



ENERGY SITUATION ANALYSIS REPORT



November 8, 2001

Energy Information Administration
U.S. Department of Energy
Washington, DC 20585
(202) 586-8800

Petroleum Natural Gas Coal Electricity

Latest Energy Market Developments

Oil prices continue to hover around two-year lows, and now are nearly 30% lower than on September 10. On Wednesday, November 7, the Organization of Petroleum Exporting Countries (OPEC) "basket price" remained below the cartel's price band for the 33rd straight day. The group is scheduled to meet and discuss production quotas on November 14, in Vienna, Austria. For more than a month, OPEC has been attempting to balance its concerns over low world oil demand and price weakness on the one hand, and world economic weakness on the other. Today (November 8), Saudi Arabia's oil minister declared that a quota cut of "one million barrels per day is not enough...a cut of 1.5 million is an easy option." OPEC also is seeking to enlist the assistance of non-OPEC oil exporters like Russia and Norway, with little apparent success to date. Norway reiterated today (Thursday) that it has no plans to curb its oil output. Also today, Russian Energy Minister Igor Yusofov announced that "the Russian government will announce its position on co-ordination with OPEC next week."

U.S. petroleum product (e.g., motor gasoline, jet fuel, heating oil) prices are significantly below levels at the same time last year, while demand for some products is stronger than anticipated. Natural gas prices for the fourth quarter of 2001 are predicted to remain low compared to last year's levels. This forecast reflects an upward revision from EIA's earlier projection on wellhead prices for the winter months (November through March). Mild weather and level natural gas prices have contributed to stable electricity prices over the past few days.

Since September 11, security at U.S. nuclear power plants and other critical energy infrastructure has been increased substantially. Maritime port security also has been highlighted by the Office of Homeland Security as a problem which needs to be addressed. On Tuesday, October 30, Homeland Security Director Tom Ridge had stated that "we need to talk to our energy companies... We need to ramp up our security and deal with what may occur."

World Oil Market Highlights

International Oil Supply and Demand

World oil demand has fallen since September 11, in part due to lower jet fuel demand. Increased jet fuel requirements as a result of military action against targets in [Afghanistan](#) are not expected to offset the decline in commercial jet fuel demand. World oil demand growth of 400,000 barrels per day now is expected in 2001, less than half of early September's growth projections.

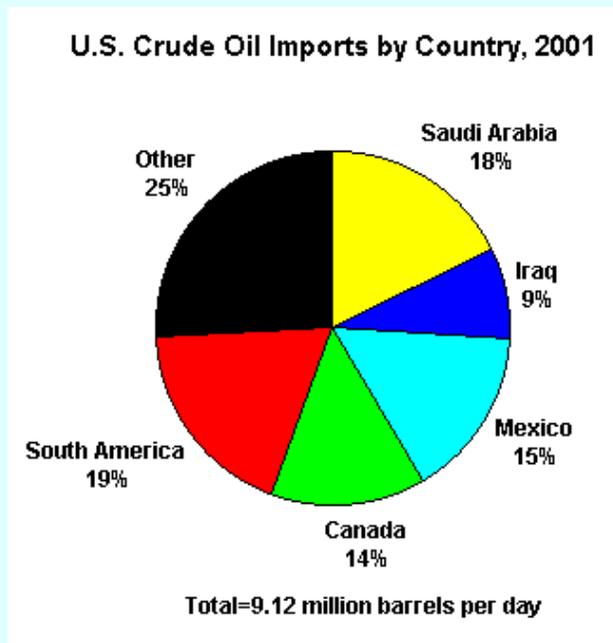
To date, no oil supply shortages have materialized in connection with terrorist attacks or ongoing military operations. Decreased world oil demand as a result of reduced economic growth, combined with OPEC overproduction, have resulted in building inventories and, in general, reduced tightness in world oil markets.

World Excess Oil Production Capacity

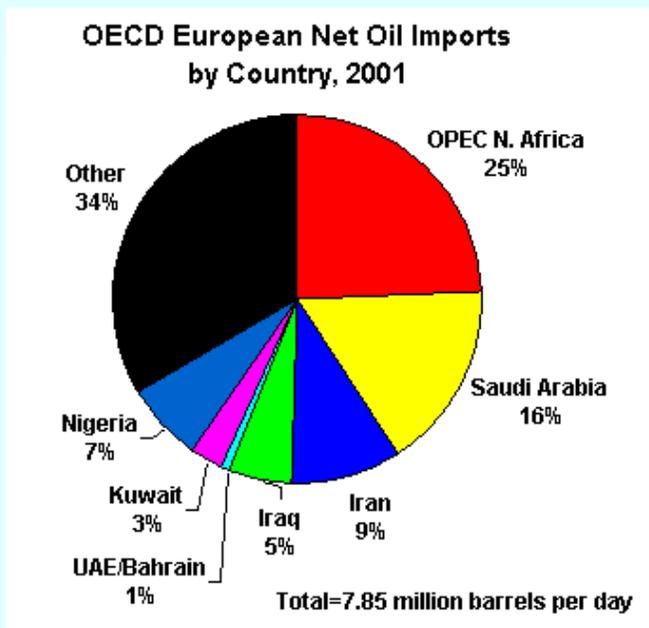
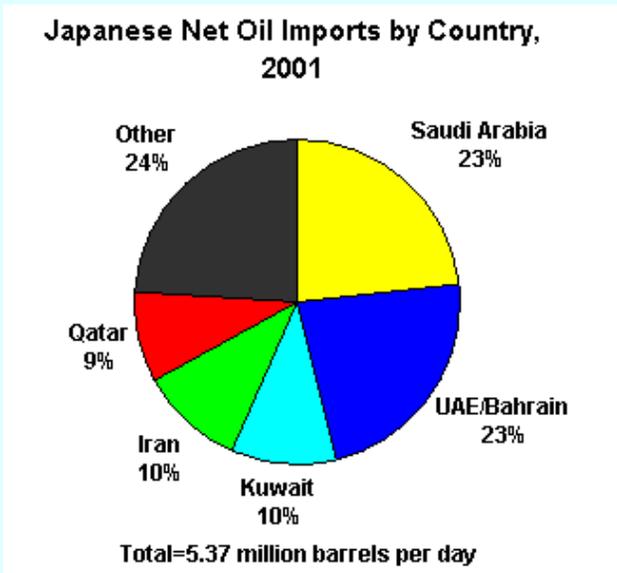
The world holds over 5 million barrels per day of excess oil production capacity, about 90% of which lies in OPEC countries. Around two-fifths of the world total is in [Saudi Arabia](#) alone.

U.S. and other OECD Oil Import Sources

During the first eight months (January-August) of 2001, the United States imported around 9.2 million barrels per day of crude oil. Of this, 47% came from within North and South America (15% from Venezuela, 14% from Canada, 14% from Mexico, 3% from Colombia), while 28% came from the Persian Gulf region (19% from Saudi Arabia, 7% from Iraq, 3% from Kuwait), and the remainder mainly from three other countries -- Nigeria (9%), Norway (3%) and the United Kingdom (2%). All in all, 89% of U.S. crude oil imports during January-August 2001 came from the 10 countries cited above.



In general, OECD Europe depends far more heavily on the Persian Gulf and North Africa for its oil imports than does the United States. During the first six months of 2001, approximately 40% of OECD Europe's net oil imports came from the Persian Gulf (mainly Saudi Arabia, Iran, Iraq, and Kuwait), 35% from Africa (mainly Libya, Algeria, and Nigeria), and much of the remainder from Russia. Japan receives around 80% of its oil supplies from the Persian Gulf (mainly the UAE, Saudi Arabia, Kuwait, Iran, and Qatar) with the remainder coming from Indonesia, China, and other sources.



Latest U.S. Weekly Petroleum Information

U.S. Oil Markets

The average world crude oil price on November 2, 2001 was \$18.62 per barrel, down \$0.62 from the previous week and \$11.24 per barrel less than last year at the same time. West Texas Intermediate (WTI) fell to \$20.24 per barrel, down \$1.83 from last week and \$12.38 per barrel less than last year at the same time. The spot price for conventional gasoline in the New York Harbor was 52.28 cents per gallon, down 5.02 cents from last week and 43.62 cents per gallon lower year on year. The spot price for heating oil in the New York Harbor on November 2, 2001 was 57.00 cents per gallon, falling 5.15 cents from a week ago and down 36.15 cents per gallon from a year ago.

Falling to the lowest level since August 9, 1999, the national average retail regular gasoline price was 120.6 cents per gallon on November 5, 2001, down 2.9 cents per gallon from last week and 32.0 cents per gallon lower than a year ago. The national average retail diesel fuel price fell for the

seventh consecutive week to 124.1 cents per gallon on November 5, 2001, lower by 1.9 cents per gallon from last week and 31.9 cents per gallon less than a year ago.

Although U.S. crude oil refinery inputs fell last week, the moving 4-week average was 1.1% above last year's comparable 4-week average. Crude oil inputs along the East Coast (PADD I) increased again last week, reaching the highest level since the week ending June 8. U.S. jet fuel refinery production reached 1.5 million barrels per day for the first time since the week ending September 14, with the most recent 4-week average at 91% of the 4-week average ending September 7, the week just prior to the September 11 attacks. Motor gasoline refinery production was higher last week compared to the previous week, while distillate fuel production was lower.

Motor gasoline demand (defined as how much was supplied into the gasoline market) remained strong, with the 4-week moving average at 8.7 million barrels per day last week, or 3.6% above the same period last year. On a week to week basis jet fuel demand continues to increase, averaging over 1.6 million barrels per day over the most recent 4-week period, but still averages 8% below the comparable period last year. Distillate fuel oil demand averaged over 3.8 million barrels per day over the same period, a 3.6% increase from last year's level.

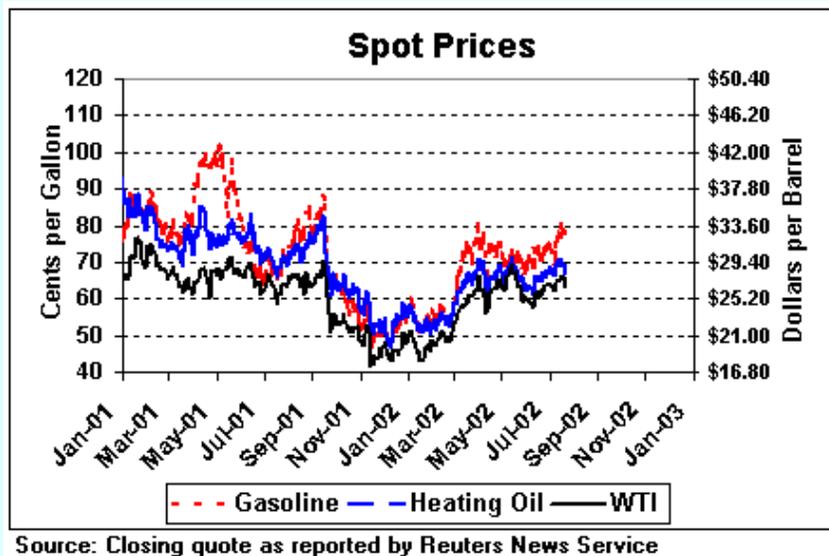
U.S. Oil Imports

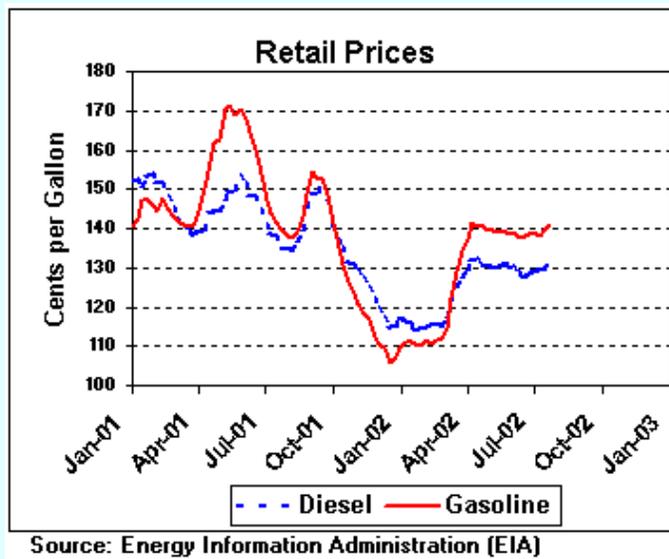
U.S. crude oil imports last week averaged 9.4 million barrels per day, a slight decrease from the previous week, with the moving 4-week average also down slightly. Crude oil imports into the Gulf Coast (PADD III) increased to 6.4 million barrels per day, the second time in the last 7 weeks that imports into the Gulf Coast exceeded 6 million barrels per day. This increase nearly offset declines in crude oil imports into all other regions of the country. Total product imports increased to 2.4 million barrels per day, with distillate fuel and motor gasoline imports remaining at relatively high levels.

U.S. Oil Inventories

With crude oil refinery inputs declining and imports relatively flat, U.S. crude oil inventories increased by 3.6 million barrels, reaching 311.9 million barrels, the highest level since the week ending July 27. Motor gasoline inventories decreased by 1.4 million barrels, the second such weekly decline after 5 consecutive weeks of increases. Distillate fuel oil stocks increased by 0.3 million barrels last week, with an increase in high-sulfur distillate fuel inventories more than offsetting a decline in low-sulfur inventories.

U.S. Petroleum Prices





Crude Oil and Oil Products Price Table

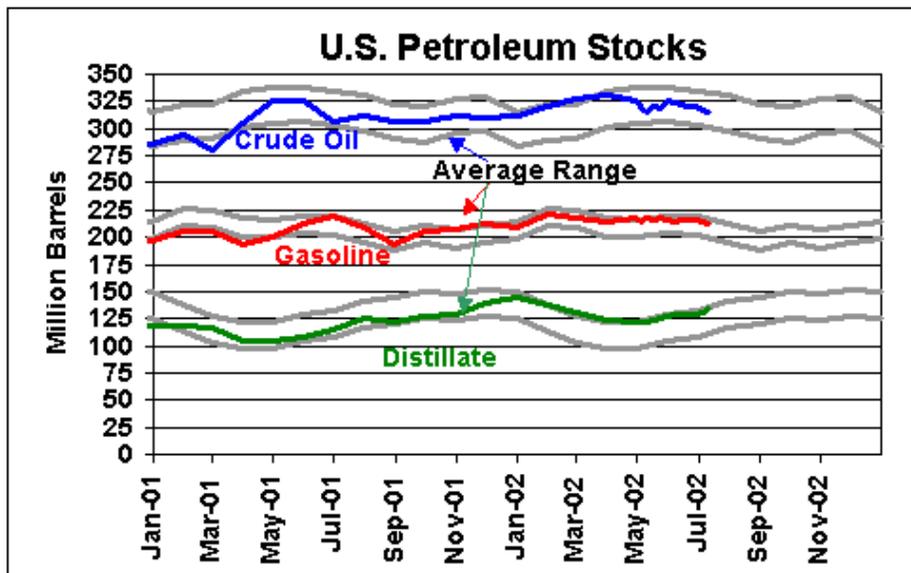
Date	WTI Crude Oil		Gasoline		Heating Oil		Kerojet	Propane		EIA Weekly Retail US Average	
	Spot	Futures	Spot	Futures	Spot	Futures	Spot	Spot	Spot	Gasoline	Diesel
	Cushing		NYH		NYH		NYH	Mt. Belvieu	Conway		
	\$/bbl	\$/bbl	cents per gallon		cents per gallon		¢/gal	cents per gallon		cents per gallon	
6/4/2002	\$25.32	\$25.33	70.50	75.34	63.25	64.28	66.15	38.01	35.00		
6/5/2002	\$25.02	\$24.89	71.57	75.13	63.03	63.60	65.58	37.26	34.32		
6/6/2002	\$24.89	\$24.79	71.40	75.70	62.70	63.48	65.43	36.94	34.32		
6/7/2002	\$24.72	\$24.75	70.82	75.09	62.65	63.17	65.38	37.07	34.25		
6/10/2002	\$24.24	\$24.29	68.78	73.79	61.65	62.33	64.15	36.38	33.57	137.5	128.6
6/11/2002	\$24.21	\$24.12	68.36	73.29	61.70	61.86	65.07	34.76	33.25		
6/12/2002	\$24.79	\$24.64	69.20	75.10	62.93	63.07	66.33	36.75	33.63		
6/13/2002	\$25.54	\$25.64	72.43	77.85	65.40	66.03	68.80	37.82	35.19		
6/14/2002	\$25.90	\$25.94	73.65	78.70	65.80	66.40	69.63	37.82	35.19		
6/17/2002	\$25.98	\$26.09	73.90	79.10	66.05	66.49	69.77	38.50	36.50	137.8	127.5
6/18/2002	\$25.36	\$25.43	73.15	77.66	65.18	65.49	68.50	37.57	36.50		
6/19/2002	\$25.57	\$25.31	72.05	76.84	65.03	65.24	68.23	37.75	36.13		
6/20/2002	\$25.62	\$25.53	71.60	76.96	65.75	66.03	69.48	37.44	35.63		
6/21/2002	\$25.51	\$25.82	70.30	75.57	64.80	64.89	68.53	37.38	35.94		
6/24/2002	\$26.31	\$26.47	73.50	77.77	66.75	66.64	70.80	37.88	36.00	138.4	128.1
6/25/2002	\$26.06	\$26.32	72.13	77.32	65.68	65.89	69.28	38.25	36.13		
6/26/2002	\$26.67	\$26.76	73.57	78.51	66.33	66.63	70.82	38.00	35.50		
6/27/2002	\$26.77	\$26.86	74.04	79.37	67.00	67.29	70.38	37.88	35.63		
6/28/2002	\$26.79	\$26.86	73.82	79.38	67.50	67.96	70.88	37.63	35.50		
7/1/2002	\$26.79	\$26.81	74.82	79.19	67.60	68.02	70.93	37.38	35.76	139.2	128.9
7/2/2002	\$26.83	\$26.77	74.07	78.98	67.98	68.71	71.28	37.13	35.75		
7/3/2002	\$26.82	\$26.80	73.63	78.60	68.38	68.77	71.82	37.01	35.19		
7/4/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA		
7/5/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA		
7/8/2002	\$26.14	\$26.07	69.60	76.14	66.15	66.80	69.65	36.19	34.38	138.2	129.4
7/9/2002	\$26.16	\$26.09	71.63	76.96	66.40	67.05	69.50	36.25	34.44		
7/10/2002	\$26.73	\$26.77	74.30	78.99	67.70	68.67	70.70	36.94	34.88		
7/11/2002	\$27.01	\$26.83	75.53	79.83	68.90	69.01	71.85	36.50	34.63		
7/12/2002	\$27.48	\$27.48	78.20	82.44	69.72	70.54	72.92	37.19	35.07		
7/15/2002	\$27.23	\$27.07	76.68	80.85	69.20	69.55	72.25	37.07	34.88	139.4	130.0
7/16/2002	\$27.68	\$27.75	79.95	84.53	69.99	71.09	73.04	37.19	34.88		
7/17/2002	\$27.88	\$27.88	80.43	84.84	70.08	70.98	73.13	36.75	34.88		
7/18/2002	\$27.50	\$27.57	78.25	83.35	69.43	70.18	72.81	37.44	34.88		
7/19/2002	\$27.83	\$27.83	78.85	83.86	69.45	70.14	73.10	37.13	35.25		
7/22/2002	\$26.61	\$26.60	76.13	81.14	66.60	67.11	70.38	37.13	35.13	141.0	131.1

Source: Spot and futures closing quotes as reported by Reuters News Service, retail prices reported by EIA

Energy Situation Analysis Report

U.S. Petroleum Supply

(Thousand Barrels per Day)	Four Weeks Ending		vs. Year Ago	
	7/12/2002	7/12/2001	Diff.	% Diff.
Refinery Activity				
Crude Oil Input	15,470	15,540	-70	-0.5%
Operable Capacity	16,800	16,641	159	1.0%
Operable Capacity Utilization (%)	93.3%	94.9%	-1.6%	
Production				
Motor Gasoline	8,520	8,576	-56	-0.6%
Jet Fuel	1,528	1,635	-107	-6.6%
Distillate Fuel Oil	3,713	3,755	-42	-1.1%
Imports				
Crude Oil (incl. SPR)	9,050	9,281	-231	-2.5%
Motor Gasoline	862	796	66	8.3%
Jet Fuel	93	148	-55	-37.3%
Distillate Fuel Oil	227	265	-38	-14.5%
Total	11,323	11,743	-420	-3.6%
Exports				
Crude Oil	30	13	17	123.4%
Products	940	924	16	1.7%
Total	970	938	32	3.4%
Products Supplied				
Motor Gasoline	8,978	8,821	157	1.8%
Jet Fuel	1,626	1,756	-130	-7.4%
Distillate Fuel Oil	3,642	3,624	18	0.5%
Total	19,686	19,702	-16	-0.1%
Stocks (Million Barrels)				
	7/12/2002	7/12/2001	vs. Year Ago	
			Diff.	% Diff.
Crude Oil (excl. SPR)	315.0	309.9	5.1	1.6%
Motor Gasoline	213.2	216.4	-3.2	-1.5%
Jet Fuel	40.3	42.8	-2.5	-5.8%
Distillate Fuel Oil	133.5	117.9	15.6	13.2%
Total (excl. SPR)	1,032.6	1,021.5	11.1	1.1%



Source: Energy Information Administration, Weekly Petroleum Status Report, Petroleum Supply Monthly.

Latest U.S. Weekly Natural Gas Information

Industry/Market Developments

The forecast in EIA's [Short-Term Energy Outlook](#) (STEO) for November reflects an upward revision from its earlier projection on wellhead prices over the winter months (November through March). In the report, EIA projected that average wellhead prices in the last quarter of 2001 will be \$2.70 per Mcf compared to the previous forecast calling for an average of \$2.20 per Mcf. The November STEO forecasts that prices should remain in the \$2-\$3 per Mcf range through the remainder of winter resulting in an average for the season of \$2.62 per Mcf at the wellhead. Despite this recent upward revision, wellhead prices would remain below the November 2000 to March 2001 average of \$6.74 per Mcf. The STEO reports that overall market fundamentals are simply not sufficient for a significant, sustained climb in prices during the remainder of this year and in 2002.

Natural Gas Storage

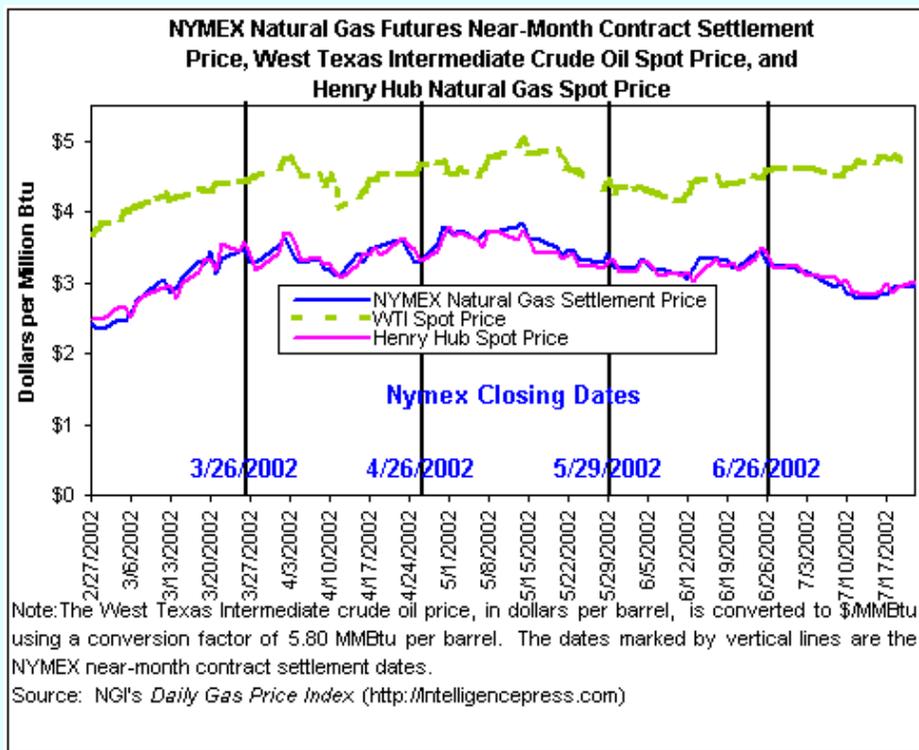
According to the American Gas Association (AGA), net additions during the week ended Friday, November 2, were estimated to have been 10 Bcf, for a daily average of 1.4 Bcf. This brings total stocks at the end of the refill season on October 31 to an estimated 3,104 Bcf. The current end-of-October level is only 3% below the previous 6-year high of 3,191 Bcf and is 15%, or 405 Bcf, greater than EIA's total of 2,699 Bcf at the start of last year's heating season.

All Volumes in Bcf	Current Stocks 7/12/2002	Estimated Prior 5-year (1997-2001) Average	Percent Difference from 5-Year Average	Implied Net Change from Last Week	One- Week Prior Stocks 7/5/2002
East Region	1,296	1,169	10.9%	53	1,243
West Region	338	284	19.0%	9	329
Producing Region	788	603	30.7%	7	781
Total Lower 48	2,422	2,056	17.8%	69	2,353

Source: Energy Information Administration: Form EIA-912, "Weekly Underground Natural Gas Storage Report," and the Historical Weekly Storage Estimates Database.

Prices

Spot prices at the Henry Hub have moved down this week and ended trading yesterday \$0.33 per MMBtu lower than the previous Wednesday as warmer-than-normal temperatures continued in most parts of the country. Prices on the NYMEX also trended down each day this week. Contributing to this decline in futures prices is the National Weather Service forecast calling for the unseasonably warm weather to continue through next week.



Trade Date (All prices in \$ per MMBtu)	California Composite Average Price*	Henry Hub	New York City	Chicago	NYMEX futures contract-August delivery	NYMEX futures contract-September delivery
6/21/2002	2.72	3.17	3.51	3.17	3.294	3.324
6/24/2002	2.99	3.33	3.80	3.34	3.480	3.501
6/25/2002	2.99	3.49	4.15	3.53	3.495	3.515
6/26/2002	2.85	3.42	4.01	3.42	3.353	3.373
6/27/2002	2.56	3.23	3.61	3.21	3.236	3.266
6/28/2002	2.58	3.20	3.69	3.20	3.245	3.273
7/1/2002	2.66	3.27	3.95	3.27	3.192	3.220
7/2/2002	2.37	3.17	4.16	3.18	3.145	3.177
7/3/2002	2.13	3.10	3.64	3.07	3.142	3.174
7/8/2002	2.71	3.06	3.73	3.00	2.939	2.982
7/9/2002	2.85	2.98	3.35	2.90	2.991	3.029
7/10/2002	2.88	3.04	3.31	2.98	2.864	2.902
7/11/2002	2.62	2.85	3.10	2.79	2.830	2.869
7/12/2002	2.47	2.86	3.11	2.78	2.787	2.830
7/15/2002	2.57	2.82	3.18	2.78	2.784	2.825
7/16/2002	2.69	2.89	3.59	2.88	2.863	2.892
7/17/2002	2.76	2.98	3.86	2.97	2.841	2.862
7/18/2002	2.71	2.86	3.26	2.80	2.943	2.950
7/19/2002	2.74	2.95	3.26	2.88	2.933	2.944
7/22/2002	2.86	3.01	3.68	2.97	2.947	2.965

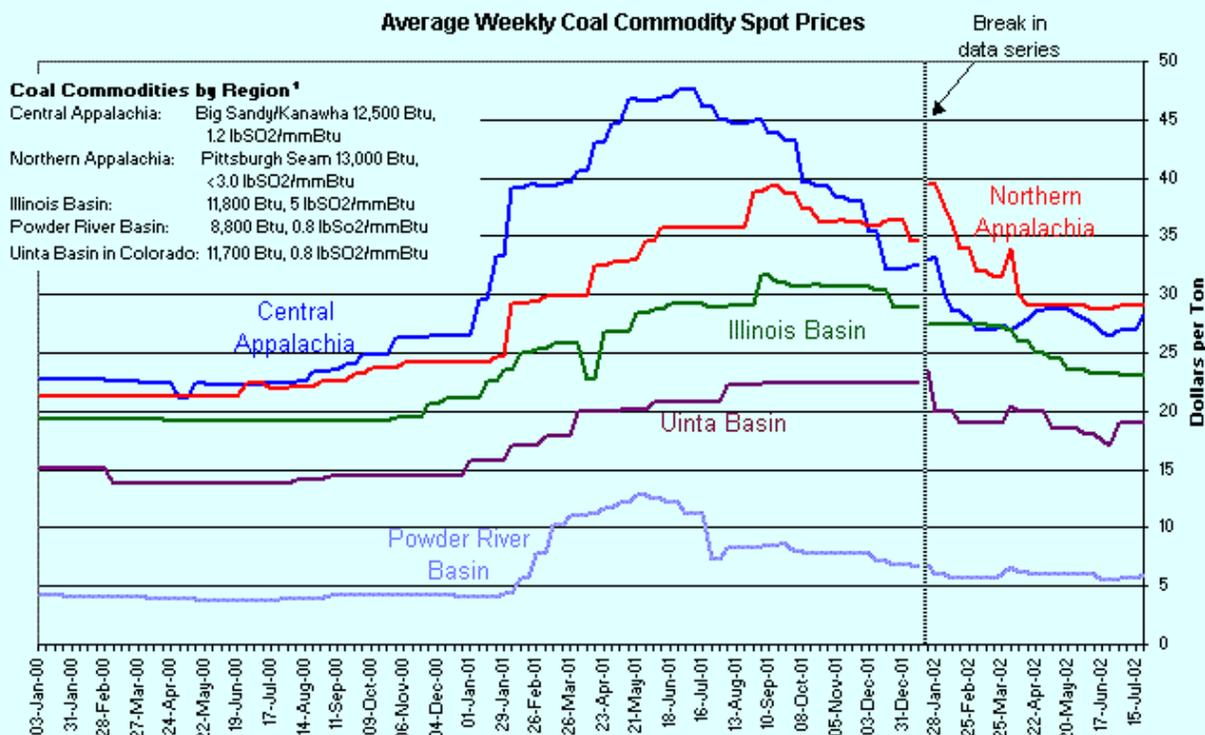
* Average of NGI's reported average prices for: Malin, PG&E citygate, and Southern California Border Average.

Source: NGI's *Daily Gas Price Index* (<http://intelligencepress.com>)

Latest U.S. Coal Information

For the week ending November 3, EIA estimates U.S. [coal production](#) at 22.7 million short tons, about 4% higher than in the previous week. Coal production in October 2001 totaled 98.8 million short tons, about 6% higher than in October 2000. Production for all of 2001 is running about 4.9% above last year's production. Despite availability problems this year for Appalachian coal, and significant increases in short-term prices, for the month of October EIA's average of reported spot market coal prices in Appalachia receded to \$38.49 per short ton (f.o.b. rail or barge). This is down more than 11% from EIA's average of reported Appalachian spot prices in June 2001, of \$43.47 per short ton. At the same time, average reported

Western spot coal prices declined to \$12.67 in October, down 21% from the June 2001 average of \$15.98 per short ton. [NYMEX](#) look-alike central Appalachian coal trading and over-the counter Powder River Basin coal trading resumed a moderate pace during the week ended November 2. Bid prices softened to around \$33 per short ton, reflecting a combination of a mild winter so far, healthy coal stocks at power plants, and a new level of interplay of coal prices with (declining) oil and natural gas prices.



¹ Prior to January 14, 2002, EIA averaged 12-month "forward" spot prices for several coal specifications; after that date, coal prices shown are for a relatively high-Btu coal selected in each region, for delivery in the "prompt" quarter. The "prompt quarter" is the next calendar quarter, with quarters shifting forward after the 15th of the month preceding each quarter's end. Source: with permission, selected from listed prices in Platts Coal Outlook, "Weekly Price Survey"

In the long term, EIA expects domestic coal supplies to be more than adequate for projected consumption. Most coal is still sold under multi-year contracts, and average prices for all coal supply contracts, incorporating spot and long-term, are projected to stabilize at well below current spot prices. EIA's projections of average coal prices decline slightly in inflation-adjusted dollars because nominal prices rise more slowly than the rate of inflation between 2001 and 2020. Customers choose coal because of its abundance and dependable availability, its relatively high Btu content, its [low prices relative to other fossil fuels](#), and, compared with natural gas, much less price volatility.

Latest U.S. Electricity Information

Wholesale electricity prices have been relatively stable over the past few days. The average price across the United States ranged with little variability from \$30.04 per megawatthour on November 2, 2001 to \$29.84 per megawatthour on November 7, 2001. Mild weather and level natural gas prices contributed to these stable electricity prices.

Interestingly, East coast and West coast trading centers displayed little difference in wholesale prices over the past week. For example, the combined average price at the COB and Palo Verde trading centers was \$31.75 per megawatthour, while the combined average price at the Nepoch and New York ISO trading centers was \$31.94 per megawatthour.

U.S. Regional Electricity Prices at Major Trading Centers (Dollars per megawatthour)

Trading Centers	Date							Price Range		
	7/12/02	7/15/02	7/16/02	7/17/02	7/18/02	7/19/02	7/22/02	Max	Min	Average
COB	22.83	15.33	13.63	26.75	17.75	22.50	21.70	26.75	13.63	20.07
Palo Verde	46.95	37.14	35.81	39.55	34.99	43.57	37.72	46.95	34.99	39.39
Mid-Columbia	8.93	5.90	5.31	5.25	5.94	14.49	17.75	17.75	5.25	9.08
Mead/Marketplace	53.40	42.05	39.46	45.46	41.32	48.86	40.50	53.40	39.46	44.44
4 Corners	46.50	37.14	37.25	42.63	37.47	43.00	40.42	46.50	37.14	40.63
NP 15	36.00	30.25	28.13	33.42	29.43	33.23	31.35	36.00	28.13	31.69
SP 15	38.87	32.52	32.42	36.97	33.31	40.21	36.00	40.21	32.42	35.76
PJM West	45.60	47.23	57.72	57.79	43.25	49.60	61.33	61.33	43.25	51.79
NEPOOL	43.65	42.25	46.64	45.50	34.45	45.67	52.60	52.60	34.45	44.39
New York Zone J	70.50	65.33	78.50	82.70	60.00	73.38	80.00	82.70	60.00	72.92
Cinergy	35.40	38.18	40.25	34.41	30.38	41.89	38.48	41.89	30.38	37.00
Average Price	40.78	35.76	37.74	40.95	33.48	41.49	41.62	41.62	33.48	38.83

Sources: COB, Palo Verde, Mid-Columbia, Mead/Market Place, Four Corners, NP-15, SP-15, PJM-West, NEPOOL, New York Zone J, and Cinergy trading centers. Used with permission from Bloomberg L.P. (www.bloomberg.com).

Notes:

n.q. - No quotes available for the day.

- COB:** Average price of electricity traded at the California-Oregon and Nevada-Oregon Borders.
- Palo Verde:** Average price of electricity traded at Palo Verde and the West Wing, Arizona.
- Mid-Columbia:** Average price of electricity traded at Mid-Columbia.
- Mead/Market Place:** Average price of electricity traded at Mead Market Place, McCullough and Eldorado.
- Four Corners:** Average price of electricity traded at Four Corners, Shiprock, and San Juan, New Mexico.
- NP-15:** Average price of electricity traded at NP-15.
- SP-15:** Average price of electricity traded at SP-15.
- PJM-West:** Average price of electricity traded at PJM Western hub.
- NEPOOL** Average price of electricity traded at Nepool.
- New York Zone J:** Average price of electricity traded at the New York Zone J - New York City.
- Cinergy:** Average price of electricity traded into the Cinergy control area.

Special Topic -- Strategic Petroleum Reserve

The [U.S. Strategic Petroleum Reserve](#) (SPR) contains 544.7 million barrels of oil, equal to 51 days of oil imports. The SPR has a maximum drawdown capability of 4.18 million barrels per day for 90 days, with oil beginning to arrive in the marketplace 15 days after a presidential decision to initiate a drawdown.

