

September 16, 2013

Natural Gas Trends

Highlights

Industry mulls best ways to take advantage of shale

Gas industry officials on Monday debated the direction the US should take to best exploit the abundance of natural gas hitting the North American market, with some pointing to vehicle transportation and others to power generation and exports. It's getting harder to say no to natural gas as compressed and liquefied natural gas offer much cheaper alternatives to traditional diesel fuel in the vehicle market, Paul Smith, senior director of infrastructure with America's Natural Gas Alliance, told the LDC Gas Forum Midcontinent in Chicago.

Beth Reese, president of Nicor Gas, also touted the transportation sector as an avenue for "top-line growth" in gas demand, although she sees compressed natural gas as a "clear winner" over liquefied natural gas as consumers seek alternatively fueled vehicles that are not electric. Reese said worldwide, the natural gas vehicle sector is poised to grow to 65 million from 15 million Natural Gas Vehicles (NGVs) over the next decade. Although North America's share is currently very small – just 140,000 vehicles – she said it presents "an untapped market in our own backyard." However, she also sees a "chicken-and-egg" challenge facing the NGV industry – Compressed Natural Gas (CNG) refueling stations will not be built without committed demand, while car companies will not build and consumers will not buy NGVs without refueling stations.

On the other hand, Frank Casey, gas sales lead with ExxonMobil subsidiary XTO Energy, downplayed transportation as a key driver of future gas demand, saying traditional liquids fuels will remain the dominant fuel source there. ExxonMobil projects that gas demand in this sector will grow to just 4% of the overall fuel mix in 2040 from 1% at present. Still, "we do see opportunities in the heavy-duty and marine sectors." In particular, gas has the potential to replace fuel oil in the marine segment to meet new environmental standards, Casey said.

Instead, he focused on electricity generation as the primary driver for future gas demand, which ExxonMobil predicts will grow by 90% through 2040. He said gas could comprise 36% of the power-sector mix by 2040 compared with 20% in 2008. "Natural gas is kind of a no-brainer" for generators, added Smith, noting that it represents the lowest cost for new generating technologies.

Looking at the shorter-term picture, Jack Weixel, director of energy with Platts unit Bentek Energy, said 19.2 GW of new gas-fired generation is expected to be built through 2017. If run at 50% capacity, this new load could comprise some 1.7 Bcf/d of new gas demand over the period. Weixel said that while new demand opportunities for 2013 are likely limited, 2014 is when significant "sustainable and systemic" demand will begin to pick up in a big way. "It's a long slog" in the power sector, he said, noting that gas is slowly and steadily capturing a greater share of demand.

However, "the best game in town" as a near-term demand driver is Mexico, Weixel believes. With that nation's own power sector booming, pipeline companies have proposed a total export capacity of 4.3 Bcf/d to Mexico by 2015, he said.

Source: Platts Gas Daily

Data

- October 2013 Natural Gas Futures Contract (as of September 13), NYMEX at Henry Hub closed at \$3.677 per million British thermal units (MMBtu)
- October 2013 Light, Sweet Crude Oil Futures Contract WTI (as of September 13), closed at \$108.21 per U.S. oil barrel (Bbl.) or approximately \$18.66 per MMBtu

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

For the week beginning 9/8/13 and ending 9/14/13, cooling degree days (CDD) were higher than normal (warmer) for the week as well as higher than normal year to date for both Texas and for the US. Source: www.cpc.ncep.noaa.gov

COOLING DEGREE DAYS (CDD)				
City or Region	Total CDD for week ending 9/14/13	*Week CDD +/- from normal	Year-to-date total CDD	* YTD % +/- from normal
Amarillo	85	39	1690	36%
Austin	116	6	2603	4%
DFW	145	47	2533	12%
El Paso	65	-16	2495	22%
Houston	127	24	2667	11%
SAT	139	29	2903	14%
Texas**	116	20	2428	7%
U.S.**	63	22	1195	11%

* A minus (-) value is cooler than normal; a plus (+) value is warmer 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 3,253 Bcf

For the week ending 9/6/2013 working gas in storage increased from 3,188 Bcf to 3,253 Bcf. This represents an increase of 65 Bcf from the previous week. Stocks were 172 Bcf lower than last year at this time and 46 Bcf above the 5 year average of 3,207 Bcf.

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

U.S. WORKING GAS IN STORAGE				
Region	Week ending 9/6/13	Prior week	One-week change	Current Δ from 5-YR Average (%)
East	1,647	1,598	49	-6.5%
West	507	505	2	11.9%
Producing	1,099	1,085	14	10.7%
Lower 48 Total	3,253	3,188	65	1.4%

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

Last week: U.S. gas rig count up for the week

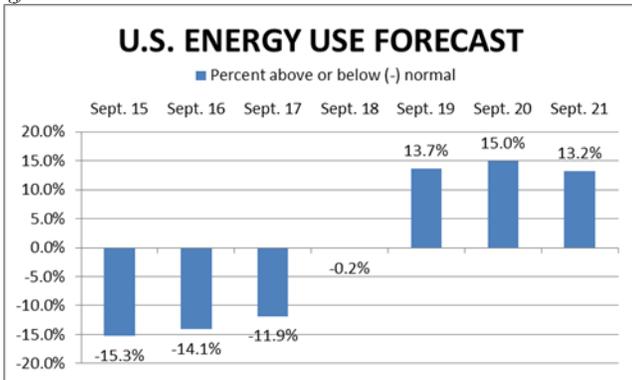
The gas rig count for the U.S. was up seven when compared to the prior week but down 47 when compared to twelve months ago. The total rig count for the U.S. was up one for the week and down 96 when compared to twelve months ago. The total rig count includes both oil and natural gas rotary rigs.

Source: Baker Hughes

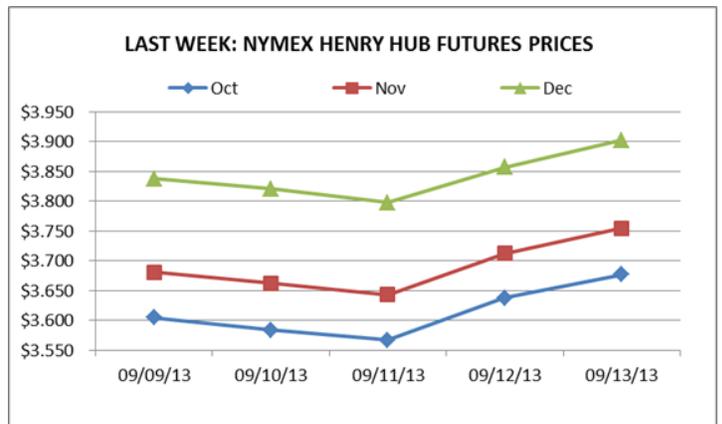
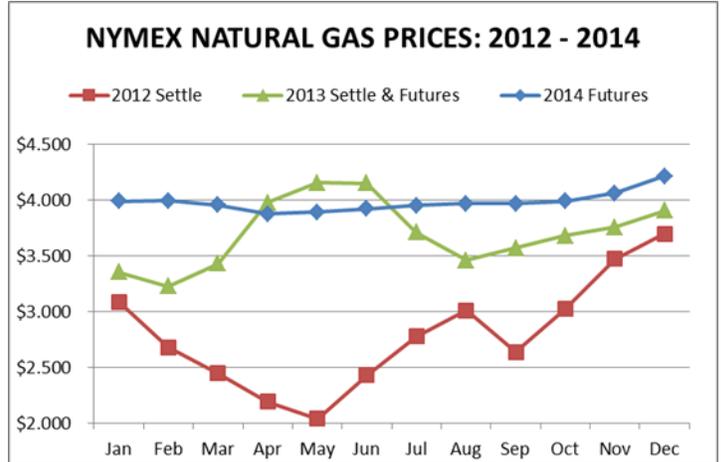
BAKER HUGHES ROTARY RIG COUNT				
	As of 9/13/2013	+/- prior week	Year ago	+/- year ago
Texas	850	12	878	-28
U.S. gas	401	7	448	-47
U.S. oil	1361	-4	1413	-52
U.S. total	1768	1	1864	-96
Canada	380	-9	354	26

This week: U.S. energy use varies

U.S. energy use is predicted to be below normal early in the week increasing to above normal, 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



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



NATURAL GAS PRICE SUMMARY AS OF 9/13/2013

	This Week	+/- Last Week	+/- Last Year	12-Month Strip Avg.
US October futures				
NYMEX	\$3.677	\$0.147	\$1.043	\$3.902