

March 16, 2009

# Natural Gas Trends

## Highlights

### DYNAMICS MAY SHIFT FOR SHALE, COAL, LNG

The Energy Information Administration's (EIA's) 3/10/09 Short-Term Energy Outlook and Platts' 3/12/09 and 3/13/09 issues of Gas Daily acknowledged anticipated shifts in the market dynamics for shale gas, coal and liquefied natural gas (LNG), as described in this issue of Natural Gas Trends.

**SHALE vs. COAL**  
 "If prices fall further than currently forecast, natural gas will become increasingly competitive with coal for base load power generation in some regions."  
 EIA

**Spot prices, natural gas.** The Henry Hub natural gas spot price is expected to average \$4.67 per Mcf in 2009 compared to \$9.13 per Mcf in 2008 and \$7.17 per Mcf in 2007. In February of 2009, the Henry Hub spot price averaged \$4.65 per Mcf – only 36% of the June 2008 average of \$13.07. EIA attributes the decline in natural gas prices to the continued economic downturn and related weak demand.

**Spot prices, crude oil.** West Texas Intermediate (WTI) spot prices for crude oil are expected to average only \$42 per barrel in 2009, due to the global economic downturn. The WTI average spot price for crude oil averaged \$100 in 2008 and \$72 in 2007.

**Consumption, natural gas.** Total U.S. natural gas consumption is expected to decline by 1.3% in 2009. Industrial sector consumption is expected to decline by 6% in 2009. Electric power sector consumption is expected to grow by .4% in 2009.

**Production, natural gas.** Total U.S. marketed natural gas production, which increased by approximately 5.9% in 2008, is projected to remain flat in 2009. As of 3/6/09, the number of natural gas rigs working in the U.S. had declined by 43% since August 2008.

### Imports, LNG.

U.S. imports of LNG are expected to increase slightly to 380 Bcf in 2009. LNG imports to the U.S. totaled about 350 Bcf in 2008 and 771 Bcf in 2007.

Source: [www.eia.doe.gov](http://www.eia.doe.gov)

**SHALE vs. LNG**  
 Shale gas development will tend to increase when LNG import prices are relatively high; shale gas development will tend to slow when LNG import prices are relatively low.  
 Platts Gas Daily, 3/13/09  
 Interview with industry analyst Scott Thetford

## Data

- April Natural Gas Futures Contract (March 13), NYMEX at Henry Hub closed at \$3.932
- April Light, Sweet Crude Oil Futures Contract (March 13), NYMEX at Cushing closed at \$46.25 per Bbl. or approximately \$7.36 per MMBtu

### Heating Degree Days

From 3/8/09 thru 3/14/09, Texas experienced cooler than normal weather while the U.S. overall had warmer than normal weather. For the heating season (7/1/08 to present), cumulative heating degree days were 14% below normal for Texas and normal for the U.S.

Source: [www.cpc.ncep.noaa.gov](http://www.cpc.ncep.noaa.gov)

#### Heating Degree Days (HDD) *Week ending 3/14/09*

City or Region	Week Total HDD	Week HDD +/- from Normal *	Year-to-date Total HDD	YTD, % +/- from Normal *
Amarillo	147	+15	3072	- 16 %
Austin	69	+27	1450	- 5 %
DFW	90	+26	1674	- 23 %
El Paso	80	+12	1823	- 21 %
Houston	56	+16	1078	- 23 %
San Antonio	64	+26	1014	- 31 %
Texas**	70	+14	1562	- 14 %
U.S.**	140	-4	3685	0 %

\* A plus (+) value = cooler than normal; a minus (-) value = warmer than normal.  
 \*\* State and U.S. degree-days are population-weighted by NOAA.

### U.S. Gas Storage Level Still Elevated at 1681 Bcf

For the week ending 3/6, U.S. working gas in storage declined from 1,793 Bcf to 1,681 Bcf, as compared to 1,410 Bcf in storage a year ago and 1,484 Bcf for the 5-year average from 2004 to 2008. Working gas in storage in the producing region (which includes Texas) dropped from 708 to 690 Bcf, as compared to 515 Bcf in storage a year ago and 522 Bcf for the 5-year average from 2004 to 2008.

Source: [www.eia.doe.gov](http://www.eia.doe.gov)

#### U. S. Working Gas in Storage (Bcf) *Week ending 3/6/09*

Region	This Week	Last Week	Change	Current Δ from 5-Year Average (%)
East	703	793	-90	- 7.3 %
West	288	292	- 4	+ 40.5 %
Producing	690	708	-18	+ 32.2 %
Lower 48 Total	1681	1793	-112	+ 13.3 %

**U.S. Gas Rigs Decline to 883**

The U.S. **gas** rig count was down 32 for the week and down 557 when compared to 12 months ago. The U.S. **total** rig count was down 44 for the week and down 666 compared to 12 months ago. Source: Baker Hughes, Inc.

*Baker Hughes Rotary Rig Count (3/13/09)*

	This Week	+/- Last Week	Year Ago	+/- Year Ago
U.S.	1126	-44	1792	-666
Gas	884	-32	1441	-557
Oil	228	-13	343	-115
Texas	456	-24	881	-425
N. Amer.	1346	-123	2302	-956

**Report Predicts Switching From Coal to Gas**

LCM Commodities released a report on 3/10 predicting that Southeast power markets may soon be ripe for power generators to switch from coal to natural gas because coal-fired generators there depend on expensive Appalachian coal and have high transportation costs while gas-fired generators "enjoy the advantage of cheaper gas."

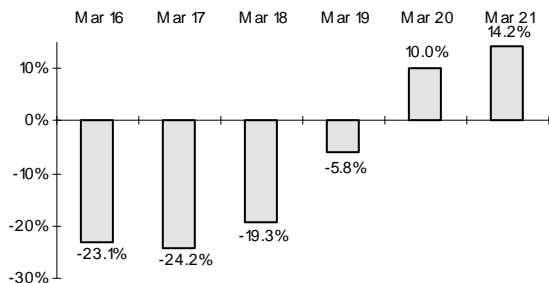
Platts Gas Daily, 3/12/09

**Rising U.S. Energy Use Expected This Week**

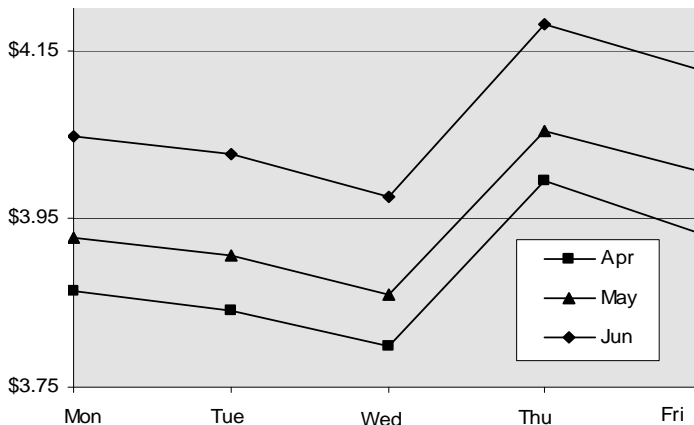
Lower than normal energy use is forecasted for the U.S. thru 3/19, followed by above normal energy use on 3/20 and 3/21, according to the Dominion Energy Index, as shown below. The index forecasts total U.S. residential energy usage, a component of which is natural gas.

Source: Dominion Energy Index

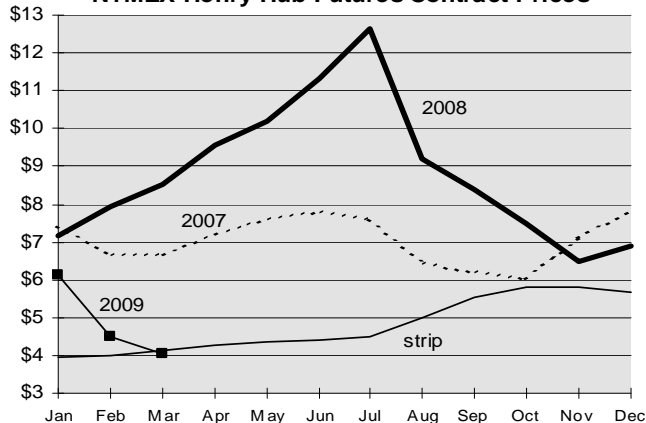
**U.S. Energy Use Forecast**



**NYMEX Natural Gas Price Movement 3/9/09 - 3/13/09**



**NYMEX Henry Hub Futures Contract Prices**



**Gas Price Summary 3/13/09**

	This Week	+/- Last Week	+/- Last Year	12-Month Strip Avg.
U.S. (April Futures)				
NYMEX	\$3.932	-\$0.013	-\$5.638	\$4.782