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RAILROAD COMMISSION OF TEXAS
Gas Services Division
Market Oversight Section

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Natural Gas Trends

Highlights

US gas exports to Canada expected to surge

Canada, which until recently has been a major exporter of natural gas to the US, is likely to see a major reversal over the next few years as production from the prolific Marcellus and Utica shales in the Northeast continues to grow and flow northward, industry officials said Monday. That trend coincides with an expected surge in gas exports to Mexico via pipelines from the US Southwest and the start-up of significant LNG exports from North America starting in 2015 or 2016.

Peter Howard, CEO of the Canadian Energy Research Institute, said that from 2021 onward, Canada could increase its imports from the US significantly thanks to "abundant" and "cheap" gas output from the Marcellus region. Production from Marcellus could grow to 18 Bcf/d by 2021 from about 7 Bcf/d now, depending on price and demand, he said at the CERI Annual Petrochemical Conference in Kananaskis, Alberta. "And with another 2,000 wells to be tied in by 2014/15, there will be pressure to find an outlet for such large volumes," he said.

Total pipeline exports to Canada from the US stood at around 3 Bcf/d in March, according to the Energy Information Administration. About 2 Bcf/d of that is shipped to Canada at the Dawn Hub in Ontario. With average production costs of $2.30/MMBtu in the Marcellus, compared with some $3.80/MMBtu in British Columbia shale plays such as the Montney, western Canadian producers will likely face stiff competition, Howard said. "There are also other factors that could result in gas being imported from the US. If the planned liquefied natural gas terminals in British Columbia do not get built, we will see a pullback in drilling activity in the Duvernay Basin in western Canada, and there are already some signs of that," he said. Also, applications for drillings gas wells in Alberta this year point to a slowdown. In 2012, some 1,100 wells were drilled in the province, but this year that may drop below 1,000 wells, he said. With a current output of about 8 Bcf/d, Alberta accounts for a large majority of Canada's total gas production. The province is followed by British Columbia, which is expected to ramp up production to 9Bcf/d, from current levels of 2 Bcf/d, to provide feedstock gas for several LNG projects planned along the Pacific coast, Howard said. "It is almost guaranteed that Marcellus and Utica production will overtake western Canada gas production and natural gas flows are due to change course," Rusty Braziel, president of RBN Energy, said at the conference. He noted that by the summer of 2017, about 1 Bcf/d of additional supply is likely to flow into eastern Canada from the Northeast US, with more growth beyond that. Around that time, the proposed Nexus Gas Transmission system is expected to be online, carrying 1 Bcf/d from the Utica to the Dawn Hub. And with 9 Bcf/d of new dry gas production due to be added in the US by 2018, the need for Canadian gas flows into the US will drop by 50%, Braziel said.

http://www.eia.gov/todayinenergy/detail.cfm?id=11491

Data

- July 2013 Natural Gas Futures Contract (as of June 6), NYMEX at Henry Hub closed at $3.827 per million British thermal units (MMBtu)
- July 2013 Light, Sweet Crude Oil Futures Contract WTI (as of June 7), closed at $96.03 per U.S. oil barrel (Bbl.) or approximately $16.56 per MMBtu

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

For the week beginning 6/2/13 and ending 6/8/13, cooling degree days (CDD) were lower than normal (cooler) for Texas and for the US. 6ł°ß˜˜: www.cpc.ncep.noaa.gov

COOLING DEGREE DAYS (CDD)

City or Region	Total CDD for week ending 6/8/13	*Week CDD + / - from normal	Year-to-date total CDD	* YTD % +/- from normal
Amarillo	57	6	1096	-22%
Austin	90	-13	625	-26%
DFW	85	-10	487	-39%
El Paso	126	24	665	-5%
Houston	110	8	702	-36%
SAT	100	-7	740	-25%
Texas**	91	-3	604	-28%
U.S.**	37	-2	219	-21%

-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 2,252 Bcf

For the week ending 5/31/2013 working gas in storage increased from 2,141 Bcf to 2,252 Bcf. This represents an increase of 111 Bcf from the previous week. Stocks were 616 Bcf lower than last year at this time and 69 Bcf below the 5 year average of 2,321 Bcf.

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

U.S. WORKING GAS IN STORAGE

Region	Week ending 5/31/13	Prior week	One-week change	Current Δ from 5-YR Average (%)
East	968	910	58	-9.9%
West	396	380	16	13.5%
Producing	888	851	37	-1.1%
Lower 48 Total	2,252	2,141	111	3.0%

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

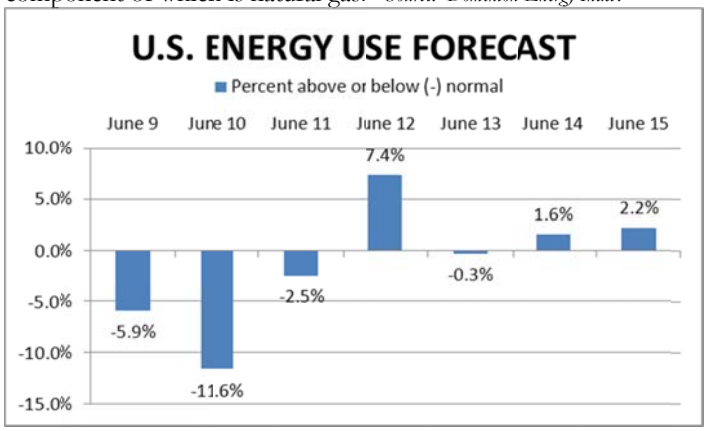
Last week: U.S. gas rig count level

The gas rig count for the U.S. showed no change when compared to the prior week and was down 211 when compared to twelve months ago. The total rig count for the U.S. was down six for the week and down 219 when compared to twelve months ago. The total rig count includes both oil and natural gas rotary rigs. Source: Baker Hughes

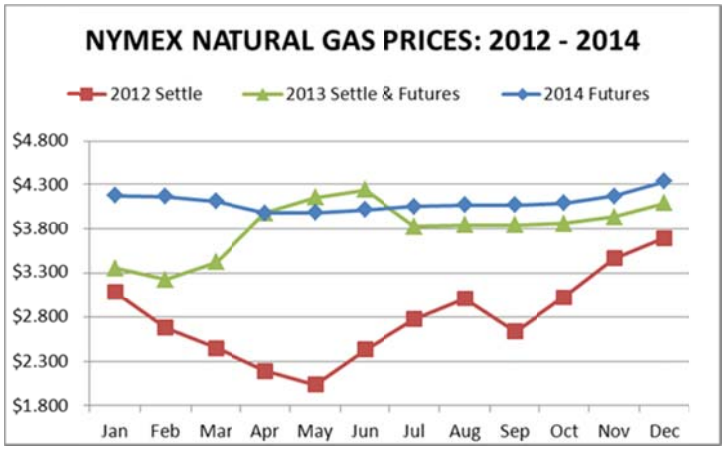
BAKER HUGHES ROTARY RIG COUNT				
	As of 6/7/2013	+/- prior week	Year ago	+/- year ago
Texas	844	1	934	-90
U.S. gas	354	0	565	-211
U.S. oil	1406	-4	1414	-8
U.S. total	1765	-6	1984	-219
Canada	152	7	230	-78

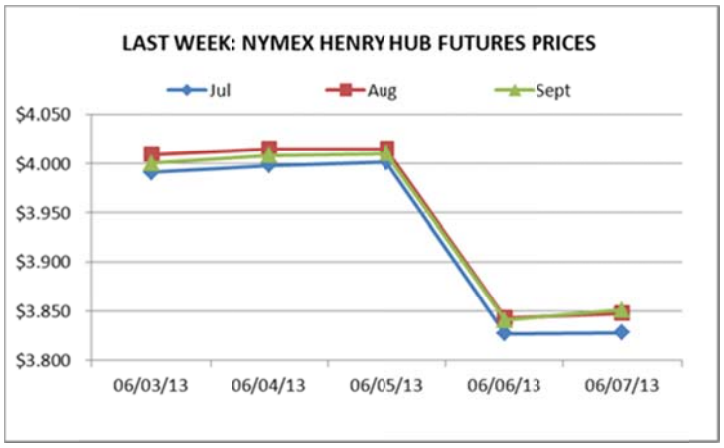
This week: U.S. energy use above normal

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





NATURAL GAS PRICE SUMMARY AS OF 6/7/2013

	This Week	+/- Last Week	+/- Last Year	12-Month Strip Avg.
US July futures				
NYMEX	$3.827	-$0.157	$1.053	$3.983