

March 14, 2016

Natural Gas Trends

Highlights

ONEOK Completes Roadrunner Phase I

On Wednesday, ONEOK Partners announced the completion of the first phase of the Roadrunner gas pipeline. The pipeline is the first of a series of proposed expansions, totaling about 3.1 Bcf/d of capacity, which will take Permian Basin-sourced gas into northwestern Mexico. The first phase of the Roadrunner pipeline will deliver up to 170 MMcf/d of gas to El Paso, and further south into Mexico via a new border crossing facility that was completed in February. The second phase, which is expected to come online during the first quarter of 2017, will raise capacity on the pipeline to 570 MMcf/d and by 2019 the total pipeline capacity will expand to 640 MMcf/d. The Roadrunner pipeline will deliver gas to Fermaca's 850 MMcf/d Tarahumara Pipeline, which primarily served power and industrial demand in the Mexican state of Chihuahua. The Tarahumara Pipeline is under a long-term, 25-year contract with Mexico's state-owned power company, the Comisión Federal de Electricidad, and is part of a larger strategy of supporting growing gas-fired power demand in the northwestern region of Mexico. The Tarahumara Pipeline will also interconnect with the 670 MMcf/d El Encino-Topolobampo pipeline, which is expected to be completed during December 2018 and will allow Permian Basin gas to reach as far west as the Mexican state of Sinaloa. From there, the pipeline will feed the 230MW Topolobampo gas-fired power plant as well as interconnect with the soon-to-be completed El Oro – Mazatlan Pipeline, which is expected to come online in the fourth quarter of 2016 and will deliver up to 202 MMcf/d of gas down to the resort city of Mazatlan. Based on CFE documentation, the Topolobampo gas-fired plant is set to expand by an additional 780MW in 2019, with plans to add another 670 MW further down the road.

US pipeline capacity to increase by 55%

US pipeline capacity to Mexico currently stands at around 6.7 Bcf/d and is set to expand to nearly 15 Bcf/d over the next four years if all of the nine currently proposed pipeline expansions come online. All of this additional capacity will be coming out of Texas, split about half and half between the Eagle Ford and the Permian. Along with the Roadrunner pipeline, two additional CFE-tendered pipelines are planned to take Permian Basin gas into Northwestern Mexico: Comanche Trail and Trans-Pecos. The 1.1-Bcf/d Comanche Trail pipeline is expected to begin construction this quarter with an in-service date of January 2016. The pipeline will deliver US gas to the border town of San Elizario, where it will interconnect with the Mexican pipeline grid and serve growing power demand in the northern region. The 1.4 Bcf/d Trans-Pecos pipeline, which is expected to start construction this quarter with an in-service date of the first quarter of 2017, will deliver Permian Basin gas to the border town of Presidio, Texas. From there, the pipeline will deliver to the 1.35 Bcf/d Ojinaga-Elnicion pipeline in Mexico, which is expected to be completed in March 2017 and which will supply new power generation plants in the North, West, and Central regions. Platts Bentek expects that US exports to Mexico will rise to 3.6 Bcf/d in 2016, a 26% year-on-year build, driven largely by additional South Texas exports along the NET Mexico/Los Ramones corridor. Export growth along the Roadrunner pipeline is expected to be more subdued in the near-term since the state of Chihuahua is already being served by US pipeline imports from the El Paso Pipeline system. However, exports along Roadrunner are expected to increase rapidly as downstream interconnections come online, allowing gas to reach previously unserved markets within Mexico. Source: Platts Gas Daily

Data

- April 2016 Natural Gas Futures Contract (as of March 11.) NYMEX at Henry Hub closed at \$1.822 per million British thermal units (MMBtu)
- April 2016 Light, Sweet Crude Oil Futures Contract WTI (as of March 11), closed at \$38.50 per U.S. oil barrel (Bbl.) or approximately \$6.64 per MMBtu

Last week: Texas warmer than normal last week

For the week beginning 3/6/16 and ending 3/12/16, heating degree days (HDDs) were lower than normal (warmer) on average for the week and for the year to date for all Texas cities shown.

Source: www.cpc.ncep.noaa.gov

HEATING DEGREE DAYS (HDD)				
City or Region	Total HDD for week ending 3/12/16	*Week HDD + / - from normal	Year-to-date total HDD	* YTD % +/- from normal
Amarillo	69	-67	2864	-21%
Austin	3	-42	1252	-18%
DFW	18	-49	1450	-33%
El Paso	39	-33	1860	-19%
Houston	4	-39	928	-34%
SAT	7	-34	960	-35%
Texas**	23	-36	1340	-26%
U.S.**	84	-63	3020	-18%

* A minus (-) value is warmer than normal; a plus (+) value is cooler 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 2,479 Bcf

For the week ending 3/4/2016 working gas in storage decreased from 2,536 Bcf to 2,479 Bcf. This represents a decrease of 57 Bcf from the previous week. Stocks were 911 Bcf higher than last year at this time and 727 Bcf above the 5 year average of 1,752 Bcf.

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

U.S. WORKING GAS IN STORAGE				
Region	Week ending 3/4/16	Prior week	One-week change	Current Δ from 5-YR Average (%)
East	464	495	-31	27.8%
Midwest	587	621	-34	46.8%
Mountain	146	145	1	21.7%
Pacific	258	255	3	27.7%
South Central	1,024	1,020	4	53.5%
Lower 48 Total	2,479	2,536	-57	41.5%

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 three for the week and 163 when compared to twelve months ago. The total rig count for the U.S. was down nine compared to last week and down 645 when compared to twelve months ago. The total rig count includes both oil and natural gas rotary rigs.

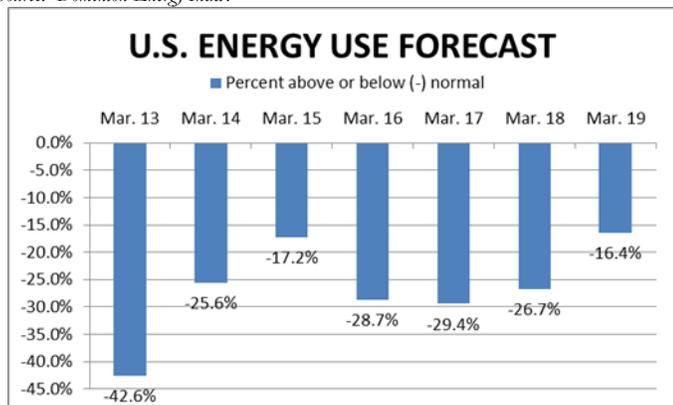
Source: Baker Hughes

BAKER HUGHES ROTARY RIG COUNT				
	As of 3/11/2016	+/- prior week	Year ago	+/- year ago
Texas	215	-12	501	-286
U.S. gas	94	-3	257	-163
U.S. oil	386	-6	866	-480
U.S. total	480	-9	1125	-645
Canada	98	-31	220	-122

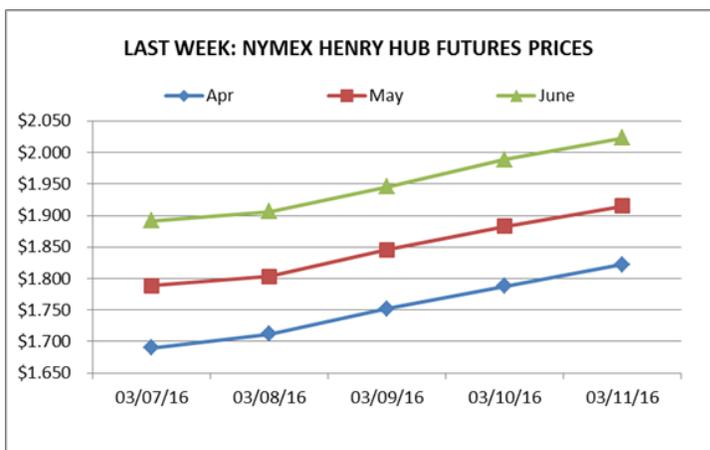
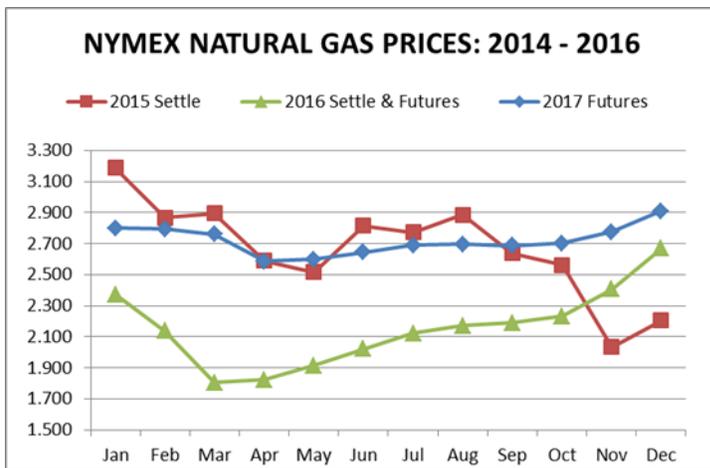
This week: U.S. energy use below average

U.S. energy use is predicted to be below average 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-Mar. and futures prices for the year.



NATURAL GAS PRICE SUMMARY AS OF 3/11/2016

	This Week	+/- Last Week	+/- Last Year	12-Month Strip Avg.
US April futures				
NYMEX	\$1.822	\$0.156	-\$1.906	\$2.664