

July 20, 2015

Natural Gas Trends

Highlights

Pipeline project funnels Texas gas to Mexico

The avenues to export natural gas to Mexico continue to expand. The Federal Electricity Commission, Mexico's state utility agency, awarded a contract to Gasoducto de Aguaprieta to construct a pipeline connecting Texas gas with a large-scale consumer and additional pipelines in northern Mexico. The 42-inch-diameter, 15-mile, 1.13 Bcf/d capacity San Isidro-Samalayuca pipeline will transport gas from the Waha storage hub in West Texas, to a new power plant just south of the Rio Grande in Samalayuca, Chihuahua. CFE will deliver natural gas to the Norte III plant through the proposed San Isidro-Samalayuca pipeline located approximately a mile south of the plant site. The nameplate capacity of the plant is 924 MW. It will consume about 116 MMcf/d of gas assuming a 70% utilization rate. Construction on the plant began in May. It is expected to be operational by August 2017 with a commercial operation date of November 2017. The new pipeline will also connect with the Corridor Chihuahua gas pipeline, currently operating, as well as with the Samalayuca-Sásabe line running from Chihuahua to Sonora, a project currently being tendered. Gasoducto de Aguaprieta, a subsidiary of IEnova, the Mexican unit of US-based Sempra Energy, handles permit procurement, engineering, construction, operation and maintenance of the pipeline. The pipeline is slated to go in service in January 2017. Exports to Mexico are expected to grow exponentially before the end of the decade. Bentek Energy estimates exports to Mexico from Texas will grow to an average of about 3.4 Bcf/d by the end of 2020, up from the year-to-date average of 2.1 Bcf/d. Meanwhile, total US exports to Mexico are predicted to top 4.5 Bcf/d by that time. The surge of gas south of the border has already begun. In 2014, the US exported 2.0 Bcf/d of gas to Mexico, more than twice the volumes recorded for 2010.

As Mexico continues to decommission high-cost, oil-fired power plants, demand for gas will increase. CFE forecast power plants in the southern region of Chihuahua alone will be demanding 1 Bcf/d by the end of 2028. Three more Chihuahua proposed gas-fired power plants, including the Norte IV and VI and the Noreste III and IV, will add combined generating capacity of 3,200 MW by 2025 according to Bentek's North American Power Plant databank. And across the nation, 31 gas-fired power plants are already in various stages of development, all slated to come online no later than 2018, with a total capacity of 13,703 MW consuming up to 1.7 Bcf/d assuming a 70% utilization rate. To fuel this rampant gas-fired power generation growth, the country has embarked on a \$12 billion expansion of its gas pipeline network with several large new import projects, such as the San Isidro-Samalayuca pipeline, at the US border. Mexico is expected to increase reliance on US gas to feed its new pipelines, supply its growth in power generation and support a renaissance of its industrial sector. Bentek is currently tracking more than 22 pipeline projects in Mexico. Constitutional reforms in 2014 made the recent renaissance in Mexico's energy sector possible. The reforms broke the state-owned energy company Petroleos Mexicanos' 76-year monopoly on oil and gas, opening the door for foreign and domestic private investors to enter the industry.

Source: Platts Gas Daily

Data

- August 2015 Natural Gas Futures Contract (as of July 17), NYMEX at Henry Hub closed at \$2.870 per million British thermal units (MMBtu)
- August 2015 Light, Sweet Crude Oil Futures Contract WTI (as of July 17), closed at \$50.89 per U.S. oil barrel (Bbl.) or approximately \$8.77 per MMBtu

Last week: Texas warmer than normal last week

For the week beginning 7/12/15 and ending 7/18/15, cooling degree days (CDD) were higher than normal (warmer) on average for the week and for the year to date for most Texas cities shown.

Source: www.cpc.ncep.noaa.gov

COOLING DEGREE DAYS (CDD)				
City or Region	Total CDD for week ending 7/18/15	*Week CDD +/- from normal	Year-to-date total CDD	* YTD % +/- from normal
Amarillo	119	27	568	-7%
Austin	130	-6	1233	-12%
DFW	158	18	1214	2%
El Paso	151	25	1320	13%
Houston	150	22	1581	14%
SAT	146	8	1509	4%
Texas**	135	7	1304	3%
U.S.**	78	4	641	15%

* A minus (-) value is cooler than normal; a plus (+) value is warmer than normal. NOAA uses 65° Fahrenheit as the 'normal' basis from which CDDs 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 2,767 Bcf

For the week ending 7/10/2015 working gas in storage increased from 2,668 Bcf to 2,767 Bcf. This represents an increase of 99 Bcf from the previous week. Stocks were 653 Bcf higher than last year at this time and 73 Bcf above the 5 year average of 2,694 Bcf.

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

U.S. WORKING GAS IN STORAGE				
Region	Week ending 7/10/15	Prior week	One-week change	Current Δ from 5-YR Average (%)
East	1,235	1,178	57	-5.0%
West	450	440	10	5.6%
Producing	1,082	1,050	32	11.9%
Lower 48 Total	2,767	2,668	99	2.7%

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 one for the week and down 97 when compared to twelve months ago. The total rig count for the U.S. was down six from last week and down 1014 when compared to twelve months ago. The total rig count includes both oil and natural gas rotary rigs.

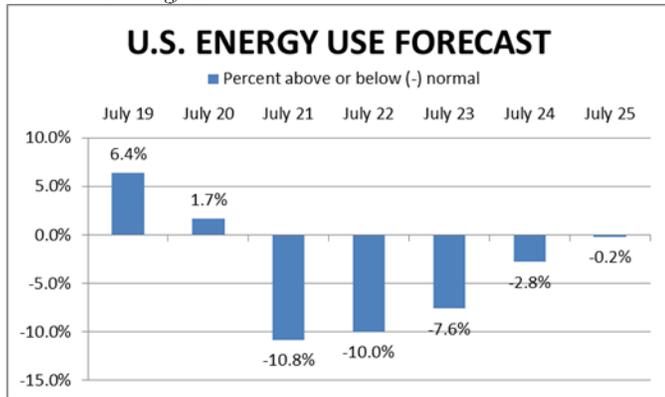
Source: Baker Hughes

BAKER HUGHES ROTARY RIG COUNT				
	As of 7/17/2015	+/- prior week	Year ago	+/- year ago
Texas	366	-2	888	-522
U.S. gas	218	1	315	-97
U.S. oil	638	-7	1554	-916
U.S. total	857	-6	1871	-1014
Canada	192	23	381	-189

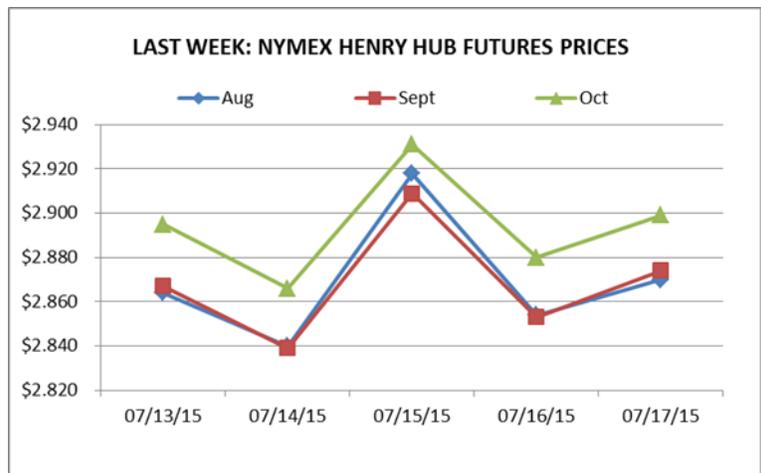
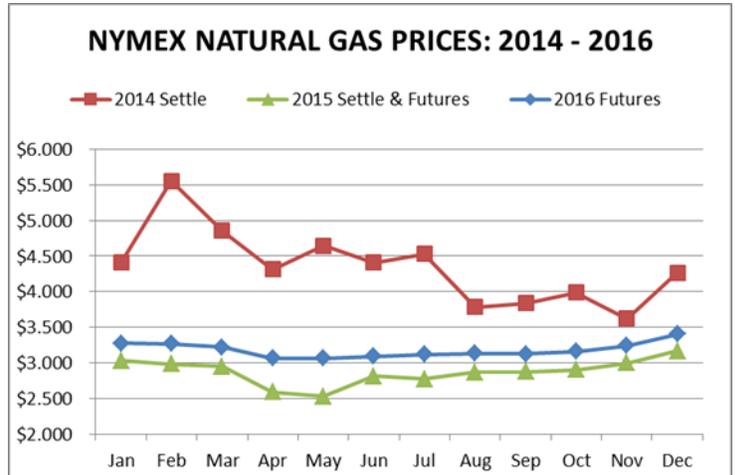
This week: U.S. energy varies this week

U.S. energy use is predicted vary 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



2015 prices. Natural gas prices for 2015, shown below in green, are the NYMEX settlement prices for Jan.-July and futures prices for the remainder of the year.



NATURAL GAS PRICE SUMMARY AS OF 7/17/2015

	This Week	+/- Last Week	+/- Last Year	12-Month Strip Avg.
US August futures				
NYMEX	\$2.870	\$0.100	-\$1.985	\$2.874