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RAILROAD COMMISSION OF TEXAS
Gas Services Division
Market Oversight Section

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Natural Gas Trends

Highlights

Exports could create gas price volatility: PIRA

US gas prices could see major volatility as the North American market becomes more tethered to global developments via liquefied natural gas exports, PIRA Energy Group said Thursday.

The Henry Hub spot price in particular will become "significantly more volatile" in proportion to the amount of export capacity built along the Gulf Coast, according to the consulting firm's report.

"We have a hard time not being concerned in our findings about episodes of increased price volatility" stemming from LNG exports, Richard Redash, PIRA's managing director of North American Natural Gas, said in an interview.

The PIRA study said US LNG exports are forecast to crest at about 9 Bcf/d by 2025, including about 8 Bcf/d from the Gulf Coast alone.

The Department of Energy has more than 20 applications pending for projects to export some 30 Bcf/d to countries with which the US has free trade agreements, and another 38.54 Bcf/d for exports to non-FTA countries.

A variety of global market factors, including Russian gas production, low European storage capacity, weather events and peak seasonal demand, all add to the higher probability of Henry Hub price swings, Redash said. "It's along the lines of the proverbial butterfly effect," Redash said.

Asian nuclear opposition is another wild card, said Mickey Kwong, PIRA's senior director of International Gas. "At first we paid a lot of attention to China because of its growing potential but since Fukushima the focus is shifting back to Japan," Kwong said of the 2011 nuclear accident. "They key there is the uncertainty surrounding the reactors; no one knows if they're going to come back, and if so, within what time frame." Kwong said Japan's prime minister spoke recently about the economy and made no mention of nuclear power.

"They don't know how much LNG they need; potentially it's a lot and for them to meet demand they have to secure it in advance," Kwong said. "But if the prime minister is supportive of nuclear power… and they end up not having to use it, then naturally the price will be swinging."

Also, Asian countries have little in the way of traditional reservoir storage fields and "we have a hard time envisioning Asia storing enough gas for peak seasonal demand," Redash said.

Some lawmakers and industrial gas users have expressed concerns that exporting large volumes of LNG would hurt the US economy by driving up US gas prices. But analysts and market observers are divided as to the real impact. Deloitte analysts, for instance, see a $0.22/MMBtu price increase at Henry Hub. EIA estimates put that increase at $0.60/MMBtu by 2018 in its moderate-case scenario, while RBAC Consulting had a far more aggressive estimate of $1.40/MMBtu by the same year.

Source: Platts Gas Daily

Data

- July 2013 Natural Gas Futures Contract (as of June 14), NYMEX at Henry Hub closed at $3.733 per million British thermal units (MMBtu)
- July 2013 Light, Sweet Crude Oil Futures Contract WTI (as of June 14), closed at $97.85 per U.S. oil barrel (Bbl.) or approximately $16.87 per MMBtu

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

For the week beginning 6/9/13 and ending 6/15/13, cooling degree days (CDD) were lower than normal (cooler) for Texas and for the US. 61°ß˜: www.cpc.ncep.noaa.gov

COOLING DEGREE DAYS (CDD)

City or Region	Total CDD for week ending 6/15/13	*Week CDD + / - from normal	Year-to-date total CDD	* YTD % +/- from normal
Amarillo	96	34	411	-8%
Austin	126	13	751	-22%
DFW	131	23	618	-33%
El Paso	157	42	822	-3%
Houston	133	22	835	-32%
SAT	124	9	864	-23%
Texas**	118	15	722	-24%
U.S.**	52	6	271	-17%

-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 2,347 Bcf

For the week ending 6/7/2013 working gas in storage increased from 2,252 Bcf to 2,347 Bcf. This represents an increase of 95 Bcf from the previous week. Stocks were 587 Bcf lower than last year at this time and 58 Bcf below the 5 year average of 2,405 Bcf.

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

U.S. WORKING GAS IN STORAGE

Region	Week ending 6/7/13	Prior week	One-week change	Current Δ from 5-YR Average (%)
East	1,025	968	57	-9.1%
West	409	396	13	12.7%
Producing	913	888	25	-0.2%
Lower 48 Total	2,347	2,252	95	-2.4%

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

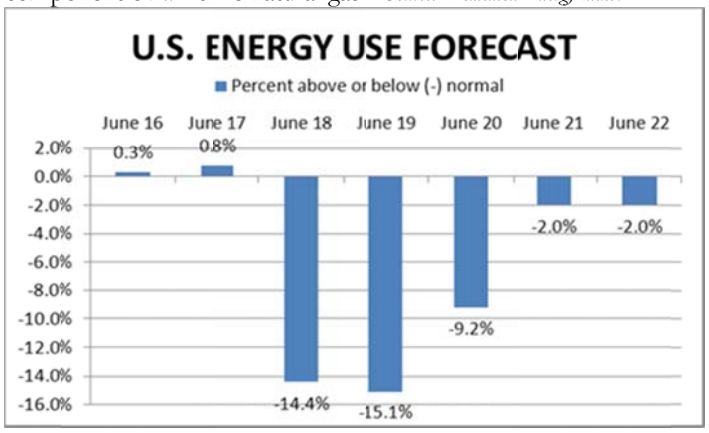
Last week: U.S. gas rig count level

The gas rig count for the U.S. was down one when compared to the prior week and was down 209 when compared to twelve months ago. The total rig count for the U.S. was up six for the week and down 200 when compared to twelve months ago. The total rig count includes both oil and natural gas rotary rigs. Source: Baker Hughes

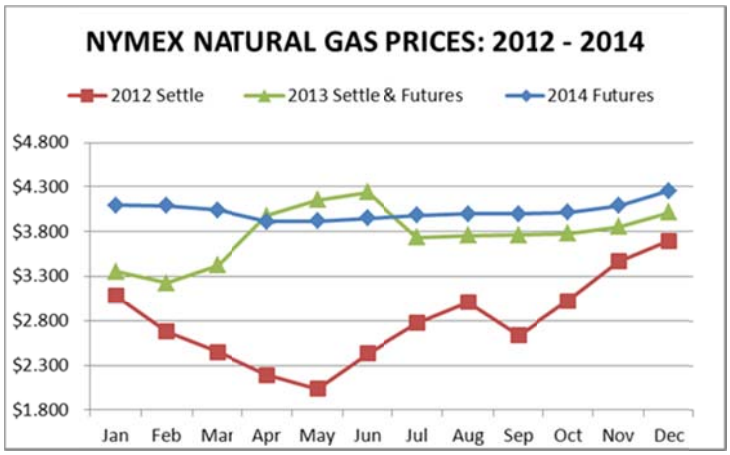
BAKER HUGHES ROTARY RIG COUNT				
	As of 6/14/2013	+/- prior week	Year ago	+/- year ago
Texas	846	2	926	-80
U.S. gas	353	-1	562	-209
U.S. oil	1413	7	1405	8
U.S. total	1771	6	1971	-200
Canada	176	24	248	-72

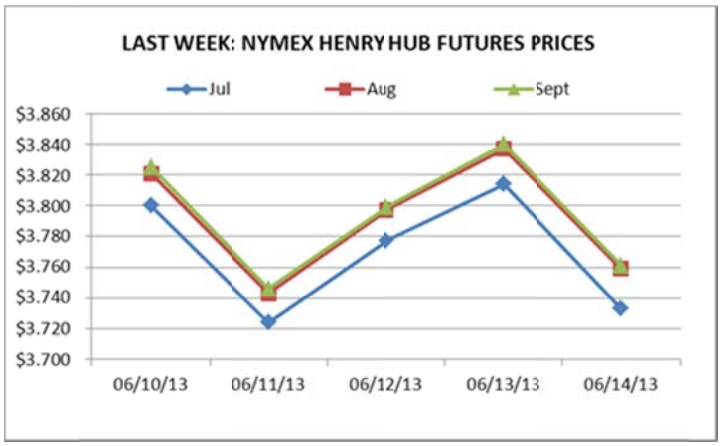
This week: U.S. energy use above normal

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 6/14/2013

	This Week	+/- Last Week	+/- Last Year	12-Month Strip Avg.
US July futures				
NYMEX	$3.733	-$0.094	$0.959	$3.983