producers.

Sources: January 1975 through January 1976—FEA Crude Petroleum Production Monthly Report; February 1976 forward—FEA Domestic Crude Oil Purchasers Report for Lower Tier percentages, FEA estimates for Upper Tier and Stripper percentages.

Crude Oil (Continued)

Entitlement Prices*

| | | Dollars |
|------|-----------|---------|
| 1974 | November | 5.00 |
| | December | 5.00 |
| 1975 | January | 6.00 |
| | February | 6.75 |
| | March | 7.31 |
| | April | 7.29 |
| | May | 7.39 |
| | June | 7.82 |
| | July | 8.13 |
| | August | 8.31 |
| | September | 8.31 |
| | October | 8.62 |
| | November | 8.94 |
| | December | 8.55 |
| 1976 | January | 8.09 |
| | February | 7.85 |
| | March | 7.89 |
| | April | 7.85 |
| | May | 7.82 |
| | June | 7.91 |
| | July | 7.80 |
| | August | 8.02 |
| | September | 7.80 |

*See definitions.

Source: FEA.

Refiner Acquisition Cost of Crude Petroleum*

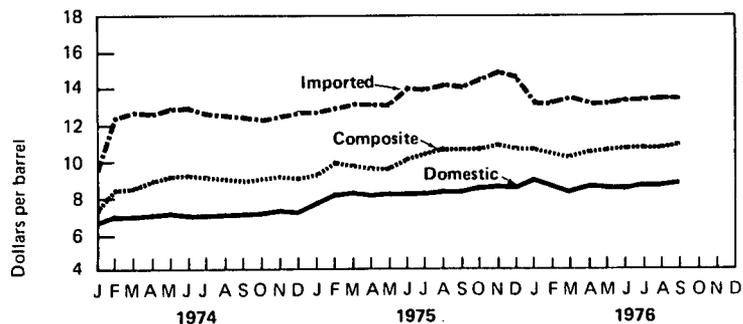
| | | Domestic | Imported | Composite |
|--------------------|----------------|-------------|--------------|--------------|
| Dollars per barrel | | | | |
| 1974 | January | 6.72 | 9.59 | 7.46 |
| | February | 7.08 | 12.45 | 8.57 |
| | March | 7.05 | 12.73 | 8.68 |
| | April | 7.21 | 12.72 | 9.13 |
| | May | 7.26 | 13.02 | 9.44 |
| | June | 7.20 | 13.06 | 9.45 |
| | July | 7.19 | 12.75 | 9.30 |
| | August | 7.20 | 12.68 | 9.17 |
| | September | 7.18 | 12.53 | 9.13 |
| | October | 7.26 | 12.44 | 9.22 |
| | November | 7.46 | 12.53 | 9.41 |
| | December | 7.39 | 12.82 | 9.28 |
| | AVERAGE | 7.18 | 12.52 | 9.07 |
| 1975 | January | 7.78 | 12.77 | 9.48 |
| | February | 8.29 | 13.05 | 10.09 |
| | March | 8.38 | 13.28 | 9.91 |
| | April | 8.23 | 13.26 | 9.83 |
| | May | 8.33 | 13.27 | 9.79 |
| | June | 8.33 | 14.15 | 10.33 |
| | July | 8.37 | 14.03 | 10.57 |
| | August | 8.48 | 14.25 | 10.81 |
| | September | 8.49 | 14.04 | 10.79 |
| | October | 8.68 | 14.66 | 10.85 |
| | November | 8.67 | 15.04 | 11.05 |
| | December | 8.66 | 14.81 | 10.98 |
| | 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 | R8.72 | R13.51 | R10.97 |
| | August | R8.65 | R13.58 | R10.78 |
| | September | **8.93 | **13.50 | **11.08 |

*See Explanatory Note 14.

**Preliminary data.

Source: FEA.

Crude Oil Refiner Acquisition Cost



Crude Oil (Continued)

Estimated Landed Cost of Imported Crude Petroleum From Selected Countries*

| | | Algeria | Canada | Indonesia | Iran | Nigeria | Saudi Arabia | U.A. Emirates | Venezuela |
|------|-----------|--------------------|--------|-----------|-------|---------|--------------|---------------|-----------|
| | | Dollars per barrel | | | | | | | |
| 1974 | January | NA | 6.70 | NA | 8.53 | 12.13 | NA | NA | 10.28 |
| | February | NA | 10.90 | NA | 12.11 | 12.74 | NA | NA | 11.31 |
| | March | NA | 11.14 | 12.13 | 13.02 | 13.26 | NA | NA | 11.78 |
| | April | 13.63 | 11.02 | 12.49 | 12.83 | 13.67 | 11.59 | NA | 11.38 |
| | May | 14.67 | 11.47 | 12.95 | 13.84 | 13.83 | 11.53 | NA | 11.28 |
| | June | 14.43 | 12.56 | 13.21 | 13.44 | 13.03 | 11.32 | 13.06 | 10.39 |
| | July | 13.65 | 12.65 | 13.77 | 13.02 | 12.75 | 11.97 | 12.34 | 10.64 |
| | August | 13.96 | 12.49 | 14.38 | 12.31 | 12.70 | 12.16 | 12.69 | 11.20 |
| | September | 13.83 | 12.51 | 13.42 | 11.87 | 12.28 | 11.45 | NA | 11.01 |
| | October | 13.20 | 12.53 | 14.24 | 12.07 | 12.12 | 11.51 | 12.84 | 10.95 |
| | November | 13.43 | 12.33 | 13.45 | 12.15 | 12.83 | 12.15 | 13.54 | 11.15 |
| | December | 13.08 | 12.15 | 14.15 | 11.63 | 12.88 | 11.75 | 14.59 | 11.37 |
| 1975 | January | 12.72 | 12.43 | 13.30 | 12.11 | 12.07 | 12.07 | 13.14 | 11.37 |
| | February | 12.11 | 12.15 | 13.52 | 11.86 | 12.18 | 11.94 | 12.67 | 11.56 |
| | March | 12.46 | 12.79 | 13.94 | 12.08 | 12.56 | 11.78 | 13.40 | 11.66 |
| | April | 12.36 | 12.95 | 13.71 | 12.34 | 12.46 | 12.16 | 12.55 | 11.61 |
| | May | 12.41 | 12.08 | 13.71 | 11.93 | 12.34 | 12.27 | 13.29 | 11.54 |
| | June | 12.37 | 11.90 | 13.73 | 12.51 | 12.49 | 11.93 | 12.48 | 11.51 |
| | July | 12.69 | 12.15 | 13.98 | 11.83 | 12.37 | 12.08 | 12.78 | 11.46 |
| | August | 12.68 | 12.27 | 13.85 | 12.17 | 12.32 | 12.10 | 12.60 | 11.44 |
| | September | 12.52 | 12.63 | 13.75 | 11.97 | 12.42 | 12.17 | 12.49 | 11.42 |
| | October | 13.45 | 13.02 | 14.00 | 12.27 | 13.18 | 12.64 | 12.85 | 12.08 |
| | November | 13.28 | 14.00 | 13.81 | 12.47 | 13.37 | 12.58 | 13.23 | 12.38 |
| | December | 13.46 | 13.96 | 13.92 | 13.01 | 13.57 | 12.93 | 13.21 | 12.31 |
| 1976 | January | 13.56 | 12.95 | 13.89 | 13.01 | 13.61 | 13.18 | 13.50 | 11.60 |
| | February | 13.57 | 13.24 | 13.94 | 12.87 | 13.52 | 13.21 | 13.36 | 12.09 |
| | March | 13.83 | 13.30 | 13.94 | 12.77 | 13.62 | 13.18 | 13.37 | 11.71 |
| | April | 13.73 | 13.61 | 13.78 | 12.91 | 13.60 | 13.11 | 13.18 | 11.95 |
| | May | 13.47 | 13.62 | 13.84 | 12.82 | 13.62 | 13.05 | 13.39 | 11.61 |
| | June | 13.75 | 14.19 | 13.84 | 13.00 | 13.78 | 13.14 | 13.09 | 11.55 |
| | July | 13.77 | 13.79 | 13.80 | 12.76 | 13.81 | 13.02 | 13.45 | 11.44 |
| | August | 13.91 | 13.78 | 13.78 | 13.09 | 13.87 | 13.03 | 13.23 | 11.77 |
| | September | 14.03 | 13.70 | 13.80 | 12.78 | 13.82 | 12.87 | 13.44 | 11.98 |

*See Explanatory Note 15.

Source: FEA.

Unrecouped Costs for Refined Products for 30 Largest Refiners

| | | Distillate * | Motor Gasoline | Aviation Jet Fuel** | Other Products | Total |
|---------------------|-----------|--------------|-------------------|---------------------------|-------------------|--------|
| Millions of dollars | | | | | | |
| 1974 | January | 116 | 91 | | 43 | 250 |
| | February | 184 | 87 | | 175 | 446 |
| | March | 198 | 85 | | 237 | 520 |
| | April | 223 | 215 | | 346 | 783 |
| | May | 261 | 255 | | 446 | 963 |
| | June | 326 | 394 | | 630 | 1,350 |
| | July | 355 | 325 | | 648 | 1,327 |
| | August | 392 | 349 | | 665 | 1,405 |
| | September | 409 | 431 | | 650 | 1,490 |
| | October | 295 | 424 | | 531 | 1,250 |
| | November | 245 | 475 | | 595 | 1,315 |
| | December | 209 | 413 | | 492 | 1,114 |
| 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 | — | R587 | R129 | R384 | R1,100 |
| | August | — | 679 | 125 | 352 | 1,156 |

*Includes 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.

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

R=Revised data.

Source: FEA.

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 | | | | | | | |
| 1974 | January | 24.3 | 42.7 | 25.7 | 48.1 | 55.0 | 55.1 |
| | February | 25.4 | 43.2 | 26.8 | 49.8 | 56.4 | 56.4 |
| | March | 25.7 | 43.2 | 27.0 | 50.8 | 56.9 | 56.9 |
| | April | 25.8 | 46.4 | 27.4 | 49.3 | 57.6 | 57.4 |
| | May | 25.7 | 49.3 | 27.5 | 49.9 | 58.6 | 57.9 |
| | June | 26.0 | 47.7 | 27.5 | 50.8 | 59.4 | 58.5 |
| | July | 26.3 | 58.7 | 28.6 | 52.5 | 62.0 | 61.1 |
| | August | 26.1 | 57.5 | 28.4 | 55.2 | 64.4 | 63.5 |
| | September | 27.3 | 58.8 | 29.5 | 54.7 | 65.2 | 64.3 |
| | October | 27.5 | 58.9 | 29.9 | 56.3 | 64.4 | 64.0 |
| | November | 28.5 | 70.9 | 31.7 | 58.7 | 66.8 | 66.6 |
| | December | 32.6 | 74.5 | 35.8 | 60.3 | 67.2 | 67.4 |
| 1975 | January | 29.8 | 104.0 | 35.2 | 67.6 | 71.1 | 71.4 |
| | February | 29.5 | 105.8 | 35.2 | 70.1 | 74.1 | 74.4 |
| | March | 31.6 | 102.5 | 37.0 | 70.4 | 77.8 | 77.9 |
| | April | 32.9 | 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 | 98.3 | 40.2 | 72.2 | 85.2 | 84.0 |
| | July | 36.9 | 101.1 | 41.8 | 73.9 | 84.7 | 83.6 |
| | August | 35.5 | 141.0 | 43.3 | 73.4 | 85.6 | 84.3 |
| | September | 36.5 | 141.2 | 44.5 | 72.8 | 85.9 | 84.6 |
| | October | 36.1 | 140.1 | 44.3 | 77.2 | 86.1 | 85.6 |
| | November | 36.5 | 162.5 | 46.7 | 77.8 | 86.9 | 86.6 |
| | December | 35.9 | 161.8 | 46.0 | 81.1 | 79.6 | 80.1 |
| 1976 | January | 38.6 | 164.0 | 48.6 | 87.5 | 88.7 | 89.2 |
| | February | 39.5 | 165.3 | 49.5 | 87.7 | 92.3 | 92.7 |
| | March | 39.5 | 164.5 | 49.7 | 86.4 | 89.8 | 90.2 |
| | April | 40.6 | 164.3 | 51.2 | 88.6 | 100.2 | 99.7 |
| | May | 42.4 | 165.1 | 52.5 | 86.9 | 98.3 | 97.6 |
| | June | 43.7 | 166.6 | 53.7 | 89.5 | 98.2 | 98.5 |

*Represents direct sales by pipelines 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.

Source: Federal Power Commission.

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

| | | Price |
|------|-----------|----------------------------------|
| | | Cents per thousand cubic feet |
| 1974 | January | 113.3 |
| | February | 115.2 |
| | March | 116.9 |
| | April | 118.2 |
| | May | 119.9 |
| | June | 120.3 |
| | July | 122.0 |
| | August | 124.2 |
| | September | 125.6 |
| | October | 127.4 |
| | November | 131.4 |
| | December | 134.2 |
| 1975 | January | 137.9 |
| | February | 141.3 |
| | March | 142.7 |
| | April | 147.1 |
| | May | 150.1 |
| | June | 152.1 |
| | July | 151.1 |
| | August | 151.8 |
| | September | 155.7 |
| | October | 156.3 |
| | November | 162.3 |
| | December | 166.2 |
| 1976 | January | 167.4 |
| | February | 171.1 |
| | March | 172.9 |
| | April | 174.2 |
| | May | 176.6 |
| | June | 178.9 |
| | July | 180.2 |
| | August | 181.5 |
| | September | 186.7 |
| | October | 189.4 |

Source: Bureau of Labor Statistics.

Utility Fossil Fuels

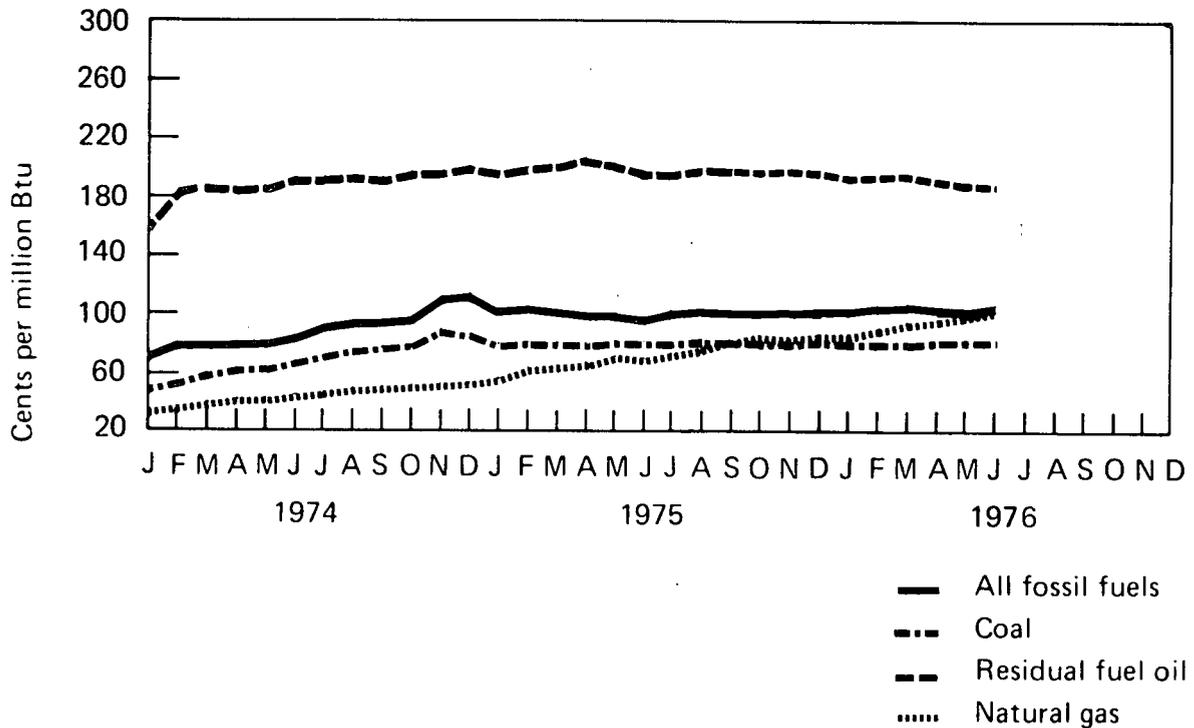
COST OF FOSSIL FUELS DELIVERED TO STEAM ELECTRIC UTILITY PLANTS

All Fossil Fuels*

| Region | Cents per million Btu | | | | | | | | | | | | |
|----------------------|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | 1975 | | | | | | 1976 | | | | | | |
| | JUNE | JULY | AUG | SEPT | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUNE |
| New England | 192.7 | 189.5 | 188.0 | 182.9 | 182.3 | 181.2 | 177.6 | 181.3 | 184.6 | 182.3 | 184.3 | 174.6 | 174.2 |
| Middle Atlantic | 140.4 | 154.5 | 144.5 | 132.7 | 133.7 | 140.8 | 140.8 | 143.6 | 142.2 | 136.8 | 136.9 | 136.6 | 137.9 |
| East North Central | 87.5 | 89.2 | 90.1 | 88.2 | 87.0 | 89.5 | 92.6 | 89.9 | 90.0 | 88.3 | 91.3 | 92.1 | 93.8 |
| West North Central | 62.8 | 63.0 | 62.7 | 63.9 | 62.6 | 62.5 | 65.7 | 72.7 | 67.4 | 67.5 | 67.2 | 68.9 | 69.1 |
| South Atlantic | 122.5 | 126.8 | 125.2 | 124.4 | 118.4 | 117.0 | 121.3 | 122.0 | 122.7 | 118.3 | 119.2 | 120.0 | 118.9 |
| East South Central | 85.3 | 86.2 | 84.5 | 85.2 | 83.8 | 84.5 | 85.5 | 88.5 | 88.0 | 87.4 | 90.4 | 90.9 | 90.0 |
| West South Central | 71.2 | 76.0 | 77.5 | 79.1 | 79.6 | 77.0 | 82.8 | 88.0 | 88.2 | 91.7 | 93.5 | 94.6 | 98.6 |
| Mountain | 50.9 | 51.8 | 50.4 | 55.0 | 50.1 | 52.3 | 55.6 | 50.4 | 48.3 | 58.4 | 56.1 | 50.1 | 53.0 |
| Pacific | 154.5 | 147.1 | 171.3 | 174.5 | 177.2 | 206.6 | 222.7 | 214.0 | 206.5 | 211.3 | 196.2 | 180.3 | 177.2 |
| NATIONAL AVG. | 99.3 | 102.5 | 103.8 | 103.7 | 101.2 | 102.4 | 106.9 | 107.3 | 107.6 | 107.8 | 106.4 | 105.8 | 107.0 |

*See Explanatory Note 16.

National Average



Coal

| Cents per million Btu Region | 1975 | | | | | | | 1976 | | | | | |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | JUNE | JULY | AUG | SEPT | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUNE |
| New England | 116.5 | 119.2 | 127.3 | 120.4 | 128.7 | 127.6 | 120.8 | 124.2 | 122.7 | 119.4 | 124.8 | 127.0 | 122.3 |
| Middle Atlantic | 101.6 | 105.5 | 103.8 | 98.6 | 101.8 | 106.1 | 104.0 | 102.8 | 103.4 | 101.7 | 100.2 | 101.7 | 102.5 |
| East North Central | 82.4 | 82.3 | 84.3 | 83.4 | 82.1 | 83.8 | 85.7 | 83.1 | 83.1 | 82.7 | 85.0 | 86.8 | 86.6 |
| West North Central | 58.9 | 60.8 | 60.7 | 61.3 | 61.2 | 60.6 | 58.2 | 59.2 | 60.2 | 62.3 | 64.1 | 65.8 | 64.7 |
| South Atlantic | 98.4 | 101.6 | 101.4 | 102.4 | 98.6 | 98.5 | 100.1 | 98.3 | 99.2 | 99.7 | 100.8 | 100.8 | 100.7 |
| East South Central | 80.5 | 79.5 | 79.1 | 80.8 | 80.7 | 82.3 | 81.9 | 83.9 | 83.5 | 82.6 | 83.4 | 85.1 | 84.5 |
| West South Central | 21.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 26.4 | 26.4 | 26.4 | 26.4 | 26.4 | 27.3 |
| Mountain | 31.0 | 33.1 | 32.2 | 32.8 | 31.7 | 33.5 | 36.1 | 34.1 | 33.0 | 42.4 | 34.6 | 32.2 | 35.9 |
| Pacific | 58.4 | 58.2 | 58.8 | 58.9 | 58.4 | 59.5 | 58.9 | 72.7 | 76.0 | 74.5 | 75.5 | 75.7 | 75.2 |
| NATIONAL AVG. | 81.4 | 80.8 | 82.1 | 82.1 | 81.5 | 81.7 | 82.2 | 80.2 | 81.4 | 83.3 | 83.7 | 84.6 | 84.6 |

Residual Fuel Oil*

| Cents per million Btu Region | 1975 | | | | | | | 1976 | | | | | |
|---------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | JUNE | JULY | AUG | SEPT | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUNE |
| New England | 201.7 | 196.3 | 192.6 | 187.9 | 184.1 | 184.8 | 181.0 | 182.5 | 185.4 | 183.5 | 185.7 | 170.0 | 177.8 |
| Middle Atlantic | 201.5 | 200.4 | 199.3 | 191.2 | 192.2 | 191.5 | 191.6 | 191.3 | 179.9 | 191.8 | 197.1 | 190.3 | 187.3 |
| East North Central | 168.3 | 185.2 | 191.7 | 205.9 | 189.7 | 211.4 | 192.4 | 197.0 | 193.4 | 200.9 | 198.4 | 202.8 | 211.8 |
| West North Central | 165.5 | 161.1 | 157.5 | 150.3 | 153.5 | 161.6 | 157.1 | 173.1 | 162.2 | 153.4 | 153.0 | 145.6 | 148.8 |
| South Atlantic | 189.3 | 185.4 | 183.8 | 181.5 | 180.7 | 179.8 | 173.0 | 174.6 | 177.5 | 178.6 | 179.6 | 171.3 | 171.9 |
| East South Central | 165.5 | 167.8 | 175.0 | 174.4 | 175.5 | 180.4 | 171.4 | 172.8 | 173.7 | 174.3 | 176.0 | 170.9 | 166.9 |
| West South Central | 182.0 | 186.2 | 185.2 | 174.4 | 168.4 | 189.2 | 187.9 | 195.3 | 190.7 | 183.0 | 187.4 | 182.0 | 176.4 |
| Mountain | 199.0 | 209.1 | 221.3 | 223.7 | 210.3 | 195.8 | 202.3 | 206.8 | 203.5 | 205.0 | 220.8 | 206.4 | 212.4 |
| Pacific | 245.6 | 253.8 | 258.1 | 257.9 | 255.5 | 261.9 | 259.7 | 246.6 | 240.7 | 240.3 | 232.7 | 229.2 | 229.1 |
| NATIONAL AVG. | 200.0 | 198.9 | 200.8 | 200.5 | 197.0 | 200.5 | 198.1 | 194.1 | 195.4 | 197.7 | 196.7 | 188.1 | 187.4 |

Natural Gas**

| Cents per million Btu Region | 1975 | | | | | | | 1976 | | | | | |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|
| | JUNE | JULY | AUG | SEPT | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUNE |
| New England | 121.7 | 122.1 | 154.1 | 137.7 | 135.6 | 133.8 | 157.7 | 166.1 | 166.1 | 151.6 | 134.5 | 144.0 | 153.7 |
| Middle Atlantic | 92.7 | 91.2 | 87.6 | 87.6 | 90.5 | 103.1 | 105.0 | 107.8 | 195.8 | 106.3 | 150.3 | 111.5 | 108.0 |
| East North Central | 111.6 | 103.4 | 104.6 | 114.0 | 120.2 | 128.3 | 136.8 | 126.8 | 124.4 | 125.0 | 127.7 | 135.3 | 139.8 |
| West North Central | 58.1 | 59.2 | 56.9 | 57.8 | 55.4 | 55.8 | 55.9 | 56.1 | 61.6 | 61.5 | 68.0 | 73.4 | 78.1 |
| South Atlantic | 72.2 | 68.9 | 69.7 | 76.4 | 79.6 | 78.5 | 80.8 | 75.1 | 82.0 | 75.5 | 78.2 | 84.0 | 83.1 |
| East South Central | 77.0 | 91.0 | 95.9 | 110.3 | 105.5 | 120.2 | 146.6 | 156.6 | 157.4 | 147.5 | 148.0 | 128.6 | 123.0 |
| West South Central | 69.2 | 72.7 | 75.7 | 77.9 | 79.7 | 77.6 | 80.3 | 83.5 | 87.3 | 90.8 | 92.3 | 94.0 | 98.1 |
| Mountain | 69.6 | 71.8 | 71.1 | 78.6 | 82.0 | 86.2 | 90.4 | 86.2 | 85.5 | 87.4 | 90.4 | 87.4 | 89.5 |
| Pacific | 84.1 | 89.7 | 111.1 | 115.2 | 122.4 | 136.9 | 151.1 | 141.2 | 151.6 | 149.5 | 152.6 | 147.3 | 147.6 |
| NATIONAL AVG. | 71.3 | 74.8 | 79.1 | 83.8 | 85.5 | 83.5 | 86.1 | 86.5 | 92.1 | 94.9 | 97.4 | 100.8 | 104.4 |

*See Explanatory Note 16.

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

Source: Federal Power Commission.

Utility Fossil Fuels (Continued)

U.S. Average Delivered Prices of Coal at Utilities

| | | Contract | Spot |
|--------------------------|-----------|----------|-------|
| In dollars per short ton | | | |
| 1974 | January | 9.83 | 17.02 |
| | February | 10.40 | 20.57 |
| | March | 10.63 | 22.54 |
| | April | 11.28 | 23.70 |
| | May | 11.80 | 24.21 |
| | June | 11.87 | 25.84 |
| | July | 12.05 | 27.99 |
| | August | 12.50 | 28.87 |
| | September | 12.89 | 30.64 |
| | October | 13.30 | 30.67 |
| | November | 14.16 | 31.95 |
| | December | 14.20 | 31.05 |
| 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 |

Source: Federal Power Commission.

Petroleum Consumption

Petroleum consumption trends during 1976 moved generally upward in the countries belonging to the International Energy Agency (IEA). France* consumed 10.1 percent more oil in the first 9 months of 1976 than in the same period a year ago. Consumption in West Germany rose 8.1 percent in the first 8 months of this year. Year-to-year increases were much more moderate in Canada (2.3 percent in 8 months) and Italy (0.8 percent in 9 months).

Crude Oil Production

Total world crude oil production rose by almost a million barrels a day in September to a new high of 58.1 million barrels a day. Arab members of the Organization of Petroleum Exporting Countries (OPEC) accounted for only about 200,000 barrels of the increase because a 400,000-barrel-per-day drop in Saudi Arabian production offset almost all the increases elsewhere, notably in Iraq and Kuwait. Iran's output rose over 600,000 barrels a day to almost full capacity and accounted for nearly all of the production increase in the non-Arab OPEC group. Only 7.1 percent of non-Arab OPEC crude oil capacity was not produced in September, compared with 24.8 percent of Arab OPEC capacity.

*Not a member of IEA.

Petroleum Consumption

Petroleum Consumption for Major Free World Industrialized Countries

| | | Total IEA* | Japan** | West Germany | France*** | United Kingdom | Canada | Italy† | Other IEA†† |
|------------------------------|------|------------|---------|-----------------|-----------|-------------------|--------|--------|----------------|
| Thousands of barrels per day | | | | | | | | | |
| 1974 | Jan | 33,700 | 4,273 | 2,556 | 2,523 | 2,045 | 1,823 | 1,755 | 3,962 |
| | Feb | 33,700 | 4,709 | 1,969 | 2,389 | 2,127 | 1,863 | 1,760 | 3,906 |
| | Mar | 31,200 | 4,508 | 2,173 | 2,249 | 2,133 | 1,659 | 1,579 | 3,044 |
| | Apr | 30,600 | 3,805 | 2,539 | 1,970 | 1,899 | 1,560 | 1,421 | 3,448 |
| | May | 30,000 | 3,718 | 2,403 | 1,915 | 1,704 | 1,577 | 1,349 | 3,523 |
| | June | 30,100 | 3,710 | 2,414 | 2,103 | 1,545 | 1,455 | 1,314 | 3,545 |
| | July | 30,000 | 3,574 | 2,548 | 1,703 | 1,531 | 1,534 | 1,368 | 3,096 |
| | Aug | 30,600 | 3,787 | 2,476 | 1,506 | 1,513 | 1,463 | 1,287 | 3,524 |
| | Sept | 30,700 | 3,868 | 2,473 | 1,996 | 1,663 | 1,415 | 1,527 | 3,730 |
| | Oct | 32,800 | 3,843 | 2,613 | 2,045 | 2,049 | 1,680 | 1,569 | 3,996 |
| | Nov | 33,000 | 4,076 | 2,432 | 2,260 | 2,108 | 1,714 | 1,580 | 3,739 |
| | Dec | 34,300 | 4,401 | 2,261 | 2,492 | 1,983 | 1,831 | 1,753 | 4,058 |
| | | AVG. | 31,775 | 4,019 | 2,408 | 2,094 | 1,857 | 1,630 | 1,521 |
| 1975 | Jan | 33,600 | 3,850 | 2,183 | 2,190 | 1,981 | 1,691 | 1,792 | 4,120 |
| | Feb | 33,600 | 4,242 | 2,455 | 2,243 | 1,906 | 1,872 | 1,767 | 4,274 |
| | Mar | 31,000 | 3,978 | 2,234 | 1,952 | 1,731 | 1,558 | 1,558 | 3,625 |
| | Apr | 30,800 | 3,448 | 2,431 | 2,202 | 1,826 | 1,592 | 1,530 | 3,932 |
| | May | 28,200 | 3,296 | 2,253 | 1,640 | 1,482 | 1,474 | 1,174 | 3,403 |
| | June | 28,800 | 3,325 | 2,106 | 1,642 | 1,414 | 1,550 | 1,289 | 3,505 |
| | July | 28,900 | 3,437 | 2,319 | 1,491 | 1,322 | 1,537 | 1,234 | 3,289 |
| | Aug | 28,700 | 3,397 | 2,360 | 1,300 | 1,208 | 1,444 | 1,105 | 3,419 |
| | Sept | 29,800 | 3,569 | 2,309 | 1,785 | 1,502 | 1,474 | 1,465 | 3,712 |
| | Oct | 30,500 | 3,584 | 2,328 | 1,914 | 1,704 | 1,555 | 1,679 | 3,306 |
| | Nov | 30,600 | 3,940 | 2,361 | 2,074 | 1,723 | 1,577 | 1,448 | 3,830 |
| | Dec | 34,600 | 4,519 | 2,502 | 2,653 | 1,821 | 1,855 | 1,600 | 4,316 |
| | | AVG. | 30,745 | 3,712 | 2,319 | 1,921 | 1,613 | 1,593 | 1,468 |
| 1976 | Jan | 34,700 | 4,143 | 2,459 | 2,432 | 1,680 | 1,748 | 1,748 | 4,378 |
| | Feb | 33,400 | 4,382 | 2,490 | 2,492 | 1,866 | 1,730 | 1,713 | 3,879 |
| | Mar | 32,300 | 4,286 | 2,742 | 2,372 | 1,879 | 1,788 | 1,621 | 2,745 |
| | Apr | 30,900 | 3,806 | 2,332 | 2,117 | 1,661 | 1,512 | 1,409 | 3,583 |
| | May | 29,200 | 3,440 | 2,314 | 1,796 | 1,418 | 1,532 | 1,238 | 3,261 |
| | June | 30,500 | 3,635 | 2,388 | 1,604 | 1,420 | 1,550 | 1,208 | 3,463 |
| | July | NA | 3,607 | R2,624 | 1,624 | 1,338 | 1,551 | R1,247 | NA |
| | Aug | NA | NA | 2,451 | R1,667 | NA | 1,577 | 1,247 | NA |
| | Sept | NA | NA | NA | 1,968 | NA | NA | 1,562 | NA |
| | | AVG. | 31,829 | 3,897 | 2,476 | 2,006 | 1,607 | 1,623 | 1,442 |

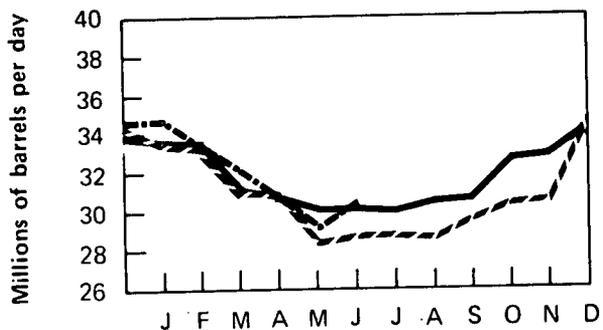
(Year to date)

Note: All recent figures are estimates.

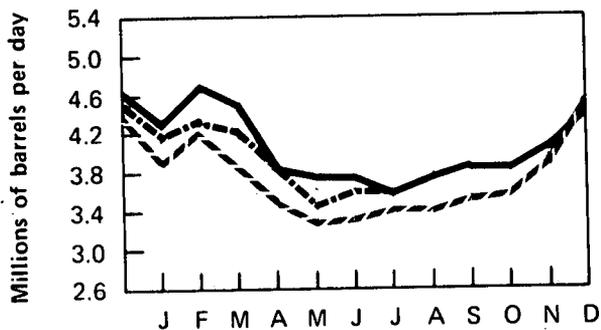
*The 19 signatory nations of the International Energy Agency (IEA) are: Austria, Belgium, Canada, Denmark, Federal Republic of Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States. Except for the United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

Excludes liquefied petroleum gases and condensates. *Not a member of IEA. †Principal products only. ††Excludes the United States. NA=Not available. R=Revised data. Source: Central Intelligence Agency.

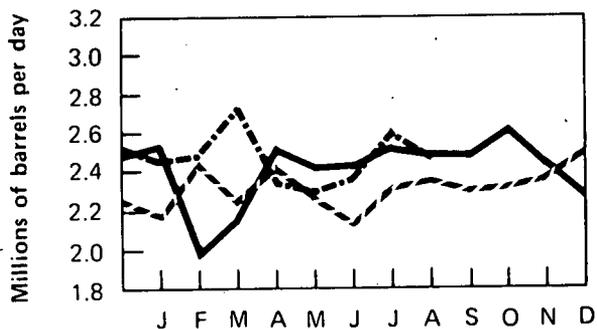
Total IEA



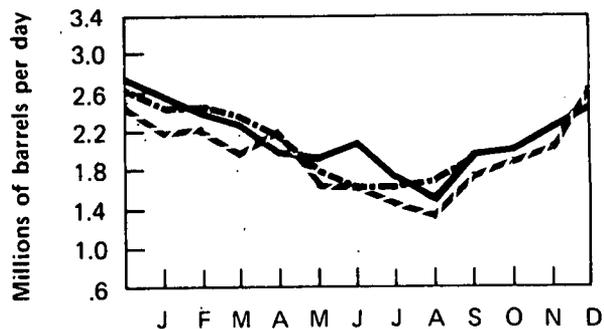
Japan*



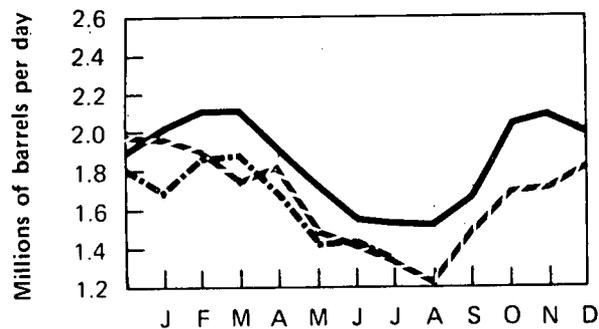
West Germany



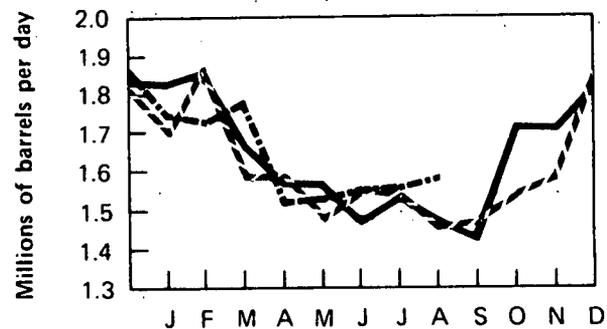
France**



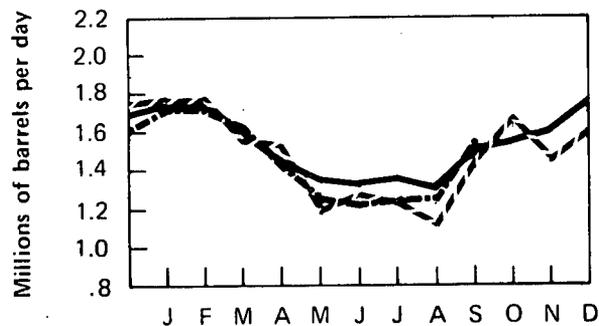
United Kingdom



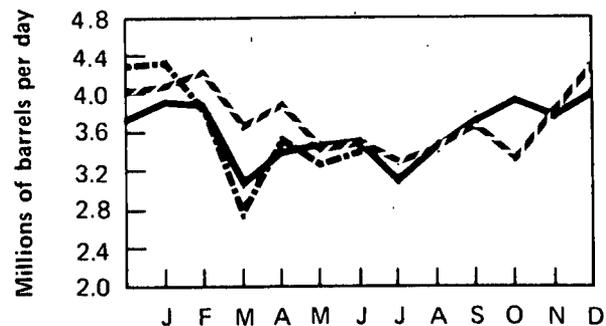
Canada



Italy***



Other IEA†



*Excludes liquefied petroleum gases and condensates.

**Not a member of IEA.

***Principal products only.

†Excludes the United States.

— 1974
 - - - 1975
 ... 1976

Crude Oil Production

Crude Oil Production for Major Petroleum Exporting Countries – September 1976

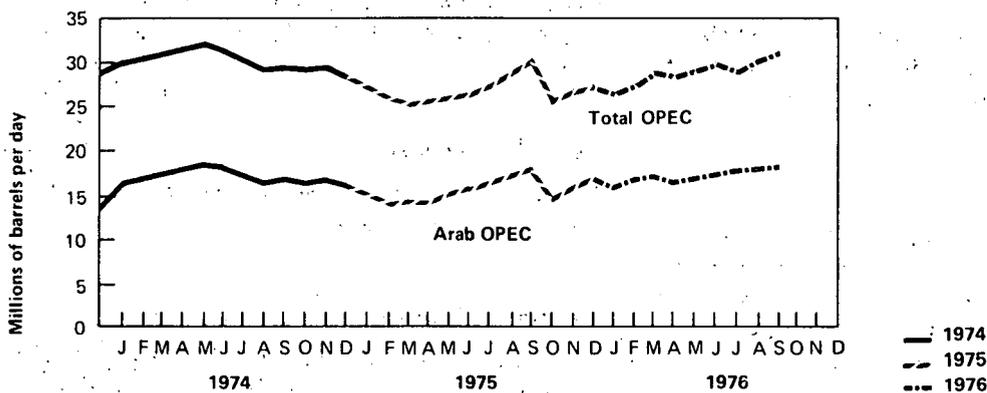
| Country | Production | | | | Production Capacity | Production Shut in |
|------------------------------------|------------------------------|---------------|---------------|---------------------|---------------------|--------------------|
| | 1973 | 1974 | 1975 | 1976 September** | September | September |
| | Thousands of barrels per day | | | | | Percent |
| Algeria | 1,070 | 960 | 930 | 1,000 | 1,000 | 0 |
| Iraq | 2,015 | 1,975 | 2,250 | 2,200 | 3,000 | 26.7 |
| Kuwait* | 3,020 | 2,545 | 2,100 | 2,390 | 3,500 | 31.7 |
| Libya | 2,175 | 1,520 | 1,520 | 2,110 | 2,500 | 15.6 |
| Qatar | 570 | 520 | 440 | 480 | 700 | 31.4 |
| Saudi Arabia* | 7,600 | 8,480 | 7,080 | 8,320 | 11,500 | 27.6 |
| United Arab Emirates | 1,530 | 1,680 | 1,700 | 1,990 | 2,380 | 16.4 |
| Subtotal: Arab OPEC | 17,980 | 17,680 | 16,020 | 18,490 | 24,580 | 24.8 |
| Ecuador | 210 | 175 | 160 | 217 | 225 | 3.6 |
| Gabon | 150 | 200 | 220 | 220 | 250 | 12.0 |
| Indonesia | 1,340 | 1,375 | 1,310 | 1,500 | 1,700 | 11.8 |
| Iran | 5,860 | 6,020 | 5,350 | 6,460 | 6,500 | 0.6 |
| Nigeria | 2,055 | 2,255 | 1,790 | 2,050 | 2,500 | 18.0 |
| Venezuela | 3,365 | 2,975 | 2,350 | 2,440 | 2,700 | 9.6 |
| Subtotal: Non-Arab OPEC | 12,980 | 13,000 | 11,180 | 12,887 | 13,875 | 7.1 |
| Total: OPEC | 30,960 | 30,680 | 27,200 | 31,377 | 38,455 | 18.4 |
| Canada | 1,800 | 1,695 | 1,470 | 1,244 | 1,800 | 30.9 |
| Mexico | 465 | 580 | 720 | 900 | 1,000 | 10.0 |
| Total: OPEC, Canada, Mexico | 33,225 | 32,955 | 29,390 | 33,521 | 41,255 | 18.7 |
| Total World | 55,740 | 55,885 | 53,160 | 58,100 | | |

*Includes about one-half of the former Kuwait-Saudi Arabia Neutral Zone. Production in September 1976 amounted to approximately 510,000 barrels per day.

**Estimate.

Sources: Central Intelligence Agency and National Energy Board of Canada.

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) or (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

The volume of crude oil flowing out of the ground. Domestic 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 Imports

The monthly volume of crude oil imported which is reported by receiving refineries, including crude oil entering the U.S. through pipelines from Canada.

Crude Oil Input to Refineries

Total crude oil used as input for the refining process, less crude oil lost or used for refinery fuel.

Crude Oil Stocks

Stocks held at refineries and at pipeline terminals.

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 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.

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 FEA. 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 FEA, 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 FEA, is the exact differential as reported for the month between the weighted average cost per barrel to refiners of "old" oil and of imported crude oil, less 21 cents, such cost to be equivalent to the delivered cost to the refinery.

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.

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 crude 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) \$1.35 per barrel.

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 20 or more States.

Motor Gasoline Production

Total production of motor gasoline by refineries, measured at 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.

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.

Power Ascension Nuclear Powerplant

A nuclear powerplant that has been licensed by the Nuclear Regulatory Commission to operate, but which 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.

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)

Recompletion Well

A well that is reentered and completed in a different reservoir or producing zone than the initial completion zone.

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, natural gas, plant condensate, and unfinished oils. Included are imports of fuels into bonded storage and receipts from U.S. territories.

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.

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).

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) \$1.32 per barrel.

Well

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):

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. 1975 and 1976 electricity imports were estimated on the basis of imports levels during 1974.

4. Distillate oil heating degree-days relate demand for distillate heating fuel to outdoor air temperature. Heating degree-days are defined as deviations of the mean daily temperature at a sampling station below a base temperature equal to 65° F by convention. Numerous studies have shown that when the outside temperature is 65°, most buildings can maintain an indoor air temperature of 70° without the use of heating fuels.

Mean daily temperature information is forwarded to the National Oceanic and Atmospheric Administration, Department of Commerce, from approximately 200 weather stations around the country. These data are used to calculate statewide heating degree-day averages based on population. The population-weighted State figures are aggregated into Petroleum Administration for Defense Districts and the national average, using a weighting scheme based on each State's consumption of distillate fuel oil per degree-day (1974 data base).

5. Domestic demand figures for natural gas liquids (NGL) as reported by BOM and reproduced in this publication do not include amounts utilized by refineries for blending purposes in the production of finished products, principally gasoline. Use of NGL at refineries is reported in a separate column. The production series cited in this publication shows both NGL produced at

processing plants and liquefied gases produced at refineries. 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 NGL stock series shown in this volume includes liquids held as stocks at both natural gas processing plants and at refineries.

6. The petroleum short-term demand forecasting model uses historical consumption data to construct a regression equation for each of eight major petroleum products. Each equation attempts to capture the relationship between final demand for that product and the factors influencing that demand. The explanatory factors used in predicting product demand include (1) macroeconomic variables such as disposable personal income and gross national product (GNP), (2) real product prices, (3) variables representing the effects of weather and other seasonal variations in demand, and (4) other factors relevant to a particular product.

The assumptions underlying the current short-term forecast are:

1. Normal weather.
2. Real GNP growth rate of 6.5 percent for 1976.
3. Implementation of the Energy Policy and Conservation Act and the Energy Conservation and Production Act; specifically, the composite price of domestic crude oil is set at \$7.66 per barrel beginning February 1976. This price ceiling is permitted to rise at 10 percent per year. Furthermore, stripper oil and tertiary oil is not controlled.
4. Elimination of the \$2-per barrel crude oil import fee beginning in January 1976.
5. The price of imported oil is assumed to be \$13.40, \$13.98, and \$14.73 for the years 1976, 1977, and 1978, respectively.

The short-term projections are periodically revised to incorporate observed weather conditions and actual values of macroeconomic and other explanatory variables as they become available. This "revised forecast" is termed the "backcast." On page 47 in this issue of the *Monthly Energy Review*, the backcast is solved for December 1975.

The supply model includes an assumed level of domestic crude oil and NGL production and inventory changes. Imports are determined as the incremental supply required to meet total demand for refined products not satisfied by domestic production or inventory drawdown.

7. 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.

8. 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.

9. Bituminous coal and lignite consumption as reported by the Bureau of Mines are derived 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 the Bureau of Mines from Association of American Railroads reports of carloadings.

10. 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 latter 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 section on Units of Measure.

11. The units used to describe power generation at nuclear plants are all 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 megawatt hours), multiply the average power level (in megawatts) 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).

12. 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.

13. 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 truck stops 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.

14. 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.

15. 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.

16. 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> | 1.102 short tons |
| 1 long ton | <i>contains</i> | 1.120 short tons |

Conversion Factors for Crude Oil

Average gravity

| | | |
|--------------|-----------------|--------------------------------------|
| 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

Petroleum

| | |
|----------------------|---------------------------|
| Crude Oil | 5.800 million Btu/barrel |
| Refined products | |
| Imports, average | 6.000 million Btu/barrel |
| Consumption, average | 5.5061 million Btu/barrel |
| Gasoline | 5.248 million Btu/barrel |
| Jet Fuel, average | 5.600 million Btu/barrel |
| Naphtha-type | 5.355 million Btu/barrel |
| Kerosene-type | 5.670 million Btu/barrel |
| Distillate fuel oil | 5.825 million Btu/barrel |
| Residual fuel oil | 6.287 million Btu/barrel |

Natural gas liquids 4.024 million Btu/barrel

Natural gas

| | |
|-----|----------------------|
| Wet | 1,097 Btu/cubic foot |
| Dry | 1,024 Btu/cubic foot |

Coal

| | |
|------------------------|-----------------------------|
| Bituminous and lignite | |
| Production | 23.73 million Btu/short ton |
| Consumption | 23.07 million Btu/short ton |
| Anthracite | 25.40 million Btu/short ton |

Electricity Conversion Heat Rates

Fossil fuel steam-electric

| | |
|------|--------------------------|
| Coal | 10,176 Btu/kilowatt hour |
| Gas | 10,733 Btu/kilowatt hour |
| Oil | 10,826 Btu/kilowatt hour |

Nuclear steam-electric 10,660 Btu/kilowatt hour

Hydroelectric 10,389 Btu/kilowatt hour

Electricity Consumption 3,412 Btu/kilowatt hour

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