

March 11, 2013

Natural Gas Trends

Highlights

Japanese LNG import volumes and prices grew more than 10 percent, in 2011 and 2012.

According to Official Statistics of Japan, imports of liquefied natural gas (LNG) rose by 12 percent from 2010 to 2011 and 11 percent from 2011 to 2012. The March 11, 2011 Tohoku earthquake, accompanying tsunami and subsequent nuclear plant outages, have led to higher use of thermal generation, including natural gas fired generation. According to the Federation of Electric Power Companies of Japan, LNG consumed for power generation grew 27 percent from fiscal year (April to March) 2010 to fiscal year 2011. Total LNG imports over the same period grew by a smaller percentage (18 percent) as the destruction from the earthquake limited natural gas demand outside the power sector.

Based on data from Official Statistics of Japan, from 2010 to 2011, the average price for LNG imported to Japan grew 35 percent from US\$10.92 per million British thermal units (MMBtu) to US\$14.78 per MMBtu. The average import price grew again in 2012, to US\$16.62 per MMBtu, or 12 percent over the 2011 average. Most LNG imported to Japan is imported under long-term contracts with the LNG prices explicitly linked to the price of crude oil. However, in order to increase imports since the earthquake, Japanese companies have had to buy more LNG under short-term or spot arrangements, with the prices negotiated between buyers and sellers.

<http://www.eia.gov/naturalgas/weekly/>

BNSF to test liquefied natural gas in locomotives.

BNSF will begin testing a small number of locomotives using liquefied natural gas (LNG) as an alternative fuel later this year. Improved economics and technology make the use of natural gas in long-haul service more operationally feasible today. The BNSF pilot will be a first step to consider how the technology could be implemented. However, even though natural gas in long-haul service has enormous potential, several significant regulatory challenges need to be addressed. According to chairman and CEO, Matthew K. Rose, "The changed market for natural gas in the United States is a critical part of our decision to explore it as a locomotive fuel and in this pilot we will test natural gas engine technology in railroad service. We will be working with the equipment manufacturers, the various regulatory agencies and government officials to address the necessary actions to accomplish this."

<http://m.bnsf.com/employees/communications/bnsf-news/2013/march/2013-03-06-a.html>

Data

- April 2013 Natural Gas Futures Contract (as of Mar. 8), NYMEX at Henry Hub closed at \$3.629 per million British thermal units (MMBtu)
- April 2013 Light, Sweet Crude Oil Futures Contract WTI (as of Mar. 8), closed at \$91.95 per U.S. oil barrel (Bbl.) or approximately \$15.85 per MMBtu

Last week: Texas warmer and U.S. cooler than normal

For the week beginning 3/3/13 and ending 3/9/13, heating degree days (HDD) were lower than normal (warmer) for Texas and higher than normal (cooler) for the US.

61°ℱ: www.cpc.ncep.noaa.gov

HEATING DEGREE DAYS (HDD)				
City or Region	Total HDD for week ending 3/9/13	*Week HDD + / - from normal	Year-to-date total HDD	* YTD % +/- from normal
Amarillo	93	-48	2997	-16%
Austin	57	+7	1407	-7%
DFW	61	-12	1689	-21%
El Paso	36	-39	2002	-11%
Houston	46	0	1006	-27%
SAT	40	-6	1058	-27%
Texas**	60	-3	1470	-17%
U.S.**	169	+17	3372	-6%

* A minus (-) value is warmer than normal; a plus (+) value is cooler than normal. NOAA uses 65° Fahrenheit as the 'normal' basis from which HDDs are calculated. ** State and U.S. degree days are population-weighted by NOAA.

-999 = Normal Less Than 100 or Ratio Incalculable

Last week: U.S. natural gas storage at 2,083 Bcf

For the week ending 3/1/2013 working gas in storage decreased from 2,229 Bcf to 2,083 Bcf. This represents a decrease of 146 Bcf from the previous week. Stocks were 361 Bcf lower than last year at this time and 269 Bcf above the 5 year average of 1,814 Bcf.

Source: <http://ir.eia.gov/ngs/ngs.html>

U.S. WORKING GAS IN STORAGE				
Region	Week ending 3/1/13	Prior week	One-week change	Current Δ from 5-YR Average (%)
East	922	999	-77	8.6%
West	344	355	-11	26.9%
Producing	817	875	-58	17.7%
Lower 48 Total	2,083	2,229	-146	14.8%

Lower 48 states, underground storage, units in billion cubic feet (Bcf)

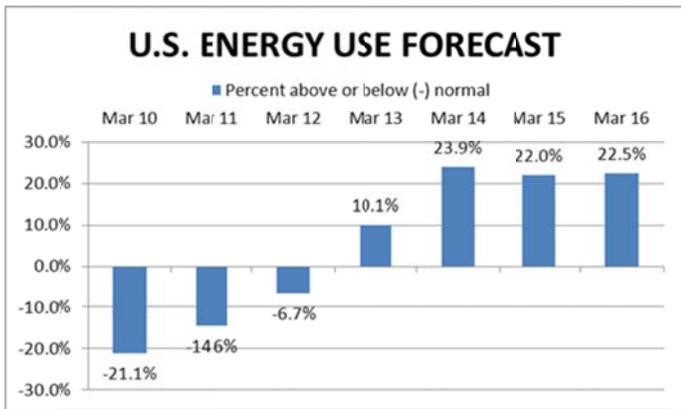
Last week: U.S. gas rig count down 13

The gas rig count for the U.S. was down 13 when compared to the prior week and down 263 when compared to 12 months ago. The total rig count for the U.S. was down 5 for the week and down 221 when compared to 12 months ago. The total rig count includes both oil and natural gas rotary rigs. Source: Baker Hughes

BAKER HUGHES ROTARY RIG COUNT				
	As of 3/8/2013	+/- prior week	Year ago	+/- year ago
Texas	835	-6	929	-94
U.S. gas	407	-13	670	-263
U.S. oil	1341	8	1296	45
U.S. total	1752	-5	1973	-221
Canada	580	-85	655	-75

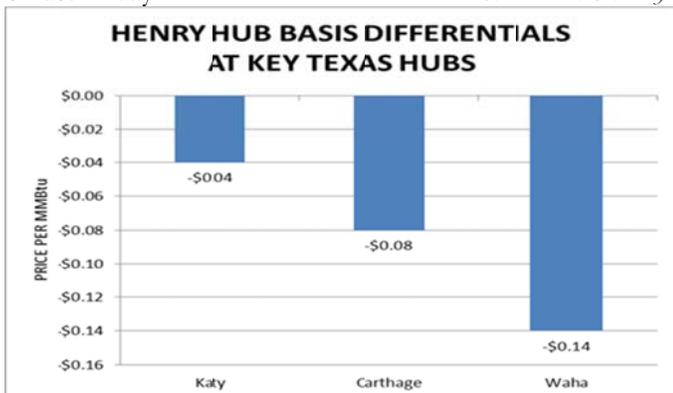
This week: U.S. energy use above normal

U.S. energy use is predicted to be below early and above normal late in the week, according to the Dominion Energy Index, as shown below. Dominion forecasts total U.S. residential energy usage, a component of which is natural gas. Source: Dominion Energy Index



Last week: Basis ranged from -\$0.04 to -\$0.14 cents

Gas basis at key Texas hub markets is shown below and at right as the spot market cash price minus the Henry Hub as of last Friday. Source: Platt's Gas Daily



2013 prices. Natural gas prices for 2013, shown below in green, are the NYMEX settlement prices for January-March and the futures prices for the remaining months of 2013.

