

August 19, 2013

Natural Gas Trends

Highlights

Market far less prone to hurricane price spikes

With Gulf of Mexico gas production down to just 6% of total US output, the traditional bullish threat of supplies being knocked offline has been replaced by the bearish potential for demand destruction as winds and rains shut down power plants, businesses and factories. As a result, any loss of gas supply due to rig evacuations and pipeline curtailments will likely have minimal impact on prices that historically have gone wild when storms entered the Gulf, analysts say.

"In terms of basic seasonality, roughly 80% of Atlantic Basin names storms occur between August 15 and October 15, with September 10 the peak day over the past 100 years, and so it is time to pay closer attention," Citi Futures Perspective analyst Tim Evans said in a note Monday. The federal Climate Prediction Center said in an updated forecast last week that there still is a 70% chance of an above-normal Atlantic hurricane season, with 13 to 19 named storms and six to nine hurricanes, of which three to five could strengthen into major hurricanes. Evans cited the Department of Energy Monte Carlo simulation, which models the impact on oil and gas production from tropical storms and hurricanes based on CPC forecasts. This year, Evans said that the simulation produced a mean gas production loss of 64 BCF.

By contrast, Hurricanes Katrina and Rita in 005 caused total production losses of 517.2 BCF, and gas prices soared to record highs, with the NYMEX futures contract peaking above \$15/MMBtu.

One of the main factors at play, Evans said, is that "natural gas production efforts have moved onshore. Gulf of Mexico natural gas production that was 13.77 Bcf/d of 23% of US total supply back in 2001 has declined to about 4.16 Bcf/d and 6% of the total in 2012." In addition, "we would argue that production infrastructure is more robust than in the past," he said. "It makes it more likely that hurricane damage is limited, with the bulk of production able to recover more easily once the storm has passed." Evans noted that DOE simulations do not account for onshore impacts to market demand, such as decreased cooling loads, electric utility outages and reduced consumption by oil refineries and petrochemical plants along the Gulf that would shut down in the event of a major storm.

Gelber & Associates analyst Aaron Calder said that because production in the Gulf has shrunk so dramatically, "you won't see a run up to \$12/MMBtu of \$6/MMBtu like in the past. ... Once prices get up to \$4.50/MMBtu there is a lot of demand evaporation." Calder said that going forward, there will likely be greater downward pressure on gas prices from demand destruction than upward pressure from any potential Gulf shut-ins. As a result, the analysts said, traders are far less inclined to assume that all storms heading into the Gulf are bullish.

Evans also said hurricanes can have an impact on calendar-spread price relationships, pointing specifically to the December-April spread as "a potential heating season bargain even without a hurricane to curtail storage injections." Meanwhile, government agencies are working with oil and gas companies operating in the Gulf. DOE will invite representatives from at least six major industry trade groups to come to its Emergency Response Center in Washington when hurricanes threaten rigs in the Gulf. Additionally, DOE unveiled a new tool on the agency's website to track the potential impact of hurricanes and other tropical storms on the US energy infrastructure, including pipelines, refineries and power plants. Source: Platts Gas Daily

Data

- September 2013 Natural Gas Futures Contract (as of August 16), NYMEX at Henry Hub closed at \$3.368 per million British thermal units (MMBtu)
- September 2013 Light, Sweet Crude Oil Futures Contract WTI (as of August 16), closed at \$107.46 per U.S. oil barrel (Bbl.) or approximately \$18.53 per MMBtu

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

For the week beginning 8/11/13 and ending 8/17/13, cooling degree days (CDD) were higher than normal (warmer) for the week in Texas and higher than normal year to date for both Texas and for the US. www.cpc.ncep.noaa.gov

COOLING DEGREE DAYS (CDD)				
City or Region	Total CDD for week ending 8/17/13	*Week CDD + / - from normal	Year-to-date total CDD	* YTD % +/- from normal
Amarillo	76	-5	1285	28%
Austin	150	10	2078	4%
DFW	130	-10	1923	7%
El Paso	132	20	2071	24%
Houston	142	14	2127	9%
SAT	166	26	2285	11%
Texas**	130	3	1923	5%
U.S.**	54	-14	920	6%

* 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 3,006 Bcf

For the week ending 8/9/2013 working gas in storage increased from 2,941 Bcf to 3,006 Bcf. This represents an increase of 65 Bcf from the previous week. Stocks were 252 Bcf lower than last year at this time and 43 Bcf above the 5 year average of 2,963 Bcf.

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

U.S. WORKING GAS IN STORAGE				
Region	Week ending 8/9/13	Prior week	One-week change	Current Δ from 5-YR Average (%)
East	1,459	1,408	51	-6.4%
West	494	484	10	12.8%
Producing	1,053	1,049	4	8.9%
Lower 48 Total	3,006	2,941	65	1.5%

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

Last week: U.S. gas rig count decreasing

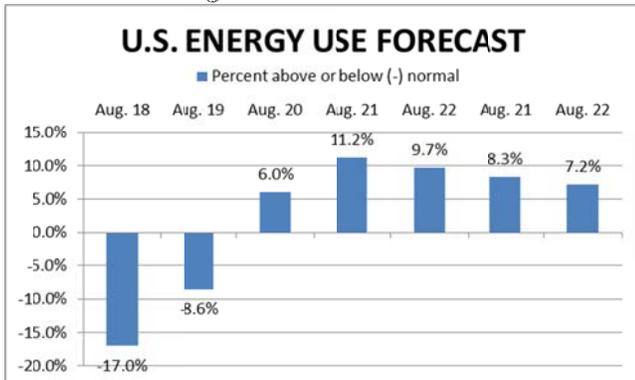
The gas rig count for the U.S. was up two when compared to the prior week and down 96 when compared to twelve months ago. The total rig count for the U.S. was up 13 for the week and down 123 when compared to twelve months ago. The total rig count includes both oil and natural gas rotary rigs.

Source: Baker Hughes

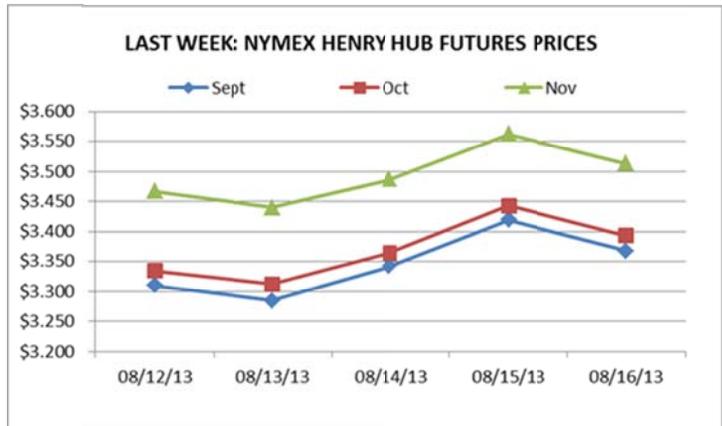
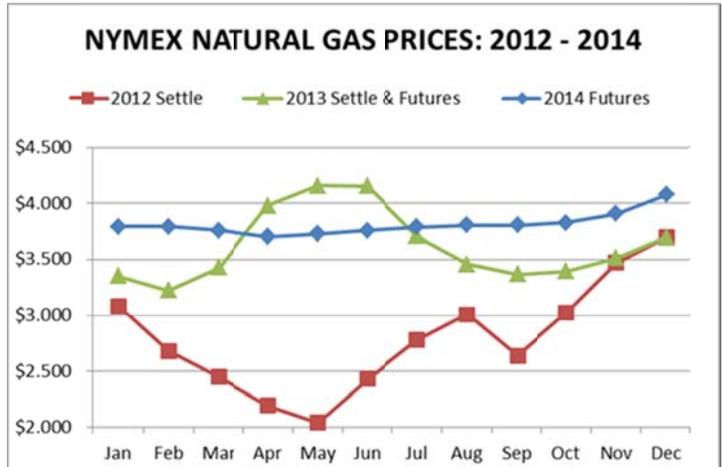
BAKER HUGHES ROTARY RIG COUNT				
	As of 8/16/2013	+/- prior week	Year ago	+/- year ago
Texas	846	-3	902	-56
U.S. gas	388	2	484	-96
U.S. oil	1397	12	1425	-28
U.S. total	1791	13	1914	-123
Canada	358	17	326	32

This week: U.S. energy use below normal

U.S. energy use is predicted to start below normal early in the week but rise above normal for the majority of 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



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



NATURAL GAS PRICE SUMMARY AS OF 8/16/2013

	This Week	+/- Last Week	+/- Last Year	12-Month Strip Avg.
US September futures				
NYMEX	\$3.368	\$0.138	\$0.734	\$3.672