BARRY T. SMITHERMAN, Chairman
DAVID PORTER, Commissioner
CHRISTI CRADDICK, Commissioner

RAILROAD COMMISSION OF TEXAS
Gas Services Division
Market Oversight Section

October 21, 2013

Natural Gas Trends

Highlights

29% of N.D. gas flared; drillers sued for alleged violations

North Dakota gas production exceeded 1 Bcf/d in August for the first time, state officials said Tuesday – a good news story for the industry if all that gas could find a home. Instead, gas produced in association with crude oil from the Bakken Shale is growing at such a rapid clip that pipeline and processing companies cannot keep up with it. As a result, nearly a third of it continues to be flared into the atmosphere, said Lynn Helms, director of the state Department of Mineral Resources.

The Bakken gas boom is creating a major challenge that most industry and government officials did not foresee: too much gas and not enough takeaway capacity. As a result, the amount of associated gas that drillers flared in August averaged 303,000 Mcf/d, or 29% of total output – though Helms noted that was down a tick from 30% in July. Helms said North Dakota's exploration-and-production industry has formed a task force to wrestle with the nagging problem of gas flaring. The group has met twice and is trying to improve communications among industry segments to better address the respective needs of producers and midstream companies.

North Dakota mineral owners have sued ten oil companies operating in the state's shale, alleging that the drillers' extensive flaring of natural gas violates state regulations and is costing them millions of dollars in royalties. The 17 plaintiffs allege that the operators were required to monetize much of the gas they have burned off. The lawsuits seek to force operators to comply with state law and pay royalties to mineral owners on the value of flared gas, and by so doing create a compelling economic incentive for producers to reduce and eliminate the wasteful practice of flaring," attorneys for the plaintiffs said in a statement. Lindsey Nieusma, an attorney with Baumstark, Braaten Law Partners in Bismarck, said while the particulars of each of the ten cases are different, the same legal theories apply. The defendants are ConocoPhillips subsidiary Burlington Resources Oil & Gas, Continental Resources, Crescent Point Energy, HRC Operating, Marathon Oil, Samson Resources, SM Energy, Statoil Oil & Gas, WPX Energy and ExxonMobil subsidiary XTO Energy. Representatives of the producers either declined to comment on the lawsuits or did not return calls seeking comment by press time.

The North Dakota Industrial Commission, which regulates oil and gas production, sets rules to limit the time frames in which flaring can take place and the volumes that can be flared. "The regulations do allow a certain amount of flaring in the first year of production," Nieusma said. Bu after that, she said a producer must apply for a written extension for any future flaring and, if it fails to do so, must pay royalties and state taxes on any flared gas. She asserted that the defendants did not get extensions and yet kept flaring gas anyway, depriving mineral owners and the state of potentially millions of dollars in revenue. Currently, around 1,500 wells are flaring gas in North Dakota without connections to pipeline and processing plant infrastructure, the plaintiffs' attorneys said.

In August, an average of 303,000 MCF/d of North Dakota gas went up in smoke. According to Platts data, the mean August price for August at the Northern Natural Gas demarcation point, the closest price point to the Bakken, was #3.4736/MMBtu, indicating that just over $1 million worth of gas was flared in the state every day that month.
Source: Platts Gas Daily

Data

- November 2013 Natural Gas Futures Contract (as of October 18), NYMEX at Henry Hub closed at $3.764 per million British thermal units (MMBtu)
- November 2013 Light, Sweet Crude Oil Futures Contract WTI (as of October 18), closed at $99.22 per U.S. oil barrel (Bbl.) or approximately $17.11 per MMBtu

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

For the week beginning 10/13/13 and ending 10/19/13, cooling degree days (CDD) were lower than normal (cooler) 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 10/19/13	*Week CDD + / - from normal	Year-to-date total CDD	* YTD % +/- from normal
Amarillo	1	-3	1805	34%
Austin	27	-18	2959	4%
DFW	17	-7	2891	14%
El Paso	13	0	2710	21%
Houston	43	0	3088	12%
SAT	38	-9	3354	15%
Texas**	33	-2	2780	9%
U.S.**	10	-1	1308	11%

-999 = Normal Less Than 100 or Ratio Incalculable

* 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.

Last week: U.S. natural gas storage at 3,654 Bcf

For the week ending 10/11/2013 working gas in storage increased from 3,577 Bcf to 3,654 Bcf. This represents an increase of 77 Bcf from the previous week. Stocks were 115 Bcf lower than last year at this time and 57 Bcf above the 5 year average of 3,597 Bcf.

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

U.S. WORKING GAS IN STORAGE

Region	Week ending 10/11/13	Prior week	One-week change	Current Δ from 5-YR Average (%)
East	1,897	1,851	46	-4.8%
West	545	538	7	11.0%
Producing	1,212	1,188	24	8.9%
Lower 48 Total	3,654	3,577	77	1.6%

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

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

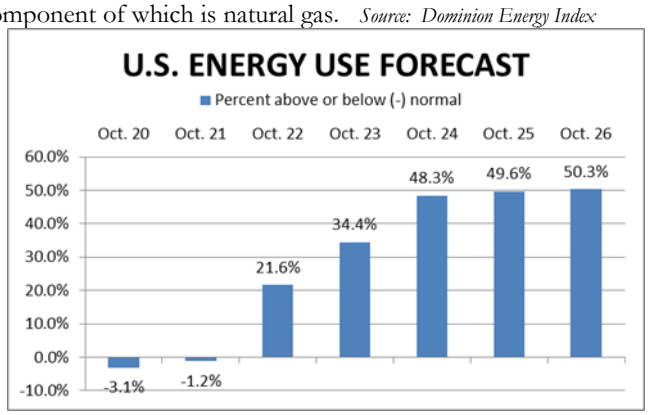
The gas rig count for the U.S. was up three compared to the prior week and down 55 when compared to twelve months ago. The total rig count for the U.S. was down four for the week and down 100 when compared to twelve months ago. The total rig count includes both oil and natural gas rotary rigs.

Source: Baker Hughes

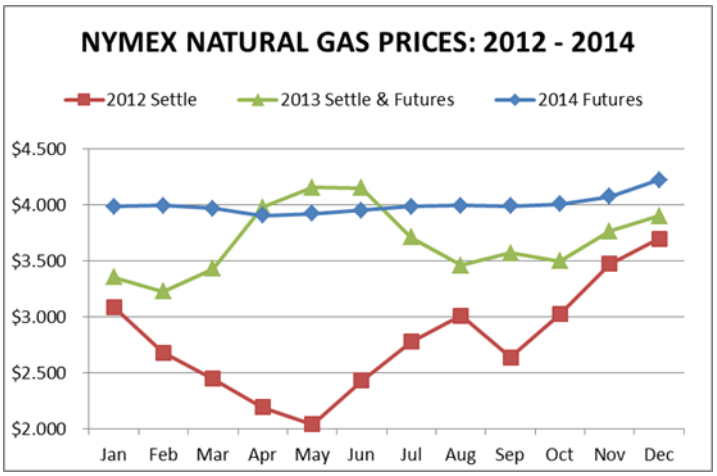
BAKER HUGHES ROTARY RIG COUNT				
	As of 10/18/2013	+/- prior week	Year ago	+/- year ago
Texas	817	-5	867	-50
U.S. gas	372	3	427	-55
U.S. oil	1361	-6	1410	-49
U.S. total	1739	-4	1839	-100
Canada	388	31	355	33

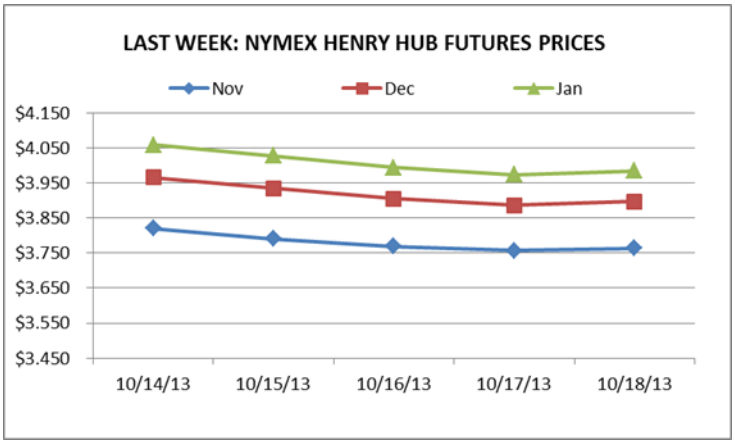
This week: U.S. energy use above normal

U.S. energy use is predicted to be above normal most of this 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-October and the futures prices for the remaining months of 2013.





NATURAL GAS PRICE SUMMARY AS OF 10/11/2013

	This Week	+/- Last Week	+/- Last Year	12-Month Strip Avg.
US November futures				
NYMEX	$3.764	-$0.012	$0.293	$3.946