

# Monthly Energy Review

November 1974



Federal Energy  
Administration

National Energy  
Information Center

Washington  
D.C. 20461



## Foreword

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The Federal Energy Administration is charged with the responsibility for collecting, analyzing, and disseminating energy-related information. Through FEA's National Energy Information Center, a variety of technical reports have been published. This new report, *Monthly Energy Review*, incorporates the energy information previously published in the *PIMS Monthly Petroleum Report*, the supplements to the *PIMS*, and *Monthly Energy Indicators*. Other data elements will be included as they are developed. The introduction of *Monthly Energy Review* is part of our continuing effort to meet your information needs.

A handwritten signature in black ink, appearing to read 'E. Zausner', with a long horizontal line extending to the right.

Eric R. Zausner  
Assistant Administrator for Policy and Analysis

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# Part 1

# Overview

During the first 9 months of 1974, domestic energy production was 0.7 percent less than for the comparable period last year. Among the producing sectors, natural gas showed the greatest decline, down 3.4 percent, and petroleum production was off nearly an equal amount. Together, these two fuels comprised about 70 percent of the total U.S. energy output. Coal (approximately 24 percent of domestic energy production) was the only major energy source that showed increased output during the first three quarters. Coal production at the end of September was 5 percent above the level for the same period in 1973. The largest gains in energy production were posted by nuclear power, which grew by 29.6 percent, and hydroelectric power, which showed a modest increase of 6.6 percent. The combined contribution of these two energy sources to total domestic energy output, however, was only about 7 percent.

Demand for petroleum products during the first 9 months of this year was 4.9 percent lower than for the same period in 1973. Residual fuel oil demand showed the greatest reduction, declining 10.3 percent. Motor gasoline was second with a 2.8 percent decrease in demand. Contributing to the drop in residual fuel oil consumption were a warmer-than-normal winter and efforts by electric utilities to conserve fuel oil by increasing their dependence on coal as a source of electric power production. Also, the slowdown in the economy probably contributed to lowered consumption of residual fuel oil by commercial and industrial sectors. Reduced gasoline consumption was the result of both conservation efforts (less driving, lower speed limits) and higher gasoline prices. The average retail price of gasoline in September was 15 cents higher than a year ago, an increase of 56 percent.

Reflecting demand constraints, total imports of fossil fuels for January through September 1974 were about 5 percent lower than imports for the same period in 1973. Refined product imports showed the greatest decline, off 12 percent. Natural gas imports were also lower, down by about 7 percent. Crude oil imports, however, showed a gain of 3 percent over 1973 levels. This trend of increased crude oil imports is mirrored in its portion of the mix of total imported fossil fuels for 1974, as compared with 1973. That portion contributed by crude oil rose from 48.8 percent during 1973 to 52.8 percent for the first 9 months of 1974, while the portion contributed by refined products declined from 43.7 and 39.5 percent. Natural gas imports rose slightly from 7.5 to 7.7 percent of the total.

Because of the decline in production and imports of natural gas, combined with predictions for a severe winter, record gas supply deficiencies are anticipated

for the coming heating season (November through March). It has been estimated that curtailments of both "interruptible" and "firm" natural gas service by major gas pipeline companies will amount to 802 billion cubic feet of gas, which is 68 percent more than gas curtailments actually experienced during the 1973-74 heating season. The greatest impact will be felt by electric utilities and industries that receive natural gas on an interruptible contract basis. Both these consuming sectors have facilities capable of burning an alternative fuel, such as fuel oil or coal. Industrial users that have non-interruptible or firm gas service with boilers equipped to use alternative fuels are the next priority category to be curtailed. However, during the coming heating season, for the first time, there is a possibility that curtailments of natural gas will also affect firm service customers who do not necessarily have alternative fuel-burning capabilities.

September end-of-month stocks of petroleum remained considerably higher than stocks held a year ago. Crude oil inventories increased from an 18.2-day supply in September 1973 to a 20.4-day supply for the current month. Inventories for most of the major petroleum products were also at record September levels. Compared with September 1973, the following stock increases were posted: motor gasoline, 9 percent; jet fuel, 21 percent; distillate fuel oil, 19 percent; residual fuel oil, 32 percent; and natural gas liquids, 27 percent. At the end of August, coal stocks remained slightly lower than levels for the previous year.

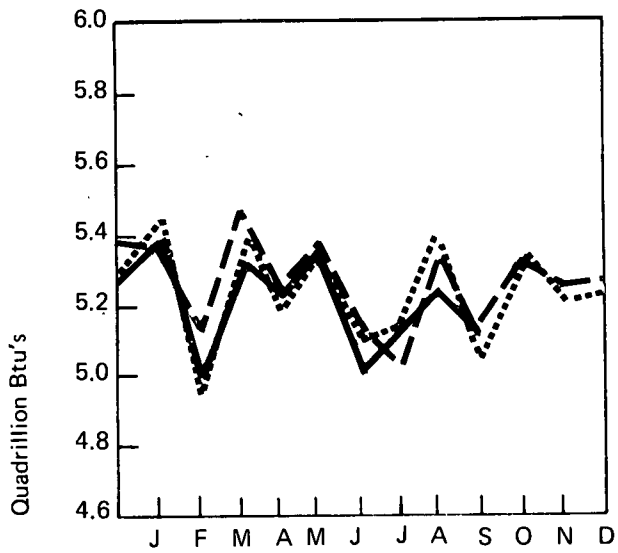
Electric power production by utilities in September exhibited the typical seasonal decrease, declining 12.3 percent from the previous month. Moreover, cumulative production for the year was down 1.3 percent compared with the same period in 1973. Both conservation practices and higher electricity rates were factors contributing to the decline. At the end of August, coal stocks held by utilities were down about 2 percent from August a year ago, in contrast to oil stocks which closed 50 percent above last year's levels. This reflected the shift in the mix of fossil fuels consumed for electric power generation. Coal consumption by utilities rose 0.7 percent during the period from January through August 1974 compared with the same period in 1973, in contrast to oil and gas consumption, which declined by 7.0 and 8.5 percent, respectively.

Gasoline prices in September showed a general softening on both the retail and wholesale levels. The average retail price of gasoline declined for the second consecutive month, and the average price that retailers pay for gasoline declined for the first time

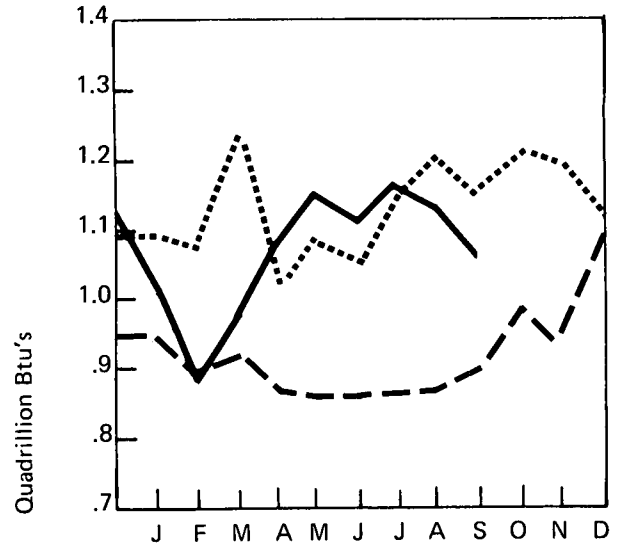
since the Arab embargo. Average dealer margins continued their downward trend, decreasing 0.3 cent per gallon from their August levels. Declines were also registered for August crude oil prices, with the average refiner acquisition costs of domestic and imported crude petroleum down 16 cents per barrel from their July levels.

Exploration activity for oil and gas in September continued to post significant gains over levels experienced last year. Crews engaged in seismic prospecting numbered 321, an increase of 28 percent over the 1973 average. The average number of rotary rigs drilling for petroleum reached 1527, a gain of 9 over August and a 21 percent increase over the rig count for September a year ago. Supported by this high level of drilling rig activity, total wells and footage drilled during the first three quarters of 1974 were up 21 and 12 percent, respectively, over the comparable period in 1973. Limited drilling rig manufacturing capacity and technical manpower shortages that were previously expected to impose significant constraints on the expansion of domestic drilling capabilities have been somewhat alleviated by a relocation of seismic land crews and drilling rigs from Canada, where proposed tax policies have severely depressed exploratory activity in that country.

Domestic Production of Energy\*



Imports of Fossil Fuels



--- 1972  
..... 1973  
—— 1974

\*See Explanatory Note 1.

# Part 2

## Energy Sources

# Crude Petroleum and Petroleum Products

## Crude Oil

After rising for two consecutive months, crude oil production in September fell to 8,809,000 barrels per day. During the period January through September 1974, production averaged 8,917,000 barrels per day. This was a 3.2 percent decline from the 9,210,000 barrels per day produced during the corresponding period in 1973. The decline reflects the inability of new discoveries and new secondary recovery projects to offset the ongoing decline in the older, depleting fields. This decline has occurred despite a full year of

a two-tier pricing system which allows "new oil" to sell at uncontrolled prices. The new pricing system, however, has probably prevented an even sharper production decline.

Crude oil imports during September decreased for the second consecutive month. However, the 3,758,000 barrels per day imported were more than that of any month in 1973. Notwithstanding the impact of Arab embargo during early 1974, crude oil imports for January through September averaged 3,324,000

	Crude Runs to Stills	Domestic Production	Imports	Stocks* In thousands of barrels
	In thousands of barrels per day			
<b>1972</b>				
January	11,388	9,114	2,046	236,776
February	11,356	9,336	2,081	238,882
March	11,345	9,462	2,067	244,860
April	11,184	9,513	2,004	253,492
May	11,478	9,614	2,160	265,305
June	11,841	9,522	2,085	257,601
July	11,885	9,496	2,182	251,913
August	11,915	9,483	2,112	244,333
September	12,112	9,508	2,364	237,085
October	11,871	9,482	2,516	239,949
November	11,851	9,426	2,299	237,519
December	12,113	9,335	2,667	232,803
<b>1973</b>				
January	12,190	9,179	2,732	224,056
February	12,187	9,373	2,873	221,893
March	12,201	9,175	3,162	230,696
April	12,208	9,233	3,049	235,383
May	12,281	9,303	3,215	244,777
June	12,862	9,209	3,220	235,846
July	12,750	9,195	3,501	230,750
August	12,636	9,161	3,593	235,660
September	12,560	9,077	3,471	228,280
October	12,758	9,172	3,740	233,520
November	12,374	9,144	3,452	237,001
December	12,150	9,041	2,891	229,504
<b>1974</b>				
January	11,491	8,907	2,382	220,261
February	11,102	9,156	2,248	228,004
March	11,355	8,950	2,462	231,705
April	11,823	8,952	3,267	243,687
May	12,277	8,903	3,748	252,270
June	12,709	8,777	3,957	253,008
July	12,905	R 8,754	4,167	252,399
August	R 12,731	8,918	R 3,852	R 247,406
September	** 12,252	** 8,809	** 3,758	** 250,227

\* See definitions

\*\* Preliminary data

R=Revised data

Sources: See Explanatory Note 2.



barrels per day, or 3.2 percent more than that during the similar period in 1973.

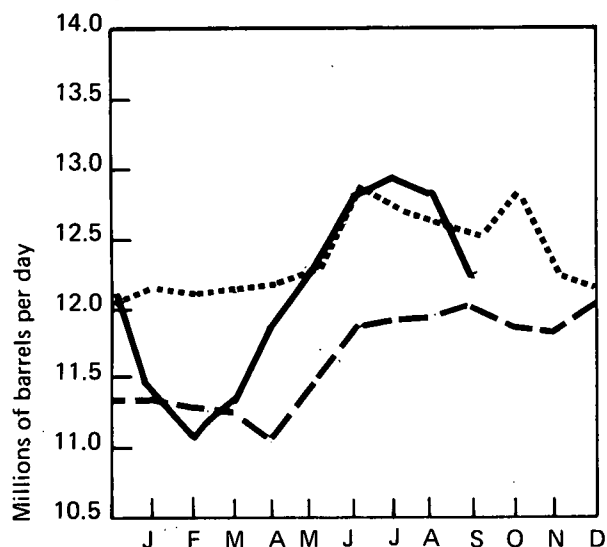
It is noteworthy that Nigeria has increased its share of the U.S. crude oil import market during recent months. According to data collected by the U.S. Customs Service for FEA, Canada, Nigeria, and Venezuela accounted for 43 percent of the total crude oil imports in September, while Persian Gulf countries supplied 21 percent of the total. Because of the growing worldwide surplus of supplies, U.S. importers have tended to import environmentally accept-

able crudes, such as Nigerian crudes. Additionally, these crudes yield a relatively high percentage of gasoline, which is desirable with respect to U.S. consumption patterns. Moreover, with Libya still enforcing the embargo, Nigerian crudes are the logical substitute.

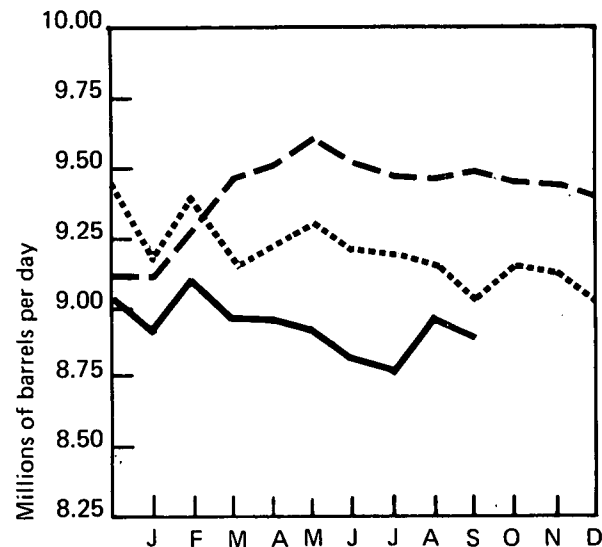
For the eighth consecutive month, stocks at the end of the month were higher in 1974 than the corresponding month in 1973. This is illustrated by a 20.4-day supply in September, compared to an 18.2-day supply for the same month in 1973.

(Continued on page 10)

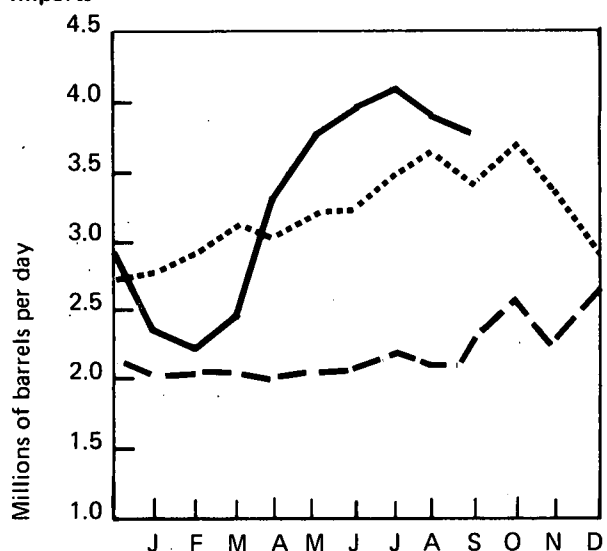
**Runs to Stills \***



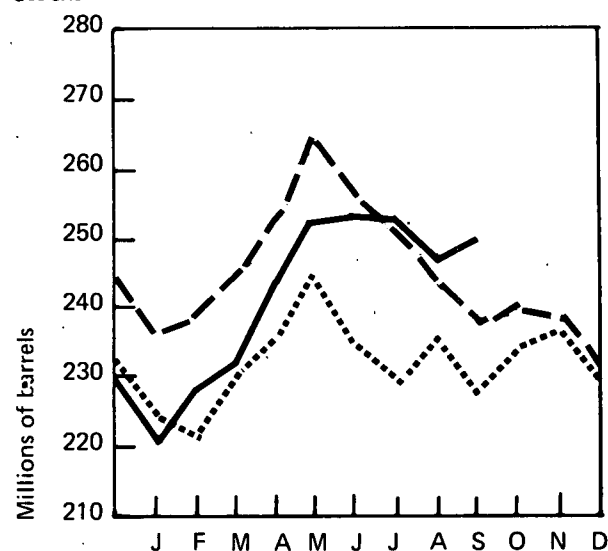
**Domestic Production**



**Imports \***



**Stocks \***



\* See Explanatory Note 3.

--- 1972  
 ..... 1973  
 ——— 1974

Reflecting demand constraints and the higher-than-normal stock levels, crude runs to stills also declined for the second consecutive month to 12,252,000 barrels per day. Furthermore, crude runs of 12,080,000 barrels per day for January through September were down 4.4 percent from last year, a figure approximately equal to the decline in demand during the same period.

### Total Refined Petroleum Products

Apparent demand for all petroleum products was 16,339,000 barrels a day during September, 1.3 percent less than a year ago but 2.0 percent higher than FEA forecasted demand for that month. September's demand also was 1.1 percent higher than that of August. Both preliminary figures and trends from previous years indicate that October's demand will probably be higher than September's.

	Domestic Demand	Imports*
	In thousands of barrels per day	
<b>1972</b>		
January	16,735	2,721
February	17,861	2,764
March	16,870	2,730
April	15,529	2,298
May	14,801	2,208
June	15,615	2,382
July	14,821	2,215
August	15,936	2,344
September	15,489	2,342
October	16,455	2,607
November	17,610	2,653
December	18,738	3,039
<b>1973</b>		
January	18,667	3,079
February	18,941	3,501
March	17,193	3,413
April	15,924	2,540
May	16,603	2,603
June	16,471	2,659
July	16,387	2,671
August	17,414	2,913
September	16,620	2,903
October	17,095	2,785
November	18,434	3,412
December	17,429	3,055
<b>1974</b>		
January	17,270	2,973
February	17,371	2,973
March	16,045	2,753
April	15,919	2,703
May	15,624	2,454
June	16,459	2,218
July	16,156	2,143
August	R 16,221	R 2,281
September	** 16,399	** 2,180

\*See definitions

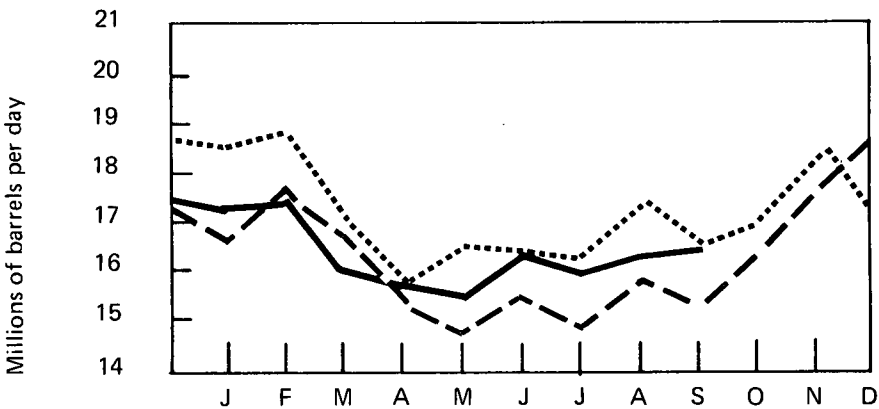
R=Revised data

\*\*Preliminary data

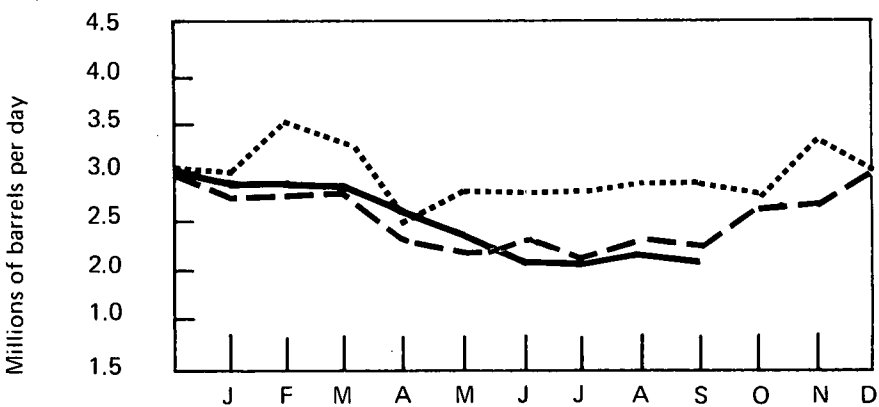
Sources: Bureau of Mines through April 1974.  
FEA from May 1974 forward.

Imports of refined products in September at 2,180,000 barrels per day were down 101,000 barrels per day from August and 723,000 barrels per day from September of last year. Residual fuel oil imports of 1,266,000 barrels per day made up 58 percent of total refined products imports. The second largest contributor was jet fuel at 183,000 barrels per day, or 8.3 percent. The year-to-date refined imports are 2,561,000 barrels per day, 12.1 percent less than during the first 9 months of 1973.

Domestic Demand \*



Imports \*



--- 1972  
..... 1973  
—— 1974

\* See Explanatory Note 3.

## Motor Gasoline

Domestic demand for motor gasoline during the first 9 months of 1974 was 219,000 barrels per day less than for the comparable period during 1973, a decrease of 3.4 percent. September demand was the lowest since May, declining by 2.8 percent from the August level, but increasing 1.1 percent over September a year ago.

Production of motor gasoline declined 4.4 percent from the previous month and 2.1 percent from September 1973. Average production for the first month of 1974 at 6,355,000 barrels per day declined

3.4 percent from the level experienced during the first 9 months of 1973.

Motor gasoline imports show no real seasonal trend. Imports for the first 9 months of 1974 averaged 184,000 barrels per day, as compared with a 9-month average of 109,000 barrels per day during 1973. Although this represents an increase of 68.8 percent over last year, this increase is insignificant compared with total demand and total production.

Stock levels for September are 229,972,000 barrels, an increase of 9.4 percent from September of the

	Domestic Demand	Production	Imports	Stocks* In thousands of barrels
	In thousands of barrels per day			
<b>1972</b>				
January	5,549	6,151	51	239,633
February	5,710	5,989	66	249,927
March	6,412	5,913	67	236,831
April	6,283	5,833	52	225,153
May	6,445	6,023	74	214,736
June	6,822	6,244	75	200,143
July	6,673	6,612	69	200,710
August	6,938	6,588	81	192,706
September	6,453	6,605	70	199,690
October	6,350	6,532	71	207,776
November	6,479	6,436	69	208,930
December	6,378	6,424	69	212,770
<b>1973</b>				
January	6,118	6,341	59	221,823
February	6,437	6,141	95	216,367
March	6,513	6,150	71	207,581
April	6,541	6,377	63	204,708
May	6,907	6,714	102	202,081
June	6,964	6,993	174	208,374
July	7,023	6,986	133	211,488
August	7,249	6,880	157	205,122
September	6,581	6,620	127	210,278
October	6,677	6,621	194	214,525
November	6,823	6,375	216	207,343
December	6,223	6,099	188	209,395
<b>1974</b>				
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	6,406	6,301	228	229,878
June	6,895	6,642	145	226,652
July	6,941	6,835	122	227,195
August	R 6,849	R 6,776	192	R 231,015
September	** 6,656	** 6,481	** 140	** 229,972

\*See definitions

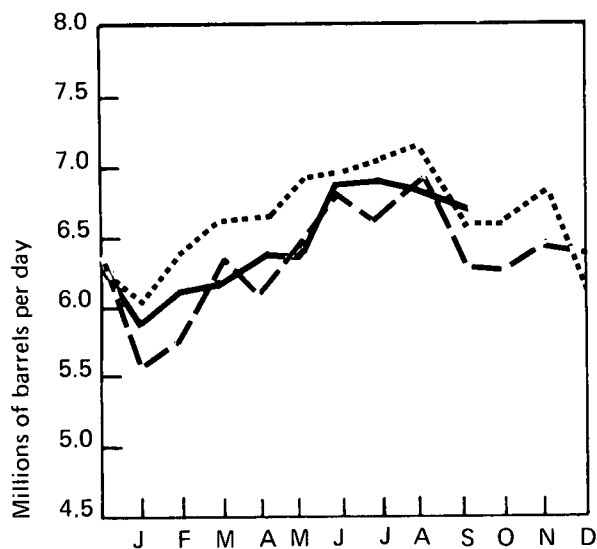
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R=Revised data

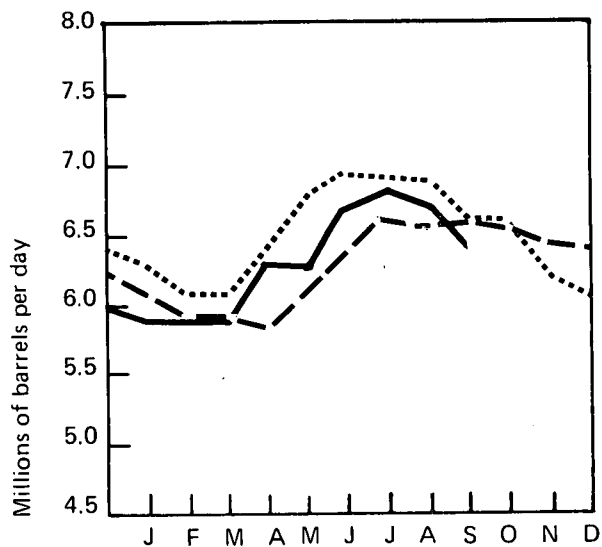
Sources: Bureau of Mines through April 1974.  
FEA from May 1974 forward.

previous year. The stock buildup is attributed to reduced demand and increased imports. Stocks did decline from the August level due mainly to a decrease in production, but only by 0.5 percent.

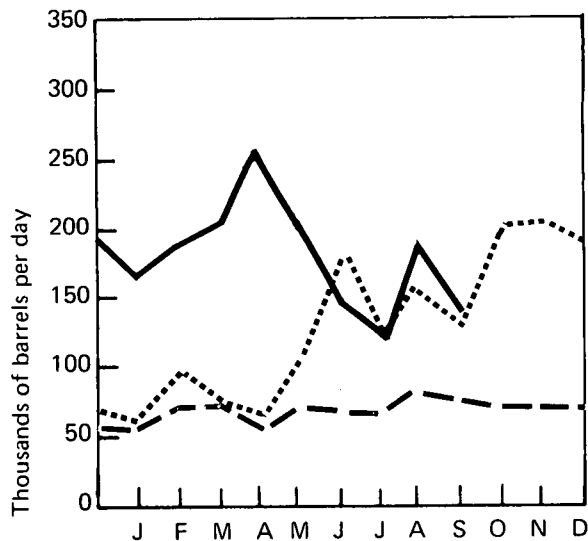
**Domestic Demand\***



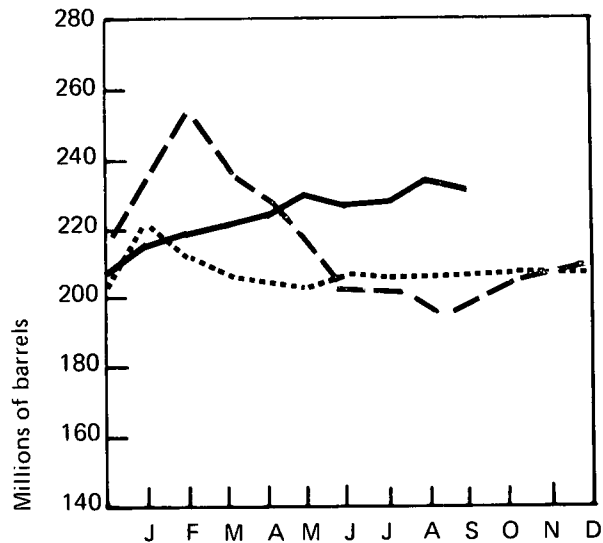
**Production\***



**Imports\***



**Stocks\***



\* See Explanatory Note 3.

--- 1972  
 ..... 1973  
 ——— 1974



## Jet Fuel

Stocks of total jet fuels, which have been declining since May of this year, were down again by 3.3 percent in September from levels experienced for the previous month. However, compared with September 1973, stocks were running 21.5 percent higher. Inventories of naphtha jet, used primarily by the military, increased 35.6 percent, and inventories of kerosine jet, consumed mainly by commercial aircraft, increased 18.5 percent over last year's levels.

exhibited their first decrease since May, declining 8.9 percent from August levels and 19.7 percent compared with last year.

September 1974 production of jet fuel of 882,000 barrels per day increased 3.9 percent over August levels, with naphtha-type gaining 16.7 percent and kerosine-type production rising 0.6 percent. Current month jet fuel production also increased 3.9 percent compared with September 1973.

September jet fuel imports of 184,000 barrels per day

September demand for total jet fuels at 1,101,000

	Domestic Demand	Production	Imports	Stocks In thousands of barrels
	In thousands of barrels per day			
<b>1972</b>				
January	1,021	784	179	25,857
February	1,141	900	220	25,230
March	1,008	906	167	27,147
April	986	877	124	27,568
May	999	887	159	28,885
June	1,163	859	292	28,356
July	1,000	873	165	29,429
August	946	837	181	31,649
September	1,035	810	190	30,597
October	1,171	822	286	28,633
November	1,050	800	184	26,650
December	1,030	811	189	25,493
<b>1973</b>				
January	1,110	864	231	24,814
February	1,090	898	221	25,437
March	993	917	152	27,585
April	1,015	887	145	27,881
May	1,113	840	211	25,825
June	1,007	836	163	25,447
July	1,045	825	231	25,661
August	1,049	844	180	24,851
September	1,065	847	229	25,149
October	1,066	875	208	25,577
November	1,013	852	263	28,539
December	1,038	830	210	28,544
<b>1974</b>				
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	915	873	97	33,574
June	1,016	886	115	33,128
July	1,032	813	188	32,231
August	R 1,076	849	R 202	R 31,594
September	* 1,101	* 882	* 184	* 30,543

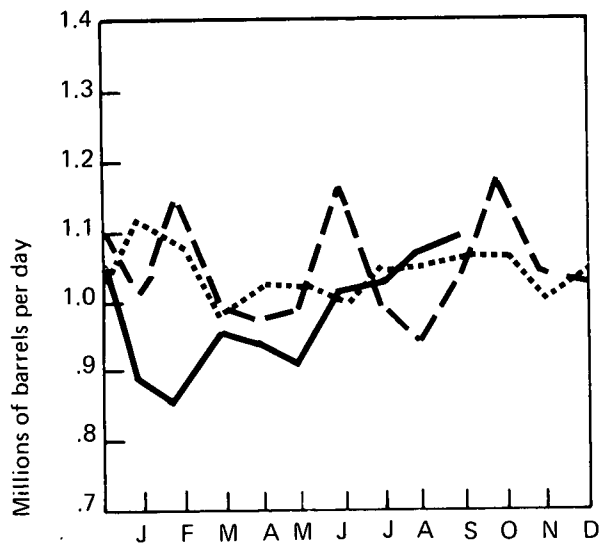
\*Preliminary data

R=Revised data

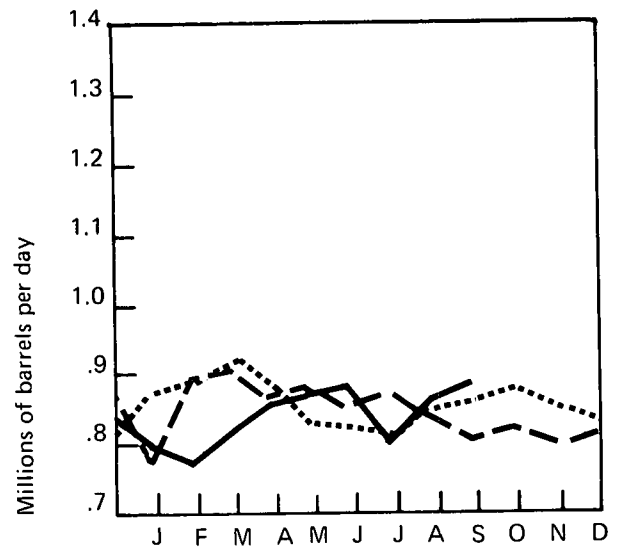
Sources: Bureau of Mines through April 1974.  
FEA from May 1974 forward.

barrels per day increased 2.3 percent over August and 3.4 percent over September a year ago. The percentage breakdown for demand was 22.5 for naphtha jet and 77.5 for kerosine jet. This compares with 20.1 percent for naphtha-type and 79.9 percent for kerosine-type in September 1973.

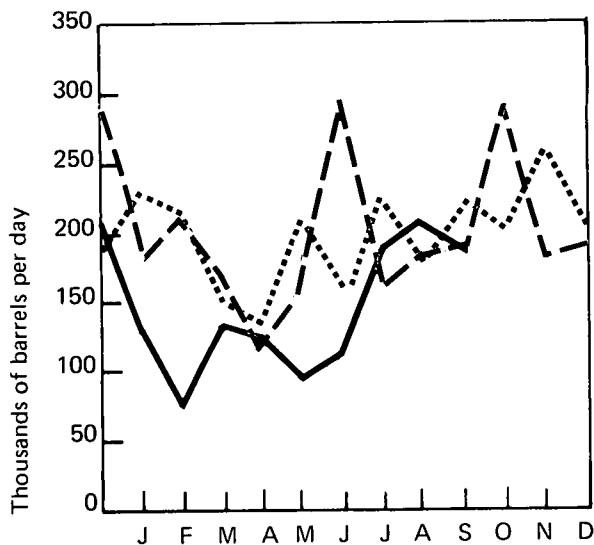
**Domestic Demand \***



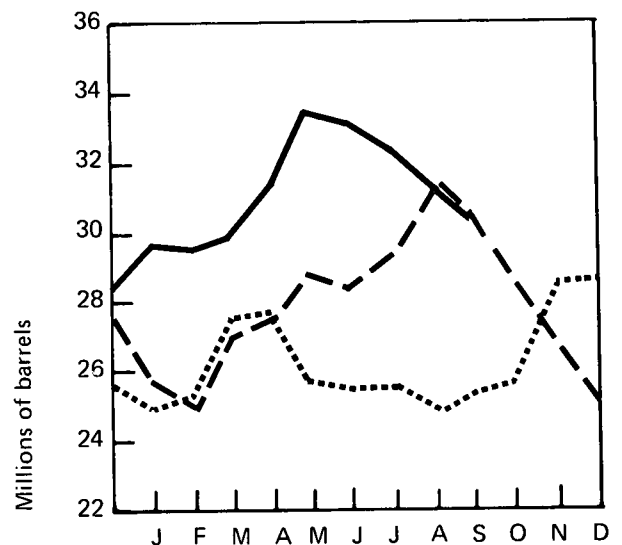
**Production \***



**Imports \***



**Stocks \***



\* See Explanatory Note 3.

— — — 1972  
 ..... 1973  
 ————— 1974

## Distillate Fuel Oil

Distillate fuel oil demand for September 1974 increased 230,000 barrels per day over the previous month, but was 159,000 barrels per day less than September 1973. Demand for distillate fuel oil in September 1974 increased 10.1 percent over the previous month in comparison to the 4.2 percent increase for the same months in 1973.

Production of distillate fuel oil in September decreased 158,000 barrels per day or 5.6 percent from

September 1973. Production for January through September 1974 averaged 2,656,000 barrels per day, a decrease of 3.9 percent from the corresponding period of last year.

Inventories of distillate fuel oil at 226.6 million barrels in September were running 19 percent above levels experienced in 1972 and 1973.

	Domestic Demand	Production*	Imports	Stocks* In thousands of barrels
	In thousands of barrels per day			
<b>1972</b>				
January	3,723	2,538	197	160,027
February	4,164	2,653	204	122,154
March	3,482	2,564	257	101,728
April	2,778	2,476	189	98,288
May	2,250	2,585	132	112,892
June	2,194	2,623	96	128,739
July	1,765	2,529	97	155,557
August	2,064	2,582	92	174,674
September	2,205	2,624	99	190,250
October	2,759	2,722	203	195,530
November	3,383	2,719	227	182,581
December	4,232	2,938	382	154,284
<b>1973</b>				
January	4,134	3,028	360	130,958
February	4,243	2,937	672	113,276
March	3,314	2,667	579	111,270
April	2,635	2,510	240	114,698
May	2,652	2,544	247	119,104
June	2,412	2,825	215	137,844
July	2,329	2,752	319	160,869
August	2,554	2,801	286	177,271
September	2,660	2,813	298	190,171
October	2,916	2,911	436	202,965
November	3,508	2,922	493	200,182
December	3,685	3,136	434	196,421
<b>1974</b>				
January	3,820	2,880	449	181,179
February	3,835	2,399	293	149,125
March	3,145	2,226	267	128,822
April	2,848	2,522	216	125,553
May	2,616	2,741	288	151,345
June	2,249	2,818	175	173,639
July	2,251	2,881	168	198,374
August	R 2,271	2,779	112	R 217,632
September	**2,501	**2,655	**146	**226,624

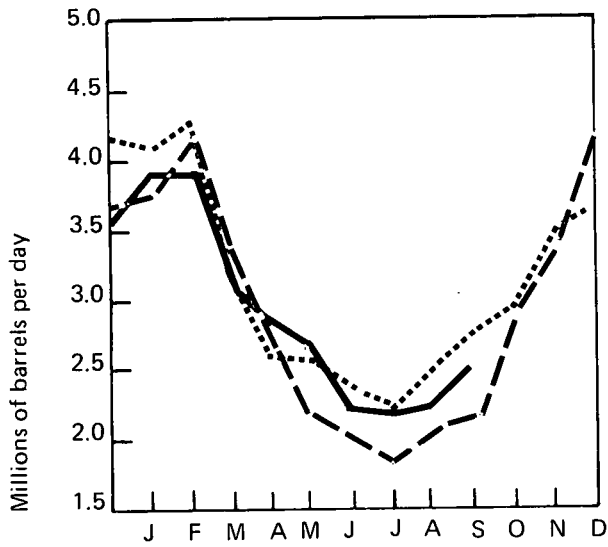
\*See definitions

R=Revised data

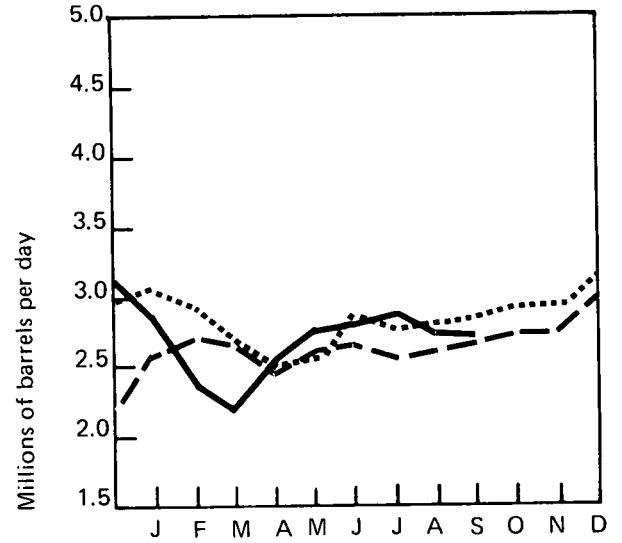
\*\*Preliminary data

Sources: Bureau of Mines through April 1974.  
FEA from May 1974 forward.

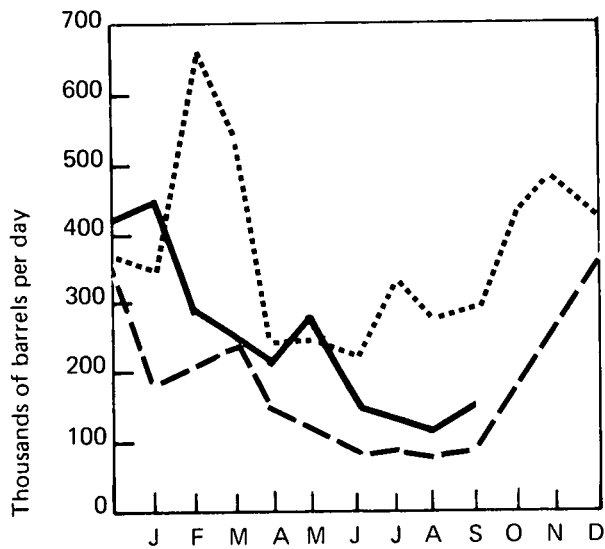
Domestic Demand \*



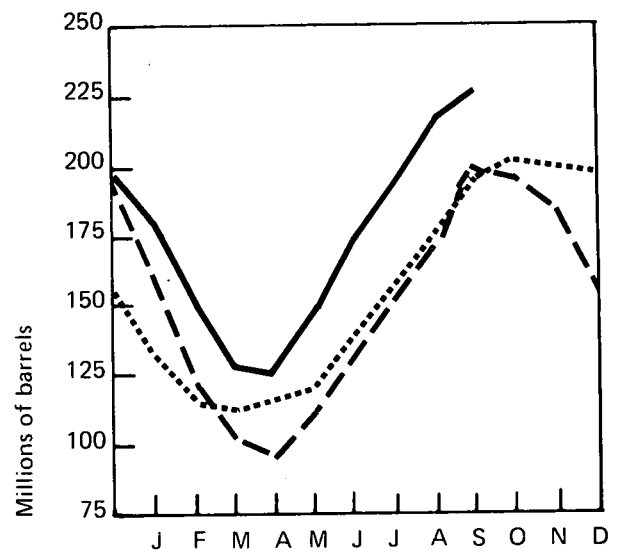
Production \*



Imports \*



Stocks \*



\* See Explanatory Note 3.

--- 1972  
 ..... 1973  
 — 1974

## Residual Fuel Oil

Domestic demand for residual fuel oil in September at 2,427,000 barrels per day was down 9 percent from last year, but up 8.3 percent over September 1972. Demand for residual fuel oil for the first 9 months of 1974 at 2,468,000 barrels per day was down 11.3 percent from last year and only slightly higher than during that same period in 1972.

Production of residual fuel oil in September declined 5 percent from August 1974, but was 21.8 percent higher than September 1973. Production of residual

fuel oil for the first 9 months of this year averaged 1,037,000 barrels per day, an increase of 10.3 percent over the same period in 1973 and 36.5 percent over 1972.

Stocks of residual fuel oil at 72.8 million barrels declined 3.2 million barrels from August 1974, but were up 17.7 million barrels from closing stocks in September 1973. These increased stocks levels are partially attributed to added report coverage of FEA, as compared with Bureau of Mines. Stocks that are reported to FEA but not to the Bureau of Mines

	Domestic Demand	Production	Imports	Stocks In thousands of barrels
	In thousands of barrels per day			
<b>1972</b>				
January	2,815	924	1,892	59,440
February	3,171	963	1,923	50,891
March	2,682	828	1,926	51,566
April	2,444	739	1,676	49,425
May	2,111	664	1,573	53,035
June	2,196	661	1,649	56,109
July	2,107	673	1,594	60,230
August	2,257	674	1,653	61,399
September	2,239	710	1,625	63,692
October	2,362	745	1,655	63,758
November	2,843	890	1,769	57,702
December	3,151	1,124	1,968	55,216
<b>1973</b>				
January	3,262	1,112	1,977	49,154
February	3,305	1,038	2,072	43,058
March	3,071	955	2,185	44,711
April	2,472	877	1,703	47,044
May	2,518	948	1,666	49,207
June	2,602	915	1,757	51,811
July	2,430	882	1,597	53,363
August	2,690	851	1,850	53,586
September	2,667	878	1,842	55,091
October	2,547	984	1,556	54,964
November	3,118	1,061	1,942	51,985
December	2,910	1,158	1,793	53,480
<b>1974</b>				
January	3,035	1,072	1,732	46,548
February	3,010	1,029	1,923	45,004
March	2,516	912	1,674	47,222
April	2,432	984	1,587	51,339
May	2,111	992	1,250	64,548
June	2,177	1,058	1,260	68,646
July	2,135	1,091	1,197	73,066
August	R 2,368	1,126	1,342	R 76,011
September	*2,427	*1,070	*1,287	*72,856

\* Preliminary data

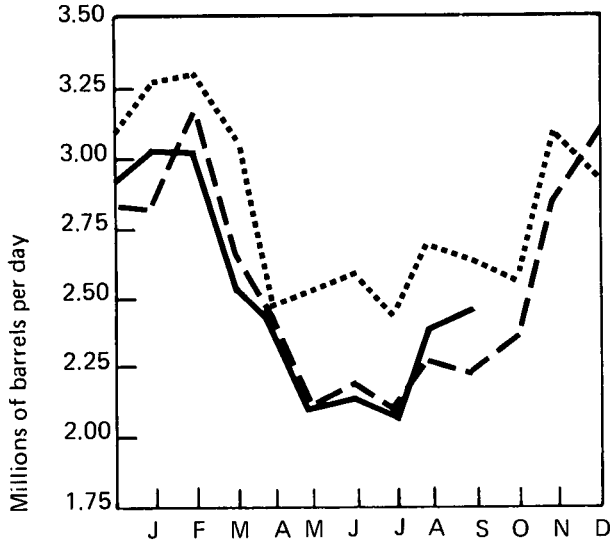
R=Revised data

Sources: Bureau of Mines through April 1974,  
FEA from May 1974 forward.

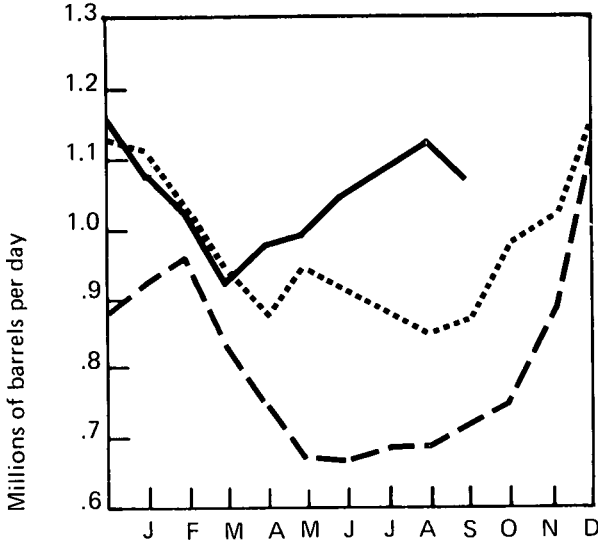


account for approximately 13 million barrels of the total (See Explanatory Note 3 for discussion of differences between FEA and Bureau of Mines "stocks" series.)

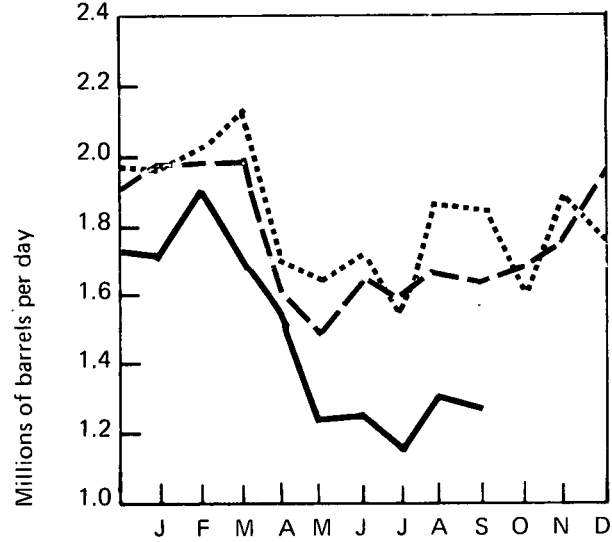
Domestic Demand \*



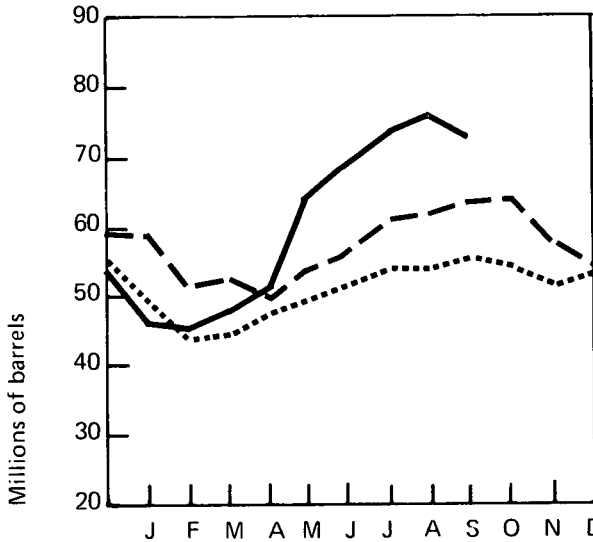
Production \*



Imports \*



Stocks \*



\* See Explanatory Note 3.

— 1972  
..... 1973  
- - - 1974

## Natural Gas Liquids

Production at natural gas processing plants was down about 2 percent during the first 7 months of 1974 compared with the similar period of 1973, while closing stocks of natural gas liquids at the end of July were up 27 percent from last year.

Propane production at natural gas processing plants declined by approximately 3 percent from that for the first 7 months of last year, but stocks of propane increased 30 percent.

Ethane exhibited just the opposite behavior. Production was up almost 9 percent from a year ago, while ethane stocks declined by 20 percent, reflecting the increased demand for this product.

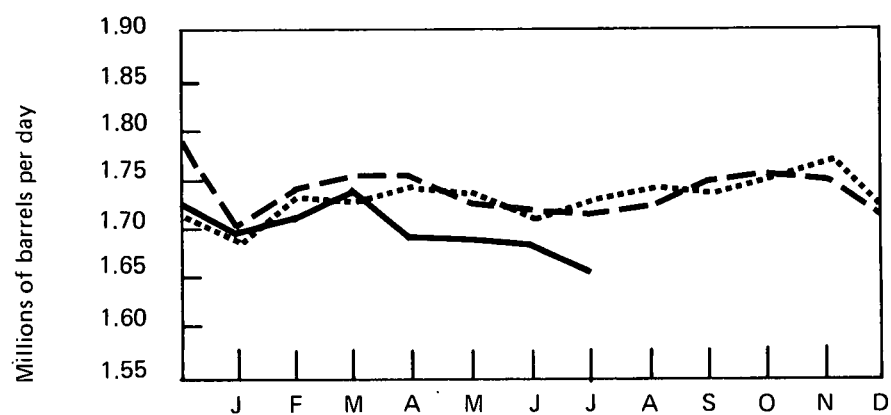
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	Production	Stocks
	In thousands of barrels per day	In thousands of barrels
<b>1972</b>		
January	1,705	76,704
February	1,747	68,232
March	1,768	68,777
April	1,769	75,101
May	1,737	84,984
June	1,734	92,831
July	1,731	100,363
August	1,739	104,397
September	1,751	108,853
October	1,769	105,098
November	1,757	94,673
December	1,721	79,238
<b>1973</b>		
January	1,680	64,343
February	1,745	55,997
March	1,734	58,471
April	1,749	65,297
May	1,739	73,942
June	1,727	83,057
July	1,737	93,362
August	1,748	98,996
September	1,741	103,907
October	1,756	104,215
November	1,774	98,320
December	1,729	94,106
<b>1974</b>		
January	1,699	85,820
February	1,728	84,734
March	1,741	89,362
April	1,696	95,707
May	1,689	104,739
June	1,684	111,356
July	*1,657	*118,804

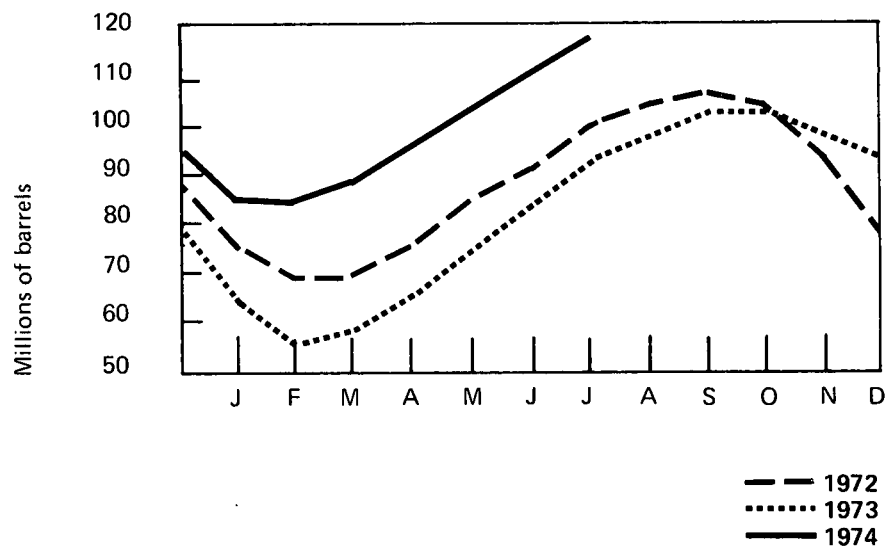
\*Preliminary data

Source: Bureau of Mines.

# Production



# Stocks



--- 1972  
 ..... 1973  
 — 1974

# Natural Gas

Marketed production of natural gas during the first 7 months of 1974 was 3 percent lower than for the comparable 1973 period. Imports of natural gas also decreased during this time, down about 7 percent through July 1974. Both of these activities reflect the continuing decline in gas utilization and the impact of limitations on Canadian gas exports.

Although the decline in gas utilization potentially could be attributed to the warmer-than-normal temperatures experienced in early 1974, this is only a

partial explanation. Conservation efforts have probably also influenced the decrease in production and imports. For example, an analysis of July 1974 data shows that during a month where weather is typically not a factor, marketed production was also down about 3 percent from the comparable month in 1973, mirroring the same trend exhibited by the 7-month average. Similarly, imports for July 1974 were 7 percent lower than in July 1973.

	Marketed Production	Domestic Producer Sales to Major Interstate Pipelines In billion cubic feet	Imports
<b>1972</b>			
January	1,994	1,086	117
February	1,902	1,035	112
March	1,937	1,091	88
April	1,893	1,050	134
May	1,867	1,045	111
June	1,797	985	108
July	1,837	1,013	102
August	1,859	1,007	97
September	1,854	970	114
October	1,889	1,040	103
November	1,896	1,041	111
December	1,961	1,065	111
<b>1973</b>			
January	R 1,994	1,069	93
February	R 1,821	963	84
March	R 1,952	1,052	R 91
April	R 1,864	1,007	R 88
May	1,898	1,026	R 86
June	1,839	963	79
July	R 1,880	999	R 80
August	R 1,896	994	R 85
September	R 1,840	956	82
October	R 1,875	1,001	R 91
November	R 1,863	1,000	R 85
December	R 1,926	1,036	89
<b>1974</b>			
January	1,944	1,033	86
February	1,773	941	79
March	1,907	1,027	85
April	1,812	987	83
May	1,853	981	80
June	R 1,777	928	74
July	R * 1,823	947	R 74
August	R ** 1,820		** 80
September	** 1,750		** 77

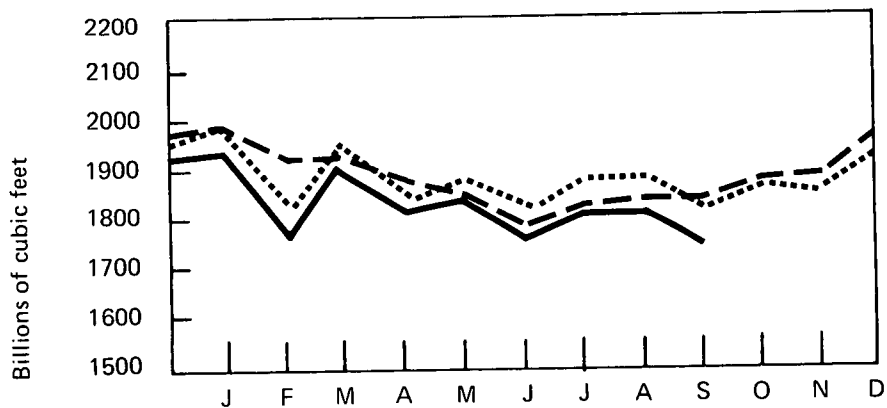
\* Preliminary data.

\*\* Projected data.

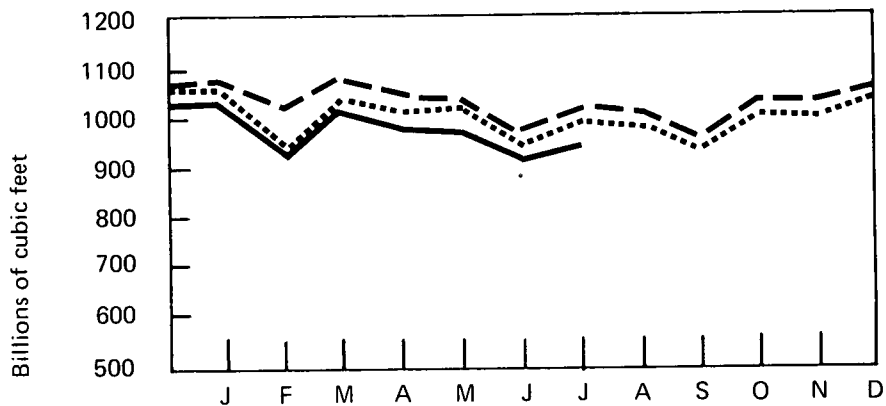
R=Revised data

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

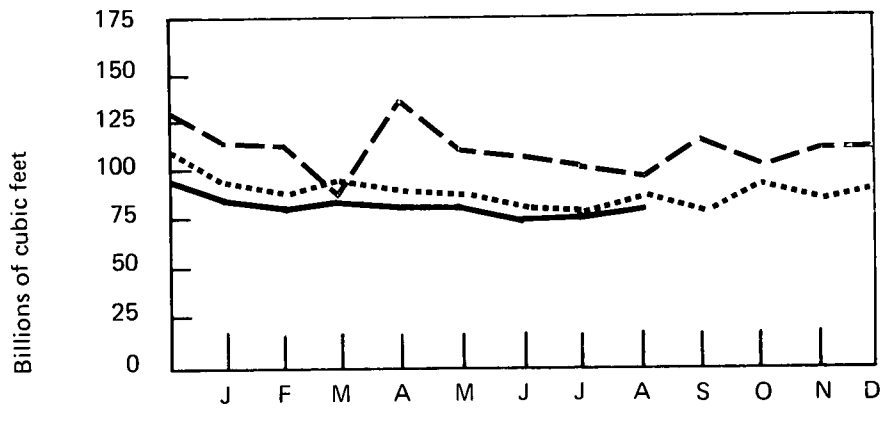
### Marketed Production



### Domestic Producer Sales to Major Interstate Pipelines



### Imports



--- 1972  
 ..... 1973  
 ——— 1974



# Coal

Production of bituminous coal and lignite in August 1974 totaled 50.3 million tons, representing a loss of 5.6 million tons from the August 1973 level, but a gain over July production of 2.4 million tons or 5 percent. This increase was considerably less, however, than the 25 percent increases experienced during August of 1972 and August of 1973. July is normally a low month because of production lost during the miners' annual vacation period. The major cause of low August production was the 5-day miners' memorial observed during the third week of the month, during which the United Mine Workers of America exercised their contract option to use up to 10 days during the 3-year contract period for a work stoppage commemorating the lives of miners lost in mining operations. Coal consumption in August was 48.8 million tons, the same level as in August 1973, and up only 0.3 million tons from the previous month. For the year-to-date, these consumption levels are consistent with the trends which show little change in consumption pattern from 1973.

## Bituminous and Lignite

	Domestic Consumption *	Production ** In thousands of short tons	Exports	Stocks
<b>1972</b>				
January	R 43,951	49,680	R 3,660	92,908
February	R 43,178	49,112	R 3,630	R 93,648
March	R 43,773	54,438	4,624	97,855
April	R 40,158	49,814	4,915	R 103,701
May	R 40,588	52,879	5,416	110,597
June	R 40,505	50,083	4,882	114,493
July	R 43,071	40,964	3,627	109,733
August	R 44,698	52,169	6,337	112,865
September	R 42,002	49,374	4,923	114,346
October	R 43,050	51,671	R 5,173	117,995
November	R 44,104	50,297	5,380	119,211
December	R 47,698	44,904	3,392	R 115,372
<b>1973</b>				
January	49,838	R 49,379	2,954	108,590
February	44,652	R 45,893	2,669	106,422
March	44,814	R 50,547	3,377	109,065
April	R 42,689	R 46,999	R 5,063	110,861
May	R 43,627	R 51,420	5,140	114,511
June	R 45,115	R 46,613	4,969	107,616
July	R 47,706	R 43,801	R 4,164	105,027
August	R 48,840	R 55,874	R 5,125	104,488
September	R 45,471	R 48,338	3,424	R 103,501
October	R 46,427	R 54,382	5,882	104,397
November	R 46,703	R 49,826	5,214	104,095
December	50,130	R 48,666	4,889	R 99,022
<b>1974</b>				
January	50,415	53,470	2,813	96,005
February	45,122	49,010	4,627	93,970
March	46,402	51,455	3,179	97,445
April	44,065	R 53,820	4,944	103,997
May	R 45,712	R 57,185	6,032	107,668
June	44,631	47,635	6,369	108,765
July	R 48,547	R 47,855	5,307	R 104,641
August	***48,800	***50,285	***5,088	***102,800

\*See Explanatory Note 4.

\*\*See Explanatory Note 5.

\*\*\*Preliminary data

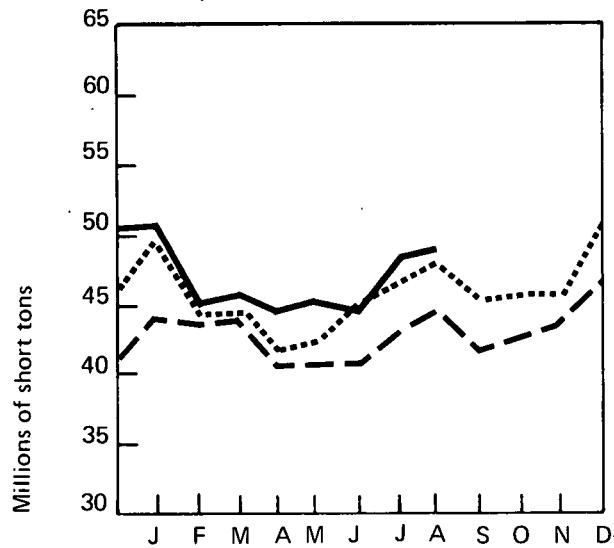
R=Revised data

Source: Bureau of Mines.

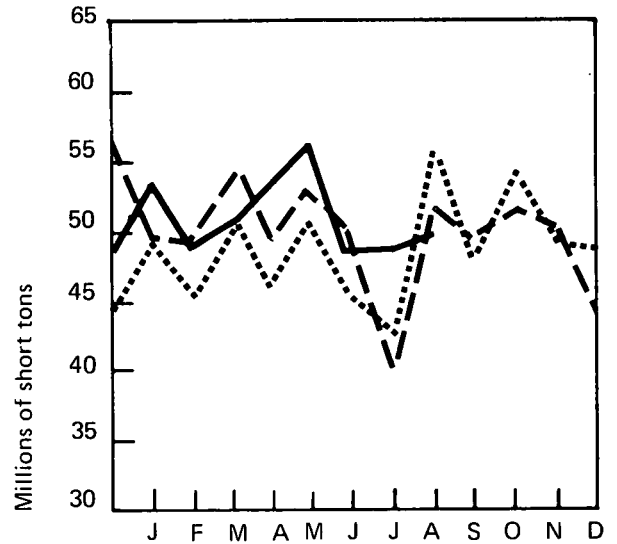
Coal exports in August at 5.1 million tons were about level with exports for July 1974 and August 1973.

At the end of August, coal stocks were 102.8 million tons, down 1.8 million tons from the 104.6-million ton level at the end of the previous month.

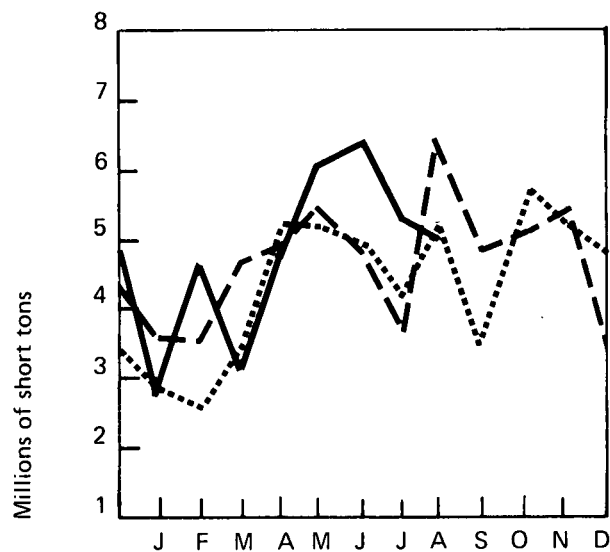
**Domestic Consumption**



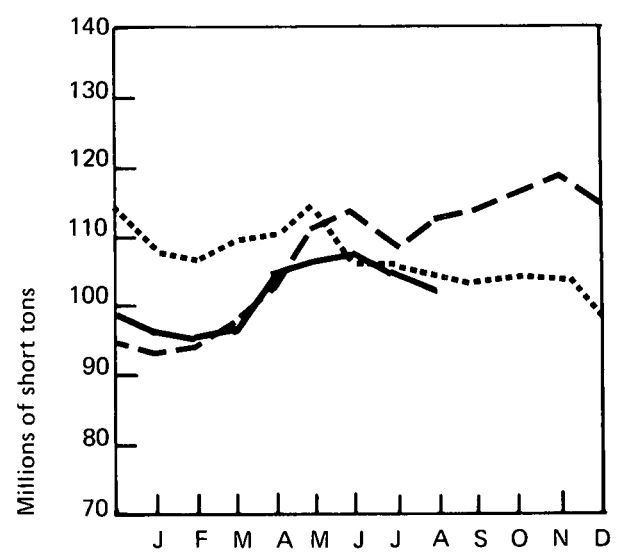
**Production**



**Exports**



**Stocks**



— 1972  
 ..... 1973  
 — 1974

# Part 3

# Electric Utilities

## Electric Utilities

As the summer months ended, the typical seasonal decrease in electric power production occurred. Production declined 12.3 percent from 174,021 million kilowatt hours in August to 152,594 kilowatt hours in September.

During the first three quarters of this year the cumulative production of kilowatt hours was down 1.3 percent as compared with the same period in 1973. This was probably due to a combination of milder winter weather, voluntary conservation efforts, and higher electric utility rates.

Coal stocks at electric utilities remained about the same as for the previous year, representing on the average an 80-day supply. Oil stocks, though, have grown approximately 50 percent over the past 12 months and currently represent about a 70-day average supply.

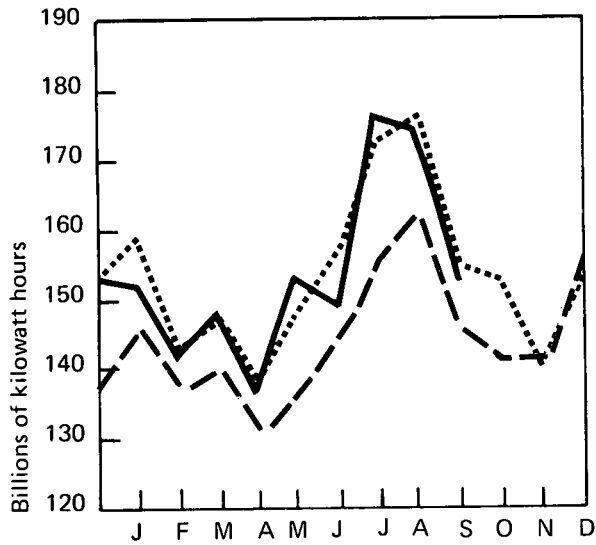
The mix of fossil fuels used for electric power generation has changed somewhat compared with August last year. Oil and gas consumption by utilities were both down considerably, 11 percent and 21 percent, respectively, while coal was only down 1 percent. However, hydroelectric and nuclear power

	Production In millions of kilowatt hours	Coal In thousands of short tons	Fuel Consumption Oil In thousands of barrels	Gas In millions of cubic feet
<b>1972</b>				
January	144,575	30,231	46,555	251,029
February	137,400	28,946	43,325	258,859
March	140,056	28,472	38,809	294,804
April	132,138	26,093	32,325	312,229
May	137,745	26,823	32,106	351,543
June	145,523	27,749	35,098	394,585
July	157,846	30,214	40,646	433,533
August	162,822	31,651	41,073	448,594
September	147,358	28,988	38,723	398,799
October	143,742	29,133	42,876	337,567
November	143,867	29,926	47,914	262,447
December	154,350	32,817	54,479	234,683
<b>1973</b>				
January	159,320	34,591	55,773	219,270
February	143,109	30,921	46,978	212,983
March	147,754	30,746	42,701	255,314
April	139,273	29,209	35,845	267,151
May	147,021	29,683	38,097	316,989
June	158,812	31,953	46,669	363,239
July	172,539	34,833	50,956	414,408
August	175,928	36,065	55,166	482,053
September	156,304	32,723	47,937	418,776
October	153,888	32,398	48,033	327,010
November	140,785	31,856	45,158	247,038
December	153,276	33,704	44,696	217,049
<b>1974</b>				
January	152,226	34,468	46,700	222,080
February	141,723	30,062	41,186	185,468
March	148,046	31,135	40,007	244,288
April	137,586	29,452	38,124	238,272
May	153,076	31,341	41,046	304,166
June	148,119	31,892	41,084	341,067
July	175,057	35,809	48,909	399,259
August	174,021	35,365	49,084	380,979
September	152,594			

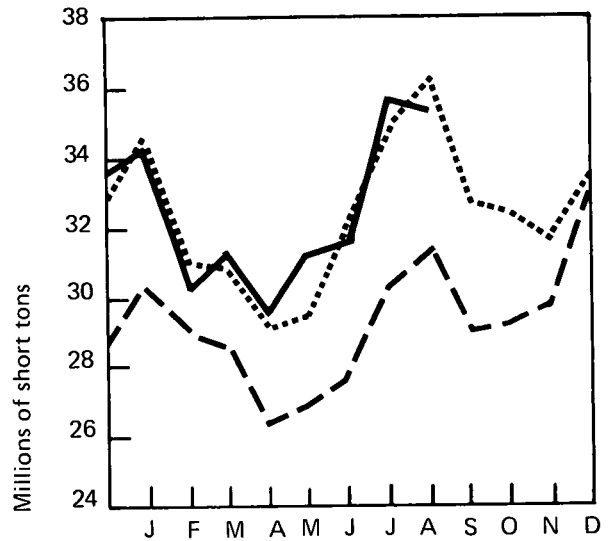
Sources: Federal Power Commission.  
Production data for latest month are from  
Edison Electric Institute.

generation increased sufficiently to more than offset the reduction in electric power produced from oil and gas. The electric utility production series will be expanded in next month's issue to include a breakdown of electricity generation by energy source, that is, coal, oil, gas, nuclear power, and hydroelectric power.

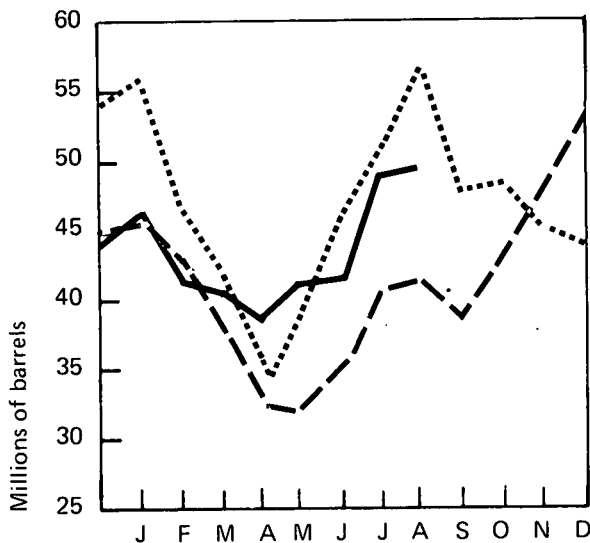
**Production**



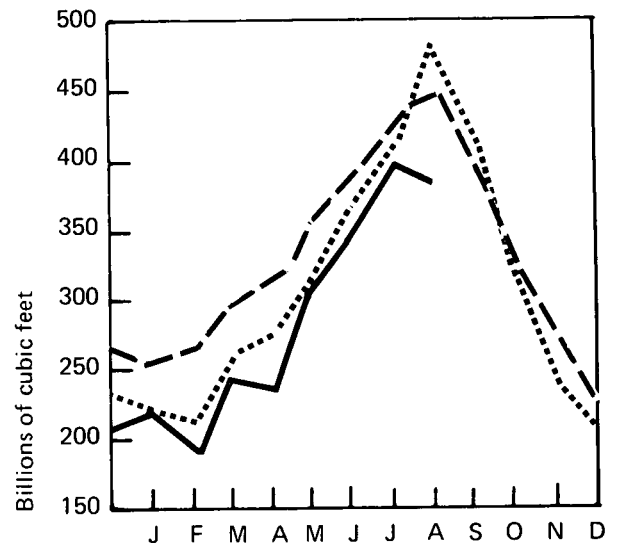
**Coal Consumption**



**Oil Consumption**



**Gas Consumption**



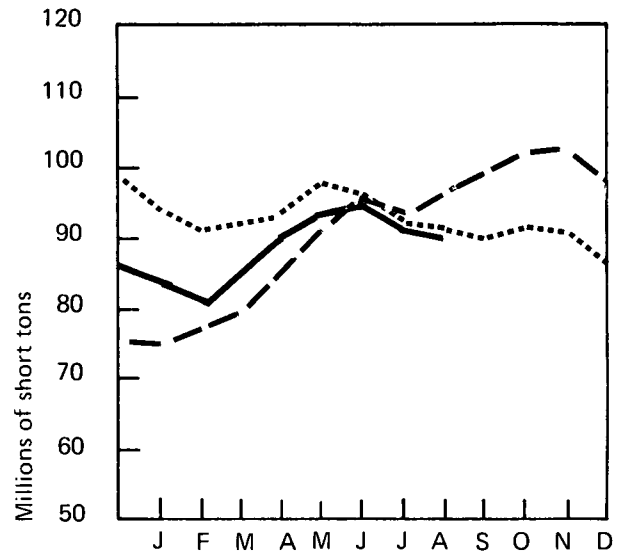
--- 1972  
 ..... 1973  
 ——— 1974



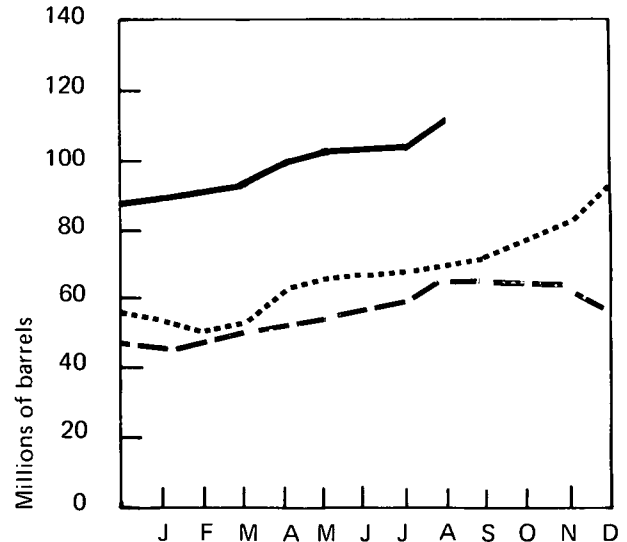
## Electric Utilities (Continued)

	Stocks at End of Month	
	Coal In thousands of short tons	Oil In thousands of barrels
<b>1972</b>		
January	76,876	46,055
February	77,138	47,111
March	80,296	52,213
April	84,984	55,730
May	91,778	57,399
June	96,553	58,815
July	93,760	60,786
August	96,611	66,024
September	98,396	66,004
October	102,205	65,531
November	102,477	62,067
December	98,671	57,686
<b>1973</b>		
January	95,017	53,691
February	92,993	50,858
March	93,986	54,885
April	94,991	62,411
May	98,722	64,259
June	97,995	65,003
July	92,215	67,987
August	91,356	73,259
September	90,156	74,863
October	91,428	76,343
November	90,369	81,224
December	86,880	88,228
<b>1974</b>		
January	83,366	89,053
February	80,962	92,645
March	84,257	94,187
April	90,901	100,210
May	93,628	103,606
June	95,811	104,316
July	91,616	105,919
August	89,691	110,997

Coal Stocks



Oil Stocks



Source: Federal Power Commission.

--- 1972  
 ..... 1973  
 — 1974

# **Part 4      Resource Development**

# Oil and Gas Exploration

In September, for the seventh consecutive month, the average number of rotary rigs engaged in drilling for oil and gas was higher than the average for the previous month. Active rotary rigs in September numbered 1,527, an increase of nine over the August rig count and a 21-percent increase over the level experienced in September 1973.

Consistent with the high level of drilling rig activity, total wells completed during the first 9 months of 1974 were up 21 percent over the same 1973 period. Oil wells showed the largest gain, increasing 27.3

percent from 7, 193 completions in the first 3 quarters of 1973 to 9,160 in 1974. Gas wells increased 19.7 percent during this period.

Cumulative footage of wells for January through September was 110 million feet, compared with '98 million feet during the same months in 1973.

The number of seismic crews engaged in exploration for oil and gas in September remained unchanged from the August 1974 level of 287 land crews and 34 marine crews, for a total of 321 crews. Seismic crew

	<b>Rotary Rigs in Operation</b>	<b>Wells Drilled</b>				<b>Total Footage of Wells Drilled</b>
	Monthly average	Oil	Gas	Dry	Total	
<b>1972</b>						
January	1,147	807	281	851	1,939	9,441,238
February	1,071	965	350	955	2,270	12,381,669
March	1,034	1,210	394	889	2,493	12,406,433
April	1,002	923	355	788	2,066	9,902,253
May	1,005	920	332	816	2,068	10,218,488
June	1,049	1,042	395	903	2,340	11,009,513
July	1,104	833	335	795	1,963	9,212,931
August	1,130	946	410	924	2,280	11,334,867
September	1,152	1,065	468	1,009	2,542	11,634,026
October	1,165	792	539	919	2,250	10,944,312
November	1,186	860	535	975	2,370	12,360,912
December	1,241	985	536	1,290	2,811	14,190,138
<b>1973</b>						
January	1,219	758	406	899	2,063	10,972,665
February	1,126	777	487	765	2,029	10,655,936
March	1,049	953	504	909	2,366	12,317,756
April	993	699	489	777	1,965	10,433,987
May	1,046	749	407	647	1,803	9,622,110
June	1,118	767	432	795	1,994	10,814,600
July	1,155	912	504	840	2,256	10,995,939
August	1,222	724	456	739	1,919	9,632,819
September	1,266	854	690	940	2,484	12,075,280
October	1,334	790	554	958	2,302	11,693,672
November	1,390	822	606	865	2,293	11,823,350
December	1,405	1,087	827	1,208	3,122	15,529,582
<b>1974</b>						
January	1,372	763	577	803	2,143	10,391,797
February	1,355	901	600	816	2,317	12,160,308
March	1,367	936	638	1,003	2,577	12,844,135
April	1,381	947	700	945	2,592	13,349,007
May	1,412	957	520	870	2,347	11,459,595
June	1,432	1,238	586	982	2,806	12,976,388
July	1,480	1,008	461	884	2,353	11,801,777
August	1,518	1,210	555	968	2,733	12,409,855
September	1,527	1,200	600	1,091	2,891	12,676,090

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

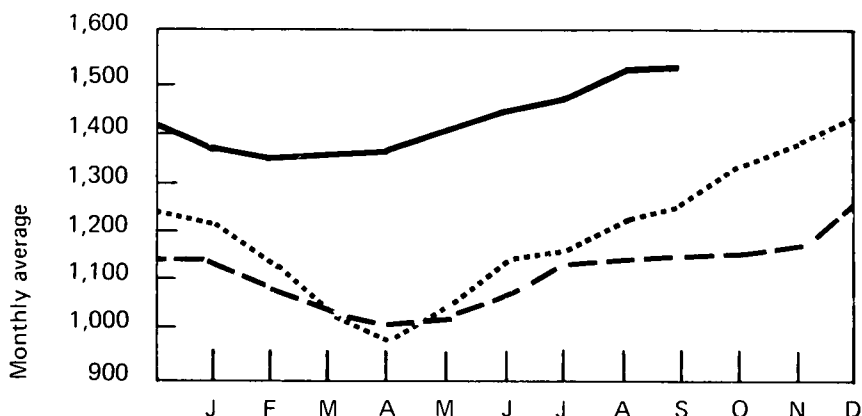
activity is still running about 28 percent above the average for 1973.

Estimated mileage traversed by seismic crews in September at 45,857 miles (32,368 offshore, 13,489 onshore) was also unchanged from August levels.

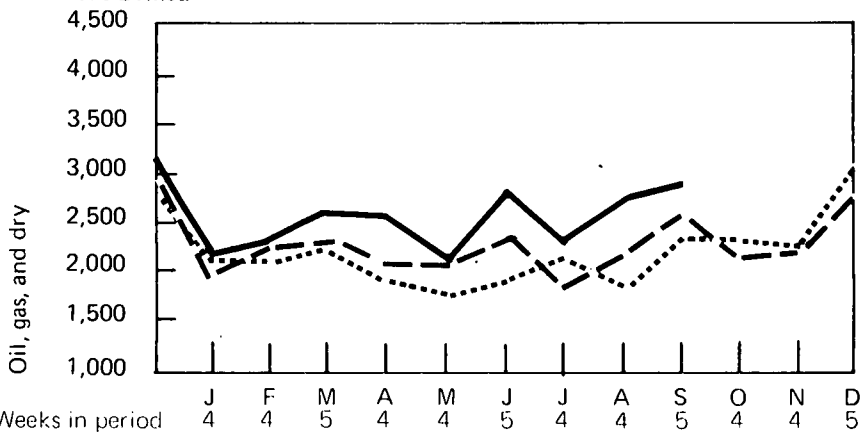
Severe constraints on the expansion of domestic oil and gas exploration and drilling capabilities imposed by technical personnel shortages and limited drilling rig manufacturing capacity have been partially alleviated by an influx of seismic crews and drilling rigs from Canada, where exploratory activity

has been depressed since early spring. From March to August of this year, 42 seismic crews ceased operations in Canada, and the number of active rotary rigs declined from 250 to 140. Approximately 28 of these rigs are currently operating in the United States, with another 15 slated to leave Canada for the United States as soon as final negotiations are completed. The situation in Canada has been attributed to proposed fiscal policies which would disallow deductions for royalty payments to provinces on Federal tax returns.

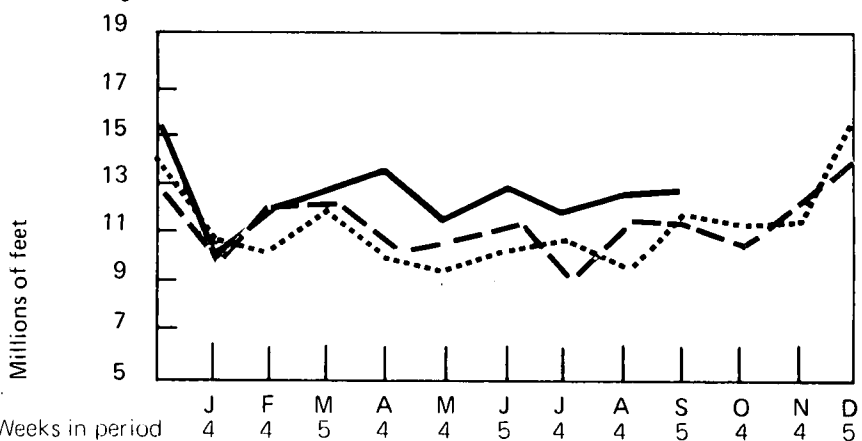
**Rotary Rigs in Operation**



**Total Wells Drilled**



**Total Footage of Wells Drilled**

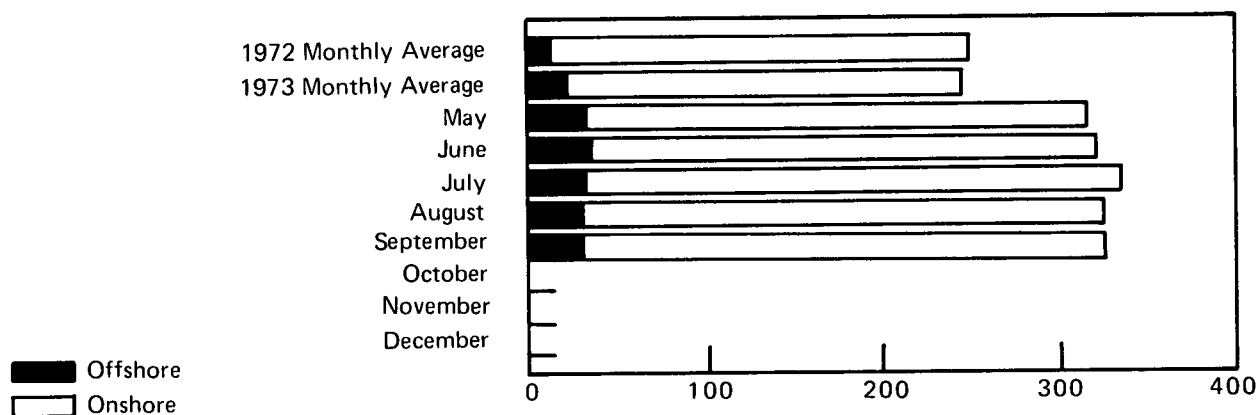


--- 1972  
 ..... 1973  
 ——— 1974

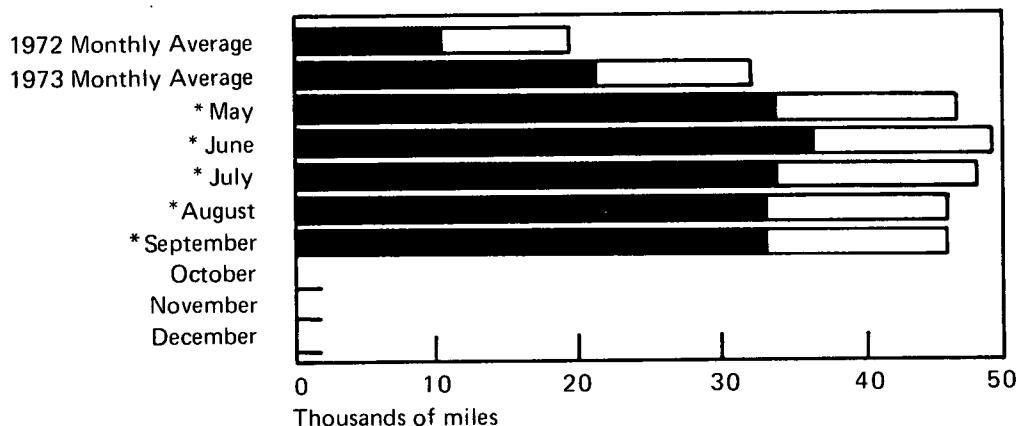
# Oil and Gas Exploration (Continued)

	Crews Engaged in Seismic Exploration			Line Miles of Seismic Exploration		
	Off shore	Onshore	Total	Offshore	Onshore	Total
1972 Monthly Average	12	239	251	10,306	9,333	19,639
1973 Monthly Average	23	227	250	21,579	10,597	32,175
1974					Estimates *	
May	35	278	313	33,320	13,066	46,386
June	38	279	317	36,176	13,113	49,289
July	35	299	334	33,320	14,053	47,373
August	34	287	321	32,368	13,489	45,857
September	34	287	321	32,368	13,489	45,857

Crews Engaged in Seismic Exploration



Line Miles of Seismic Exploration



\* See Explanatory Note 4.

Source: Society of Exploration Geophysicists.

**Parts**

**Price**

## Motor Gasoline

A survey of retail dealers during September indicated that the monthly average retail price of regular gasoline declined for the second month in a row. The average price that retailers pay for regular gasoline declined for the first time since the Arab embargo. The average dealer margin continued its downward trend by decreasing 0.3 cent per gallon from its level in August. Retailers of independent brand gasoline decreased both their selling prices and margins by larger amounts than retailers of major brand gasoline. On a regional basis, Region 2 had the highest average selling price of regular gasoline whereas Region 7 had

the lowest average selling price.

A survey during September of 21 major oil companies corroborates the softening of retail gasoline prices. Ten companies decreased prices, eight did not change prices, and three increased prices. In comparison, only four companies decreased prices during August.

The survey of dealer tankwagon (DTW) and jobber buying prices of gasoline sold by major companies to branded retail outlets indicates a softening in wholesale buying and selling prices. The jobber buying price and the jobber selling price declined by

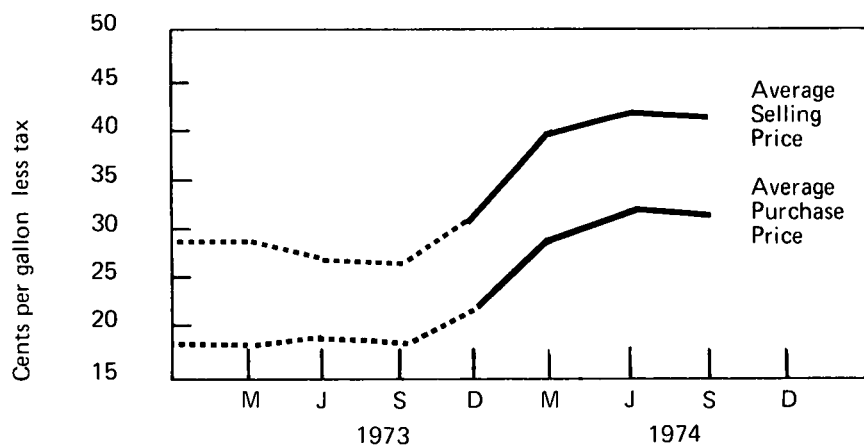
### Regular Gasoline at Retail Outlets

	Average Selling Price	Average Purchase Price	Average Dealer Margin
Cents per gallon, less tax			
<b>1973</b>			
January	25.31	18.46	6.85
February	24.81	18.09	6.72
March	25.94	18.75	7.19
April	26.32	19.02	7.30
May	26.49	19.21	7.28
June	26.78	19.22	7.56
July	26.82	19.22	7.60
August	26.81	19.21	7.60
September	26.74	19.13	7.61
October	27.7	20.2	7.4
November	29.3	21.6	7.7
December	31.3	23.1	8.2
<b>1974</b>			
January	34.1	25.2	8.9
February	36.6	27.5	9.1
March	40.1	29.2	10.8
April	41.2	30.5	10.7
May	42.5	31.9	10.5
June	42.9	32.6	10.3
July	43.1	33.0	10.1
August	42.7	32.9	9.7
September	42.0	32.6	9.4

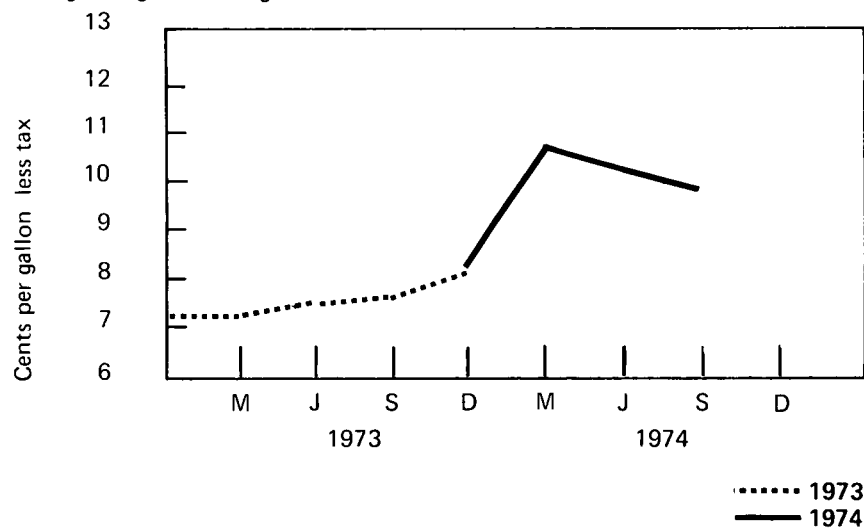
Sources: Platts Oilgram through September 1973.  
FEA from October 1973 forward.

0.61 and 0.52 cent per gallon, respectively. The jobber margin remained about the same.

Average Retail Prices For Regular



Average Margins For Regular





## Motor Gasoline (Continued)

Product at Retail Outlets		Average Selling Price		Average Margins	
		September 1974	August 1974	September 1974	August 1974
Regular Gasoline:		Cents per gallon, less tax			
Major		42.6	43.2	9.8	10.1
Independent		39.3	40.5	7.3	7.8
National Average		42.0	42.7	9.4	9.7
Premium Gasoline:					
Major		46.6	47.2	10.7	10.9
Independent		24.7	43.7	8.5	8.8
National Average		46.0	46.6	10.3	10.5
No Lead Gasoline:					
Major		44.3	45.0	10.2	10.4
Independent		40.6	42.1	7.9	8.5
National Average		43.6	44.6	9.8	10.2
Diesel Fuel:					
Major		38.3	39.0	8.2	8.0
Independent		35.4	38.3	5.7	5.8
National Average		37.4	37.7	7.4	7.3
Regular Gasoline at Retail Outlets					
Regions		Average Selling Price		Average Margin	
		September 27, 1974		September 27, 1974	
		Cents per gallon, less tax			
1	Boston	42.6		9.0	
	New York				
2	Washington	42.9		10.2	
	Baltimore				
	Philadelphia				
3	Buffalo	42.2		8.6	
	Cleveland				
	Pittsburgh				
4	Atlanta	42.8		9.7	
	Cincinnati				
5	Detroit	42.6		8.8	
	Chicago				
6	Milwaukee	42.5		9.4	
	Minneapolis				
7	Dallas	40.5		9.6	
	Houston				
8	Kansas City	41.9		9.6	
	St. Louis				
9	San Francisco	41.6		10.6	
	Seattle				
10	Los Angeles	40.6		9.0	
	San Diego				
National Average		42.0		9.4	

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**Retail Gasoline Price Changes  
During September 1974**

Company	Effective Date	Amount of Change Cents per gallon
Amerado Hess	September 20	-4.0
American Petrofina	September 17	0.25
Ashland	September 10	-1.0
Atlantic Richfield		None
B.P.		None
Cities Service	September 18	-1.1
Champlin	September 16	-1.0
Continental	September 18	-1.5
Exxon		None
Getty	September 1	-1.0 (N.Y.C. only)
Gulf	September 30	1.5
Kerr—McGee		None
Mobil	September 19	-2.0
Phillips		None
Shell		None
Standard Oil of California	September 4	-0.5
Standard Oil of Indiana		None
Standard Oil of Ohio	September 7	-2.0
Sun	September 12	0.1
Texaco		None
Union Oil of California	September 1	-3.0

**Major Brand Regular Gasoline, September 1974**

Marketing Region	Retail DTW Price	Change from Previous Month	Branded Jobber Price Cents per gallon	Change from Previous Month	Regional Jobber Margin	Change from Previous Month
Northeast	33.78	-0.24	29.33	-0.46	4.45	0.22
Mid Atlantic	32.49	-0.83	28.88	-0.56	3.61	-0.27
Southeast	31.63	-0.50	28.01	-0.56	3.62	0.06
Central	32.89	-0.55	28.84	-0.71	4.05	0.16
Western	32.37	-0.48	28.65	-0.42	3.72	-0.06
Southwest	30.98	-0.34	27.37	-0.76	3.61	0.42
Pacific	31.45	-0.75	27.82	-0.75	3.63	0
Average	32.23	-0.52	28.41	-0.61	3.82	0.08

# Heating Oil

The average price of heating oil sold to residential customers increased slightly during August to 35.8 cents per gallon from 35.2 cents per gallon during July. The average price for institutional and utility use also increased, whereas the average price for industrial use declined. The average purchase price for heating oil jobbers during August remained about the same as during July.

The September survey of 21 major oil companies indicated very little movement in heating oil prices for

that month. Three increased prices, 3 decreased prices, and the other 15 companies did not change prices.

## Average Prices for August 1974

	Average Purchase Price	Residential		Institutional and Utility		Industrial	
		Selling Price	Margin	Selling Price	Margin	Selling Price	Margin
				Cents per gallon			
New England	28.1	36.3	8.2	34.7	6.6	33.2	5.1
Mid Atlantic	28.2	36.1	7.9	34.9	6.7	33.3	5.1
Southeast	27.9	37.8	9.9	36.8	8.9	34.0	6.1
East North- Central	27.5	35.1	7.6	33.1	5.6	32.7	5.2
West North- Central	28.8	35.2	6.4	33.5	4.7	33.0	4.2
East South- Central	29.3	33.7	4.4	33.0	3.7	33.3	3.7
Mountain			Not	Available			
West Coast	28.2	35.9	7.7	33.5	5.3	34.1	5.9
National Average	28.1	35.8	7.7	34.2	6.1	33.1	5.0

## Price Changes During September 1974

Company	Effective Date	Amount of Change Cents per gallon
Amerda Hess		None
American Petrofina		None
Ashland		None
Atlantic Richfield		None
B.P.		None
Cities Service	September 16	2.0
Champlin	September 6	-0.5
Continental		None
Exxon		None
Getty		None
Gulf	September 30	1.6
Kerr—McGee		None
Mobil		None
Phillips	September 27	-2.0
Shell	September 1	1.0
Standard Oil of California		None
Standard Oil of Indiana		None
Standard Oil of Ohio		None
Sun		None
Texaco		None
Union Oil of California	September 1	-4.0

## Crude Oil

The percentage of production of new oil and resulting released oil in July remained the same as in June. New oil accounted for 15 percent of total crude production, and released oil accounted for 9 percent. A survey of stripper well production indicated that the percentage of total production accounted for by stripper wells has declined from 13 percent to 12 percent. The estimated total percentage of oil being sold at the free market price during July was 36 percent.

The average free market price for domestic crude oil during July was \$9.95 per barrel, unchanged from its June level. A survey of major producers indicated that crude price postings increased during August and September in selected areas. A preliminary estimate of the September average new oil price, taking into account these increases, is \$10.01 per barrel.

The average cost for domestic crude petroleum delivered to the refinery was \$7.03 per barrel during

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### Percentage of Domestic Production Sold at Controlled and Uncontrolled Prices

	Controlled Old Oil	Uncontrolled New Oil	Released	Stripper
<b>1974</b>				
January	60	17	10	13
February	62	15	10	13
March	60	16	11	13
April	60	16	11	13
May	62	15	10	13
June	63	15	9	13
July	64	15	9	12

### Domestic Crude Petroleum Prices at the Wellhead

	Old	New
	Dollars per barrel	
<b>1974</b>		
January	5.25	9.82
February	5.25	9.87
March	5.25	9.88
April	5.25	9.88
May	5.25	9.88
June	5.25	9.95
July	5.25	9.95
August	5.25	*10.01
September	5.25	*10.01

\*Preliminary estimate

## Crude Oil (Continued)

August, down 16 cents per barrel from its July level.

The average refiner acquisition cost of imported crude petroleum during August was \$12.59 per barrel, down 47 cents per barrel from its high during June of \$13.06 per barrel.

There was considerable variability in the landed cost of crude petroleum by country of origin during July. Of the eight large sources of imported crude petroleum shown, the lowest cost crude came from

Venezuela at \$10.64 per barrel and the highest came from Indonesia at \$13.28 per barrel. The two most important sources of crude petroleum, Nigeria and Canada, had average crude costs of \$12.75 and \$12.65 per barrel, respectively.

The composite cost of crude petroleum purchased by refiners during August, at \$9.11 per barrel, was down 19 cents per barrel from its July level.

### Refiner Acquisition Cost of Crude Petroleum\*

	Domestic	Imported	Composite
	Dollars per barrel		
<b>1974</b>			
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	7.03	12.59	9.11

### Estimated Landed Cost of Imported Crude Petroleum From Selected Countries\*

	Algeria	Canada	Indonesia	Iran	Nigeria	Saudi Arabia	U. A. Emirates	Venezuela
	Dollars per barrel							
<b>1973</b>								
December	NA	6.32	6.42	6.37	8.54	5.49	NA	6.70
<b>1974</b>								
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

NA = Not available

\*See Explanatory Note 7.

# Definitions

## **Base Production Control Level**

The total number of barrels of domestic crude petroleum produced from a particular property in the corresponding month of 1972.

## **Ceiling Price**

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

## **Controlled Crude Oil**

Domestically produced crude petroleum that is 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 Runs to Stills**

The volume of domestic and foreign crude oil piped to the distillation unit. Runs to stills are measured at the input to the distillation unit.

## **Crude Oil Stocks**

Stocks held at refineries and at pipeline terminals. Does not include stocks held on leases (storage facilities adjacent to the wells), which historically total approximately 13 million barrels.

## **Dealer Tankwagon (DTW) Price**

The price at which a retail 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 Non-controlled Crude Oil**

That portion of domestic crude oil production including new, released, and stripper oil which may be sold at a price exceeding the ceiling price.

## **Electricity Production**

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

## **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 kerosine-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.

**Line Miles of Seismic Exploration**

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

**Motor Gasoline Production**

Total production of motor gasoline by refineries, measured at refinery output. 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 Imports**

This is based on data collected by the Federal Power Commission from major interstate pipeline companies.

**Natural Gas Liquids**

Products obtained from natural gasoline plants, cycling plants, and fractionators after processing the natural gas. Included are ethane, liquified 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, kerosine, and distillate fuel oil.

**Natural Gas Marketed Production**

Gross withdrawals from the ground, less gas used for repressuring and quantities vented and flared. Gas volumes are reported at a base pressure of 14.73 pounds per square inch absolute at 60°F. Data are from Bureau of Mines and are collected from reports received from the Interstate Oil Compact Commission provided by State agencies.

**New Oil**

The volume of domestic crude petroleum produced from a property in a specific month which exceeds the base production control level for that property.

**Old Oil**

Same as controlled crude oil.

**Primary Stocks of Refined 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.

**Refined Products Domestic Demand**

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.

**Refined Products Imports**

Imports of motor gasoline, naphtha-type jet fuel, kerosine-type jet fuel, liquified petroleum gases, kerosine, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, and asphalt. Imports of bonded bunkers, jet fuel, distillate and residual fuel oils for onshore military use, and receipts from Puerto Rico, the Virgin Islands, and Guam are based on data reported to the Oil Import Administration of FEA. All other figures are compiled by Bureau of Mines from Department of Commerce data.

**Released Oil**

This is that portion of the base production control level for a property which is equal to the volume of new oil produced in that month and which may be sold above the ceiling price. The amount of released oil may not exceed the base production control level for that property.

**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 refiner 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.

**Stripper Well Lease**

A property of which the average daily production of crude petroleum and petroleum condensates, including natural gas liquids, per well did not exceed 10 barrels per day during the preceding calendar month.

**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

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1. Domestic production of energy includes the production of fossil fuels as well as the production of electricity by hydroelectric and nuclear powerplants. For fossil fuels, these series were derived by multiplying the physical units of the product by the approximate heat content of the fuel listed in the Units of Measure and Equivalencies. Data on hydroelectric and nuclear powerplant generation were obtained from FPC.

2. Data for Runs to Stills, Imports, and Stocks through April 1974 are from Bureau of Mines. From May 1974 forward data for these categories are from the FEA *Weekly Petroleum Statistics Report*. Bureau of Mines data for Domestic Production are shown through July 1974. August and September Domestic Production data are from the American Petroleum Institute.

3. A break in the data series occurred in May 1974. Data shown for 1972 through April 1974 are from Bureau of Mines. FEA data are shown from May 1974 forward. It was during this month that FEA began publishing the *Weekly Petroleum Statistics Report* which presents volumetric data on domestic petroleum receipts and imports for all refiners and bulk terminal operators, as well as production and stock levels of each major petroleum product. The major difference between FEA and Bureau of Mines data occurs in the "stocks" series. Stock levels reported by FEA for the major petroleum products are higher than those reported by Bureau of Mines, because the FEA series includes stocks of independent terminal operators not counted by the Bureau of Mines.

4. Bituminous coal and lignite consumption data 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.

5. 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.

6. Mileage estimates for 1974 were derived by multiplying the monthly seismic crew counts by the average number of miles traversed per crew month in 1973.

7. 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. The estimated landed cost of imported crude petroleum from selected countries does not represent the total cost of all imported crude. Imported crude costs to U.S. company-owned refineries in the Caribbean are not included in the landed cost, and costs of crude petroleum from countries which export only small amounts to the U.S. are also excluded.

# Units of Measure

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## Weight

1 metric ton                      1.102 short tons

## Conversion Factors for Crude Oil

### *Average Gravity*

1 barrel (42                      *weighs*                      0.136 metric tons  
gallons)                                      (0.150 short tons)

1 metric ton                      *contains*                      7.33 barrels

1 short ton                      *contains*                      6.65 barrels

## Approximate Heat Content of Various Fuels

### Petroleum

Crude Oil	5.598 million Btu/barrel
Gasoline	5.248 million Btu/barrel
Jet fuel, naphtha-type	5.355 million Btu/barrel
Jet fuel, kerosine-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                      3.99 million Btu/barrel

Natural gas                      1,031 Btu/cubic foot

### Coal

Bituminous and lignite	24.05 million Btu/short ton
Anthracite	25.40 million Btu/short ton

Nuclear power                      10,660 Btu/kilowatt hour

Hydroelectric power                      10,379 Btu/kilowatt hour





**Federal Energy Administration  
Monthly Energy Review**