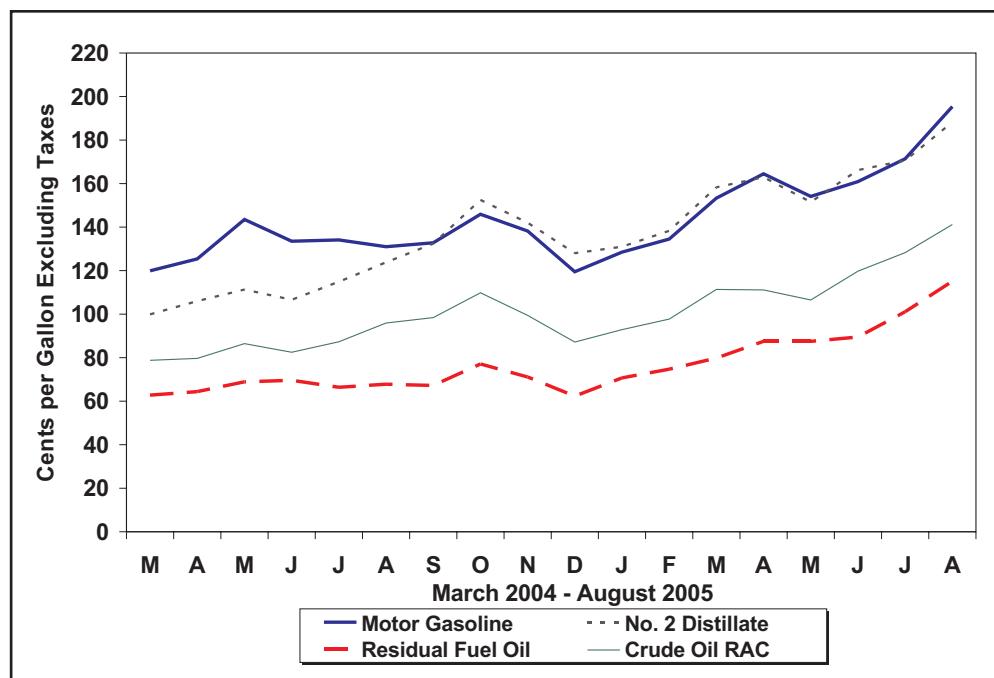


Highlights

In response to many issues, world crude oil prices rose dramatically in August. The death of Saudi Arabian King Fahd on August 1 underpinned prices that were already on the rise because of lean gasoline inventories and refinery problems in the United States. Concern about attacks by militants in Saudi Arabia also encouraged price increases during the second week of the month. Additionally, a standoff between the International Atomic Energy Agency (IAEA) and Iran supported prices. The issue pertained to the Organization of Petroleum Exporting Countries (OPEC) second largest oil producer's continuation of its nuclear program leading to worries that action on the issue by the U.N. Security Council could affect Iranian oil exports and drive oil prices higher. The parties involved arrived at no immediate resolution to the impasse. At mid-month, the International Energy Agency lowered its previous prediction of non-OPEC oil production for 2005 because of unscheduled outages in the U.S. Gulf Coast offshore region, Mexico, Norway and Great Britain along with lower-than-expected production from Russian, Asian, and African sources. Following a short-lived break in their ascent, prices rose again following rocket attacks on two U.S. warships in Jordanian ports on August 19. Further, a force majeure declared on oil exports by the Guatemalan government spurred prices. The declaration was due to strike by oil workers over investments by foreign operators in that country's oil industry, which significantly reduced oil pipeline throughput for export. Prices rose dramatically at the end of the month, with many key streams setting record highs as Hurricane Katrina struck the Gulf Coast of the United States.

In the United States, worries about gasoline supplies, refinery problems, and the impact of Hurricane Katrina led petroleum product prices to record-setting highs during August. After focusing on distillate fuels production during the past several months due to robust demand, inventory levels were within, or above their normal range in most regional markets at the beginning of the month. However, because of an outage at a refinery near Los Angeles, CARB-specification diesel fuel production was hampered, and diesel prices in California markets soared during the first half of August. In other markets across the country, gasoline prices led the upward trend seen in oil product prices. A combination of falling inventories, rising crude oil prices, outages at several refineries, and demand at its seasonal high, sent gasoline prices significantly higher during the first half of August. At mid-month, rising prices cooled off, in part due to market technical factors and the absence of news of additional problems with

Figure HL1. Crude Oil and Petroleum Product Wholesale Prices



Sources: Energy Information Administration. Crude oil refiner acquisition cost: Form EIA-14, "Refiners' Monthly Cost Report"; petroleum product prices: Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report."

Table HL1. U.S. Refiner Prices and Volumes of Petroleum Products

(Prices: Cents per Gallon Excluding Taxes, Volumes: Million Gallons per Day)

Products	Sales to End Users						Sales for Resale					
	August 2005		July 2005		August 2004		August 2005		July 2005		August 2004	
	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume
Motor Gasoline	207.9	62.7	184.9	62.6	145.1	59.7	195.4	346.7	171.4	333.4	131.0	331.8
Conventional	203.3	36.2	179.1	36.1	141.4	35.7	192.1	232.7	167.0	225.5	127.5	227.5
Regular	201.4	30.5	176.9	30.1	138.8	28.8	190.6	200.8	165.6	193.6	126.1	196.2
Midgrade	209.0	3.3	185.4	3.4	148.1	3.8	198.9	12.9	170.4	12.7	132.4	11.0
Premium	219.0	2.5	196.3	2.6	157.3	3.0	203.7	19.0	179.4	19.2	139.4	20.3
Oxygenated	210.4	1.8	182.2	1.9	146.2	1.7	201.1	9.2	170.5	8.9	132.5	7.5
Regular	209.3	1.5	180.5	1.6	144.0	1.4	200.2	7.5	169.6	7.3	131.5	6.1
Midgrade	212.6	0.2	187.0	0.2	153.2	0.2	202.6	1.1	170.4	1.1	132.6	0.9
Premium	220.2	0.1	195.4	0.1	162.7	0.1	209.5	0.6	181.6	0.6	144.1	0.5
Reformulated	214.5	24.7	193.6	24.7	150.9	22.3	202.2	104.8	181.4	99.0	139.1	96.8
Regular	211.1	19.1	189.8	18.8	146.8	16.6	200.1	86.2	178.9	80.9	136.4	77.4
Midgrade	222.2	2.7	201.2	2.8	158.1	2.5	208.7	4.2	187.3	4.4	144.9	5.2
Premium	229.9	2.9	209.8	3.0	166.9	3.2	213.3	14.3	194.6	13.7	151.5	14.3
Aviation Gasoline	238.6	0.1	223.0	0.1	184.9	0.1	230.5	0.7	210.2	0.6	168.4	0.7
Kerosene-Type Jet Fuel	185.3	48.0	172.4	45.8	127.2	47.3	185.1	15.0	171.3	17.5	126.9	15.3
Propane (Consumer Grade)	110.1	2.3	101.3	2.2	88.1	2.6	93.2	26.9	86.2	25.1	83.0	33.1
Kerosene	203.2	0.0	178.1	0.1	125.8	0.2	193.8	1.7	176.5	1.2	128.4	1.4
No. 1 Distillate	201.6	0.2	183.9	0.2	137.6	0.1	195.3	0.6	178.4	0.4	136.8	0.4
No. 2 Distillate	193.7	19.9	176.0	18.2	127.7	20.3	188.2	153.3	170.6	142.3	123.7	134.6
No. 2 Fuel Oil	186.1	2.0	171.1	1.7	122.6	2.2	177.8	19.6	164.7	17.4	118.8	15.7
No. 2 Diesel Fuel	194.5	17.9	176.5	16.5	128.3	18.1	189.7	133.7	171.4	124.9	124.4	118.9
Low Sulfur	197.2	12.2	178.6	11.6	130.3	11.9	190.5	117.5	171.9	111.2	125.2	102.3
High Sulfur	188.9	5.7	171.6	4.9	124.6	6.2	184.0	16.2	167.8	13.7	119.3	16.7
No. 4 Fuel^a	W	W	W	W	106.4	0.1	152.0	0.0	W	W	95.4	NA
Residual Fuel Oil	110.6	10.7	105.1	9.4	73.5	8.7	115.1	3.4	101.1	4.4	68.4	5.5
Sulfur Content not > 1 %	129.2	3.9	116.8	3.7	81.8	2.5	133.1	2.0	113.8	2.2	77.4	2.5
Sulfur Content > 1 %	100.0	6.8	97.3	5.6	70.1	6.2	90.7	1.4	87.8	2.1	61.1	3.0

NA = Not available.

W = Withheld to avoid disclosure of individual company data.

^a Includes No. 4 fuel oil and No. 4 diesel fuel.

Notes: Motor gasoline averages and totals prior to October 1993 include leaded gasoline.

Notes: Values shown for the current month are preliminary. Values shown for previous months are revised. Data are final upon publication in the *Petroleum Marketing Annual*.

Source: Energy Information Administration Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report."

refineries or other related infrastructure. Notably, fears of the impact of high crude oil and refined product prices on the general economy began to mount. Then, following some of the largest price increases seen at the retail level for both gasoline and diesel fuel in the past fifteen years, Hurricane Katrina formed and traveled through the Gulf of Mexico. Fears of disruptions and damage to oil production and transportation infrastructures in the region, similar to that caused by Hurricane Ivan in 2004 pressed prices higher. Hurricane Katrina made landfall on August 29 in Plaquemines Parish, Louisiana, just east of New Orleans. The Minerals Management Service reported that shut-in oil production on August 29 amounted to 91.69 percent of the normal daily oil production in the Gulf of Mexico. Natural gas production fell by 82.99 percent of normal

daily production levels. On August 31, oil production remained 91.45 percent offline, while shut-in natural gas production was at 83.46 percent. While not all Gulf Coast refineries are in Louisiana or Mississippi, the two states most severely affected by the storm, the region produces about 45 percent of U.S. gasoline. Thanks to widespread power outages, pipelines could not move products to other areas of the country, leading to fears of product shortages and spiking prices. A review of spot market prices at New York Harbor shows the effect of the storm and other issues on product prices in August. The August 2005 monthly average price for regular gasoline was \$1.937 per gallon compared with \$1.591 last month, a difference of 34.6 cents. The price one year ago was \$1.206 per gallon, a difference of 73.1 cents, and a 60.6 percent increase. In July 2005, the

monthly average spot price for No. 2 fuel oil was \$1.640 per gallon, and in August it was \$1.804 per gallon, a 16.4-cents rise. In August 2004 the price was 63.7 cents lower at \$1.167 per gallon. The West Texas Intermediate (WTI) crude oil price averaged \$64.99 per barrel in August 2005, compared with \$59.00 per barrel last month and \$44.90 per barrel in August 2004.

Additional August market and sales activity for crude oil and the principal petroleum products are summarized in the following sections.

Crude Oil

The daily spot price for WTI crude oil at Cushing, Oklahoma rose significantly during August, reaching record-setting highs. After opening at \$60.71 per barrel, its lowest point for the month, the price began its substantial rise on concern about a spate of refinery outages and gasoline supply levels in the face of continuing robust demand. The price continued its upward trend repeatedly setting new records. At mid-month, a supply report showing that crude oil stocks registered an increase tempered the price modestly before it returned to an upward path. In the days surrounding Hurricane Katrina's landfall on August 29, the price increased appreciably again. A new record high was set on August 30 when the price reached \$69.91 per barrel. The price closed the month at \$68.63 per barrel, and \$7.92 above its opening level for August.

- August monthly average crude oil prices rose in all sales categories. The average domestic crude oil first purchase price climbed \$5.46 (10.2 percent) to \$58.77 per barrel.
- The average free-on-board (f.o.b.) cost of imported crude oil increased \$4.91 (9.4 percent), to \$56.93 per barrel. The average landed cost of foreign crude oil rose \$3.91 (7.3 percent), to \$57.66 per barrel.
- The average refiner acquisition cost for domestic crude oil increased \$4.71 (8.4 percent), to \$60.49 per barrel. The average cost of imported crude oil to U.S. refiners saw the largest increase, rising \$5.82 (11.0 percent), to \$58.70 per barrel, while the composite refiner acquisition cost for crude oil climbed \$5.41 (10.0 percent), to \$59.29 per barrel.

Petroleum Products

Motor Gasoline

Because of a variety of issues, the daily spot price for regular gasoline at New York Harbor rose to a record-setting level in August. After opening the month at \$1.670 per gallon, the price began a vigorous upward climb, largely in response to refinery outages and growing concern about inventories. That period of growth lasted through mid-month until market technical factors came into play and moderated the price. While it remained unsettled after that, the price began to rise in earnest during the last week of August when the threat of Hurricane Katrina to the Gulf Coast region became clear. Following the storm's landfall on August 29, the price rocketed upwards, setting an all-time record of \$3.265 per gallon on the last day of the month.

- Monthly average gasoline prices soared upwards in all categories of sales during August. The average price for retail sales of motor gasoline by refiners jumped 23.0 cents to \$2.079 per gallon, while the average wholesale price surged 24.0 cents to \$1.954 per gallon. Including data reported by a sample of motor gasoline marketers, the national average price at company-operated retail outlets climbed 23.9 cents to \$2.084 per gallon. The average wholesale price for gasoline leaped 24.3 cents to \$1.960 per gallon. The average dealer tank wagon (DTW) price rose 23.5 cents to \$2.021 per gallon, while the average rack price saw the largest increase, climbing 26.1 cents to \$1.967 per gallon. The average bulk sale price rose 19.1 cents to \$1.818 per gallon. Reformulated gasoline prices were 9.6 cents higher than conventional gasoline prices at retail, and 9.7 cents more at wholesale. Oxygenated gasoline prices were 5.2 cents above conventional gasoline prices at retail, and 7.9 cents more at wholesale.
- Overall, refiner sales of motor gasoline increased moderately in August. Total sales rose 13.4 million gallons per day (3.4 percent) to an average of 409.4 million gallons per day. Retail sales inched up 100,000 gallons per day (0.2 percent), while wholesales increased 13.3 million gallons per day (4.0 percent). Rack sales accounted for 70.1 percent of wholesales, while DTW and bulk sales made up 14.4 percent and 15.5 percent, respectively. Reformulated gasoline accounted for 31.6 percent of total motor gasoline sales, while oxygenated gasoline made up 2.7 percent of sales.

No. 2 Distillate

Although producers had replenished distillate stocks to normal ranges by August, the daily spot price for No. 2 heating oil at New York Harbor continued to rise significantly. After opening at \$1.630 per gallon, its lowest level for the month, the price followed the general upward trend seen in the complex. While the No. 2 fuel oil price registered substantial increases during the next few weeks, the price for regular gasoline firmly overtook it from the start of the month due to inventory-related issues, ending a trend seen during much of the past several months. During the final days of the month, the price surged to record-setting levels, reaching its high of \$2.059 per gallon on August 30. Closing the month at \$2.049, the price was 41.9 cents per gallon higher than its opening level.

- August monthly average prices for No. 2 distillates rose significantly in all categories of sale. The national average residential sales price increased 14.0 cents to \$2.182 per gallon. The average wholesale price jumped 17.7 cents to \$1.891 per gallon. The average price for No. 2 diesel fuel at company-operated retail outlets climbed 15.8 cents, while the average wholesale price for No. 2 diesel fuel surged 18.7 cents. The difference between low- and high-sulfur diesel fuel prices was 9.2 cents at retail, and 5.4 cents at wholesale.
- Sales of No. 2 distillates by refiners rose firmly in August. Total sales increased 12.7 million gallons per day (7.9 percent), to 173.2 million gallons per day. Sales of No. 2 fuel oil rose 2.5 million gallons per day (13.1 percent), while sales of No. 2 diesel fuel climbed 10.2 million gallons per day (7.2 percent). Low-sulfur diesel fuel made up 85.6 percent of all refiner diesel fuel sales, and 74.9 percent of all refiner No. 2 distillate sales.

Residual Fuel Oil

- Following the general trend in product prices, monthly average residual fuel oil prices rose in all

categories during August. Refiner prices for low-sulfur residual fuel oil increased 12.4 cents to \$1.292 per gallon at retail, while the average wholesale price soared 19.3 cents to \$1.331 per gallon. The average refiner retail price for high-sulfur residual fuel oil rose 2.7 cents to \$1.000 per gallon, while the wholesale price increased 2.9 cents, to 90.7 cents per gallon. Including data reported by a sample of residual fuel oil marketers, average prices for low-sulfur residual fuel oil rose 9.7 cents to \$1.257 per gallon at retail, and 12.0 cents to \$1.180 per gallon at wholesale. The retail price for high-sulfur residual fuel oil increased 3.6 cents to \$1.018 per gallon, while the wholesale price climbed 5.7 cents to 97.3 cents per gallon.

- Overall, refiner sales of residual fuel oil increased modestly in August. Total sales rose 300,000 gallons per day (2.2 percent). Low-sulfur residual fuel oil sales remained flat, while high-sulfur residual fuel oil sales climbed 500,000 gallons per day (6.5 percent).

Other Products

- Prices for the products included in this section increased for the most part during August. Refiner prices for propane rose 8.8 cents per gallon at retail, and 7.0 cents per gallon at wholesale. Including data from a sample of propane marketers, the average residential propane price dropped 0.1 cent per gallon, while the average retail price climbed 4.0 cents per gallon. The average wholesale propane price increased 6.5 cents per gallon. Prices for kerosene-type jet fuel, aviation gasoline, kerosene, and No. 1 distillate rose at both the retail and wholesale levels.
- Refiner sales of these products were mixed during August. Sales of propane, aviation gasoline, and No. 1 distillate increased at both the retail and wholesale levels. Sales of kerosene-type jet fuel rose at retail, but declined at wholesale. Kerosene sales fell at retail but increased at the wholesale.