

May 23, 2016

Natural Gas Trends

Highlights

Gas prices likely to remain depressed: expert

The US electric generation fleet's natural gas demand will likely grow to 15.9 Tcf/year by 2030, but surging renewables and global LNG liquefaction capacity may mute any rise to natural gas prices, a Texas economist said Thursday. In 2015, power generation consumed 9.7 Tcf of natural gas, according to the US EIA. Gurcan Gulen, senior economist at the UT Bureau of Economic Geology Center for Energy Economics, made a presentation entitled "Going through another cycle: implications for the power sector and Texas economy" at a Gulf Coast Power Association luncheon in Houston Texas. In that presentation, Gulen noted that the four nongovernmental organizations and large companies such as Microsoft and Google parent Alphabet announced on May 12 the formation of a Renewable Energy Buyers Alliance to deploy 60 GW of new corporate renewable energy capacity by 2025. "If we think the natural gas prices are going to be low, so we build a lot of natural gas generation, and we have a lot of renewables on the market, so it doesn't need natural gas generation, what's going to happen to natural gas prices?" Gulen said. "They're going to tank further."

Natural gas market participants are asking whether US LNG exports "can play a balancing role "to keep US natural gas prices at a sustainable level," Gulen said, adding, "I don't think so." The natural gas industry "shot itself in the foot by overproducing" while natural gas demand has not help up, Gulen said. The US has approved a half-dozen LNG projects for exports to countries that do not have free trade agreements with the US, including several European and East Asian countries, but the delivered cost of US LNG to those sites is around \$7/MMBtu, while other countries, such as Australia, have also developed large LNG plants and can sell for about \$4/MMBtu, he said. Demand growth is anybody's guess," Gulen said. For example, Japan has been resuming operation of its nuclear plants and buying more coal, and China's economic growth has been less robust over the past year. "If China starts slowing down, that's going to have a multiplier effect on the global economy," Gulen said. "LNG is going to be in excess condition for the next several years."

The current oil and natural gas market is in a cycle similar to that experienced in the mid-1980s, which resulted in widespread layoffs and consolidation in the industry, Gulen said. "You'll hear people say, 'This time is different,'" Gulen said. "That's the kind of language we always hear in the industry." Globally, the oil and gas industry has laid off more than 300,000 people, of whom 50,000-60,000 are in Houston alone, he said. But the situation is somewhat different in the Houston Ship Channel area, where downstream petrochemical activity has picked up, while western Houston's "Energy Corridor" of exploration and production companies, tool manufacturers and services has ben hit hard by low oil and natural gas prices since Nov. 2014, Gulen said. "The industry is in trouble, especially if you're a dry gas producer." "We have been expecting a lot of merger-and-acquisition activity." But Gulen cited three deals that show how those expectations have not been fulfilled. Royal Dutch Shell closed on the acquisition of BG Group on Feb. 15, but the merger of Halliburton and Baker Hughes ended after the US DOJ sued to stop the acquisition. Meanwhile, the \$32.6-billion Energy Transfer Partners-Williams Companies' deal is in doubt. "Companies are in trouble, and what they are asking for their assets is a lot higher than buyers are willing to pay," Gulen said. "As we go through a round of bankruptcies, we are going to see some rationalization of these assets changing hands." Source: Platts Gas Daily

Data

- June 2016 Natural Gas Futures Contract (as of May 20) NYMEX at Henry Hub closed at \$2.062 per million British thermal units (MMBtu)
- June 2016 Light, Sweet Crude Oil Futures Contract WTI (as of May 20), closed at \$47.75 per U.S. oil barrel (Bbl.) or approximately \$8.23 per MMBtu

Last week: Texas cooler than normal last week

For the week beginning 5/15/16 and ending 5/21/16, cooling degree days (CDDs) were lower than normal (cooler) on average for the week and for the year to date for all Texas cities shown.

Source: www.cpc.ncep.noaa.gov

COOLING DEGREE DAYS (CDD)				
City or Region	Total CDD for week ending 5/21/16	*Week CDD + / - from normal	Year-to-date total CDD	* YTD % +/- from normal
Amarillo	10	-11	42	-999%
Austin	47	-28	374	-13%
DFW	33	-29	298	22%
El Paso	52	-9	275	20%
Houston	51	-26	452	1%
SAT	52	-29	477	2%
Texas**	45	-22	417	9%
U.S.**	15	-8	119	0%

* 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 2,754 Bcf

For the week ending 5/13/2016 working gas in storage increased from 2,681 Bcf to 2,754 Bcf. This represents an increase of 73 Bcf from the previous week. Stocks were 791 Bcf higher than last year at this time and 795 Bcf above the 5 year average of 1,959 Bcf.

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

U.S. WORKING GAS IN STORAGE				
Region	Week ending 5/13/16	Prior week	One-week change	Current Δ from 5-YR Average (%)
East	490	468	22	21.3%
Midwest	606	582	24	47.8%
Mountain	166	161	5	40.7%
Pacific	293	288	5	21.1%
South Central	1,199	1,182	17	52.7%
Lower 48 Total	2,754	2,681	73	40.6%

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

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

The gas rig count for the U.S. was down two for the week and down 137 when compared to twelve months ago. The total rig count for the U.S. was down two compared to last week and down 481 when compared to twelve months ago. The total rig count includes both oil and natural gas rotary rigs.

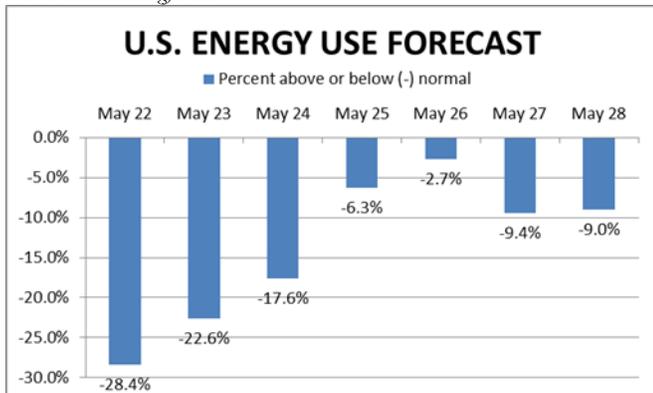
Source: Baker Hughes

BAKER HUGHES ROTARY RIG COUNT				
	As of 5/20/2016	+/- prior week	Year ago	+/- year ago
Texas	173	-8	373	-200
U.S. gas	85	-2	222	-137
U.S. oil	318	0	659	-341
U.S. total	404	-2	885	-481
Canada	44	1	72	-28

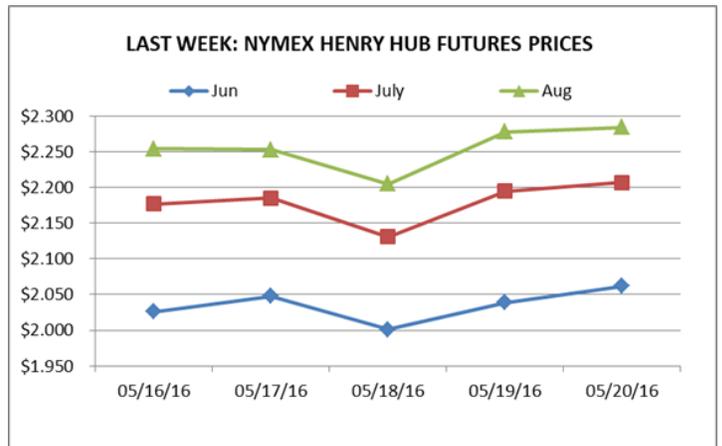
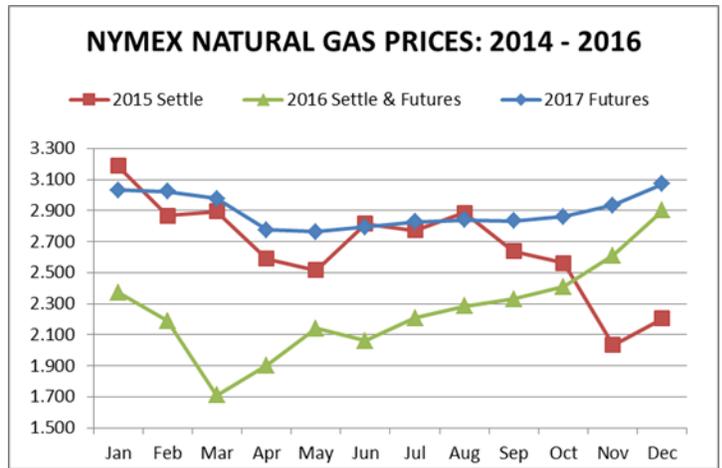
This week: U.S. energy use below normal

U.S. energy use is predicted to be below normal 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



2016 prices. Natural gas prices for 2016, shown below in green, are the NYMEX settlement prices for Jan-Apr. and futures prices for the year.



NATURAL GAS PRICE SUMMARY AS OF 5/20/2016

	This Week	+/- Last Week	+/- Last Year	12-Month Strip Avg.
US June futures				
NYMEX	\$2.062	-\$0.034	-\$1.666	\$2.664