

February 16, 2016

Natural Gas Trends

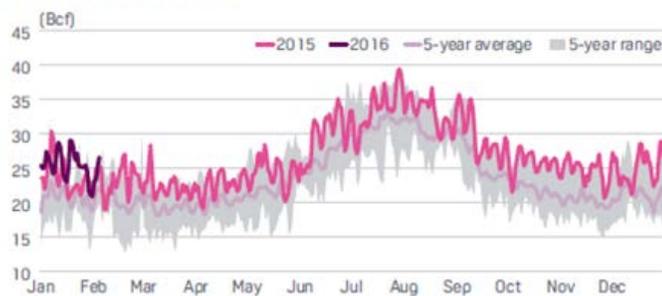
Highlights

Winter power burn up 17% from last year

Daily US power burn is currently averaging 25.0 Bcf/d this winter, a solid 3.5 Bcf/d, or 17%, higher than last winter season-to-date despite national temperatures averaging 47 degrees Fahrenheit, 5 degrees higher than last year. Gains have been spread throughout the country with Midcon Producing and Rockies being the only regions posting year-on-year declines. The biggest absolute increase has occurred in the Southeast where demand is up 1.2 Bcf/d to 8.2 Bcf/d. The Northeast and Texas are also up 0.7 Bcf/d and 0.6 Bcf/d to 5.5 Bcf/d and 4.4 Bcf/d, respectively.

With temperatures in these regions ranging from 4 degrees warmer in Texas to 8 degrees warmer in the Northeast compared to last year, the additional burn is due to both infrastructure and economic fuel switching. A portion of this increase is due to structural shifts in the generation stack towards gas as a result of recent coal retirements. Last year the US saw approximately 15.1 GW of coal capacity retire. Assuming the retired coal plants were previously running at a 60% capacity factor and that the new replacement gas operates at a 7.5 MMBtu/MWh heat rate, about 1.63 Bcf/d of the increased gas demand is from gas-fired power plants filling in for lost baseload coal capacity. The remaining incremental demand is due to factors outside of the infrastructure shifts such as economic fuel switching.

US DAILY POWER BURN



Source: Platts Bentek

Actual vs. weather-normal power burn data from Platts Bentek estimates season-to-date fuel switching to have averaged 2.1 Bcf/d through February 8, a 7% increase from last year's winter season over the same period. The increase comes on the heels of historic low gas prices from booming production in the Northeast. The region set another new all-time record for production on Sunday, February 7 at 23.1 Bcf. The regions showing an increase in burns above weather-normal levels include the Northeast, Texas and the Midwest. In the Northeast, fuel switching is estimated to be 576 MMcf/d, an increase of 19% from last winter. In the Midwest, fuel switching is estimated to be 266 MMcf/d, up 15% from the 2014-2015 winter season. Despite potentially higher fuel-switching levels, fuel-switching is responsible for less overall demand compared to last year. Season-to-date switching levels account for about 8% of overall average daily demand, down seven-tenths of a percent from its share last winter. Interestingly, Southeast fuel switching only accounts for 0.3 Bcf/d, or 4%, of the region's demand, meaning 0.9 Bcf/d of the incremental demand this winter is due to cooling demand and high nuclear outages. Temperatures have averaged 58 degrees season-to-date with nine days averaging over 70 degrees and nuclear outages are averaging 4.0 GW/d, up 200% from last winter.

Source: Platts Gas Daily

Data

- March 2016 Natural Gas Futures Contract (as of February 12), NYMEX at Henry Hub closed at \$1.966 per million British thermal units (MMBtu)
- March 2016 Light, Sweet Crude Oil Futures Contract WTI (as of February 12), closed at \$29.44 per U.S. oil barrel (Bbl.) or approximately \$5.08 per MMBtu

Last week: Texas warmer than normal last week

For the week beginning 1/31/15 and ending 2/6/16, 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 2/13/16	*Week HDD + / - from normal	Year-to-date total HDD	* YTD % +/- from normal
Amarillo	126	-56	2510	-17%
Austin	79	-8	1144	-11%
DFW	86	-35	1301	-29%
El Paso	93	-20	1716	-12%
Houston	54	-27	836	-29%
SAT	57	-25	888	-28%
Texas**	77	-22	1192	-21%
U.S.**	197	6	2505	-17%

* 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 2,864 Bcf

For the week ending 2/05/2016 working gas in storage decreased from 2,934 Bcf to 2,864 Bcf. This represents a decrease of 70 Bcf from the previous week. Stocks were 573 Bcf higher than last year at this time and 543 Bcf above 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 2/05/16	Prior week	One-week change	Current Δ from 5-YR Average (%)
East	620	641	-21	18.3%
Midwest	739	767	-28	25.5%
Mountain	151	159	-8	4.9%
Pacific	258	271	-13	9.3%
South Central	1,096	1,096	0	32.2%
Lower 48 Total	2,864	2,934	-70	23.4%

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 198 when compared to twelve months ago. The total rig count for the U.S. was down 30 compared to last week and down 817 when compared to twelve months ago. The total rig count includes both oil and natural gas rotary rigs.

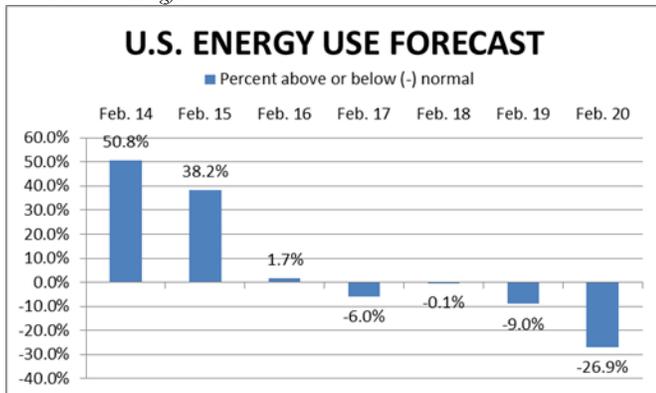
Source: Baker Hughes

BAKER HUGHES ROTARY RIG COUNT				
	As of 2/12/2016	+/- prior week	Year ago	+/- year ago
Texas	248	-14	598	-350
U.S. gas	102	-2	300	-198
U.S. oil	439	-28	1056	-617
U.S. total	541	-30	1358	-817
Canada	222	-20	382	-160

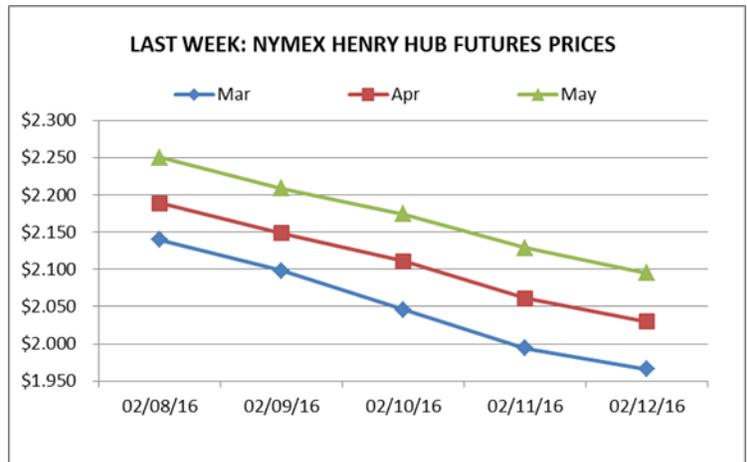
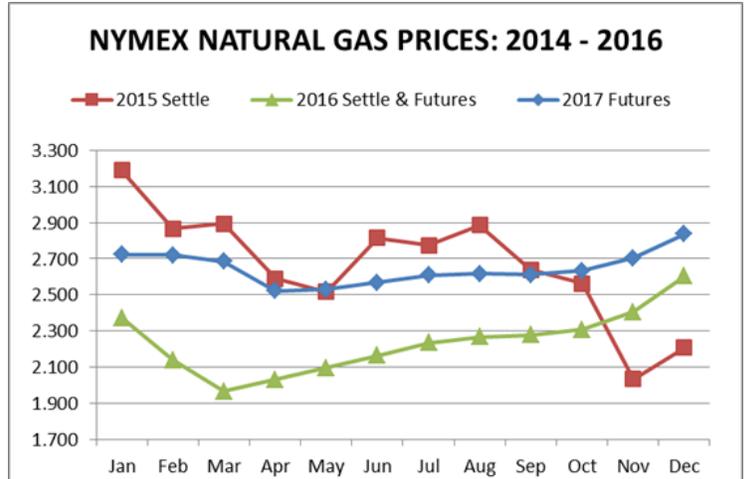
This week: U.S. energy varies this week

U.S. energy use is predicted to 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



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



NATURAL GAS PRICE SUMMARY AS OF 2/12/2016

	This Week	+/- Last Week	+/- Last Year	12-Month Strip Avg.
US March futures				
NYMEX	\$1.966	-\$0.097	-\$1.762	\$2.664