CHRISTI CRADDICK, Chairman
DAVID PORTER, Commissioner
BARRY T. SMITHERMAN, Commissioner

RAILROAD COMMISSION OF TEXAS
Gas Services Division
Market Oversight Section

November 17, 2014

Natural Gas Trends

Highlights

Mexican pipelines could bolster Permian basis

Mexico's Comision de Federal Electricidad (CFE) Presidio and San Elizario pipelines will provide much needed takeaway capacity for Permian Basin natural gas by exporting it to Mexico, primarily for power generation. The pipelines will give Mexico direct access to growing supplies in the Permian, which Bentek believes could grow by 1.4 to 2.2 Bcf/d over the next five years.

Bentek expects that both pipelines will provide essential takeaway capacity out of the Permian, as gas currently bound from the Permian to the Midcontinent is increasingly being displaced by gas from the Appalachian and Anadarko basins while at the same time Permian gas production growth will outpace accessible demand.

Connected by CFE's Waha Header, with a design capacity of 2.8 Bcf/d, the 1.4 Bcf/d, 48-inch-diameter Presidio Pipeline and the 1.5 Bcf/d San Elizario pipeline, not scheduled for service until 2028, will deliver gas to the Oginaga-El Encino and the Tarahumara pipelines in northern Mexico. These pipelines are not expected to come online until mid-2016 or 2017. The two Mexican pipelines are expected to serve growing gas demand from power generation and other sources in the region. CFE estimates that gas demand in the northwestern part of the country will grow by 2.2 Bcf/d between now and 2028, due primarily to growing power and industrial load.

Currently, Bentek estimates that northwestern Mexico only has about 3 GW of gas generation capacity, or 420,000 Mcf/d of gas demand running at 80% utilization. The region is expected to add another 3.3 GW of gas generating capacity after 2017, potentially adding another 0.4 Bcf/d of demand. Much of this new demand will likely replace the existing 3.6 GW of oil-fired generation capacity that is currently operational. The timing of these generation changes is uncertain.

The CFE Waha Header is expected to begin service in January 2017 and is designed to connect up to 12 different pipelines, with its initial design connecting at least six pipelines. The header could interconnect with Oneok Westex, El Paso Natural Gas, Oasis Pipeline, Atmos Pipeline, Natural Gas Pipeline Company of America, the Energy Transfer ETF/ETP NTX-36 system, Regency Pipeline, Northern Natural Gas, Transwestern Gas Transmission, and Enterprise Pipeline.

The proposed pipelines will give the Permian much needed takeaway capacity and likely help strengthen Permian basis starting around 2018.

Source: Platts Gas Daily

Data

- December 2014 Natural Gas Futures Contract (as of November 14), NYMEX at Henry Hub closed at $4.020 per million British thermal units (MMBtu)
- December 2014 Light, Sweet Crude Oil Futures Contract WTI (as of November 14), closed at $75.82 per U.S. oil barrel (Bbl.) or approximately $13.07 per MMBtu

Last week: Texas cooler than normal

For the week beginning 11/9/14 and ending 11/15/14, heating degree days (HDD) were higher than normal (cooler) for the week and for the year to date for most Texas cities shown.

Source: www.cpc.ncep.noaa.gov

HEATING DEGREE DAYS (HDD)

City or Region	Total HDD for week ending 11/15/14	*Week HDD + / - from normal	Year-to-date total HDD	* YTD % +/- from normal
Amarillo	195	65	454	-18%
Austin	127	84	172	55%
DFW	139	74	216	24%
El Paso	75	-8	130	-49%
Houston	91	52	122	11%
SAT	104	64	121	12%
Texas**	120	67	197	19%
U.S.**	145	27	573	-7%

-999 = Normal Less Than 100 or Ratio Incalculable

* 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.

Last week: U.S. natural gas storage at 3,611 Bcf

For the week ending 11/7/2014 working gas in storage increased from 3,571 Bcf to 3,611 Bcf. This represents an increase of 40 Bcf from the previous week. Stocks were 220 Bcf lower than last year at this time and 237 Bcf below the 5 year average of 3,848 Bcf.

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

U.S. WORKING GAS IN STORAGE

Region	Week ending 11/7/14	Prior week	One-week change	Current Δ from 5-YR Average (%)
East	1,964	1,956	8	-4.9%
West	502	498	4	-5.5%
Producing	1,145	1,117	28	-8.5%
Lower 48 Total	3,611	3,571	40	-6.2%

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 six for the week and down twenty when compared to twelve months ago. The total rig count for the U.S. was up three from last week and was up 166 when compared to twelve months ago. The total rig count includes both oil and natural gas rotary rigs.

Source: Baker Hughes

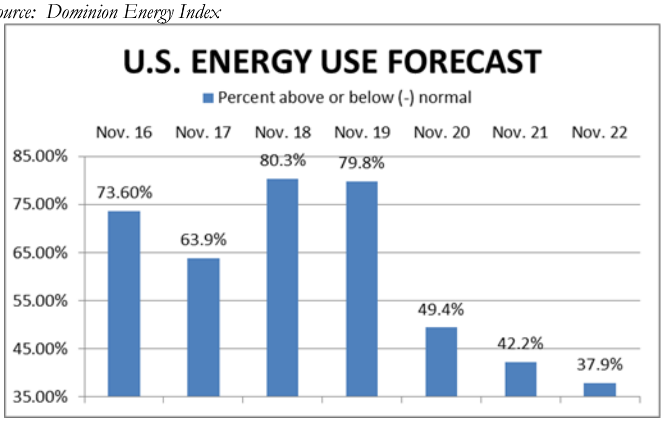
BAKER HUGHES ROTARY RIG COUNT

	As of 11/14/2014	+/- prior week	Year ago	+/- year ago
Texas	902	-4	825	77
U.S. gas	350	-6	370	-20
U.S. oil	1578	10	1385	193
U.S. total	1928	3	1762	166
Canada	402	-8	401	1

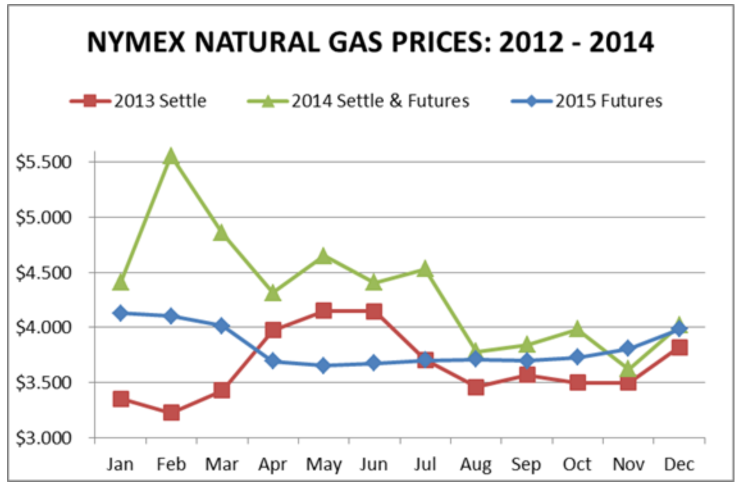
This week: U.S. energy use above average

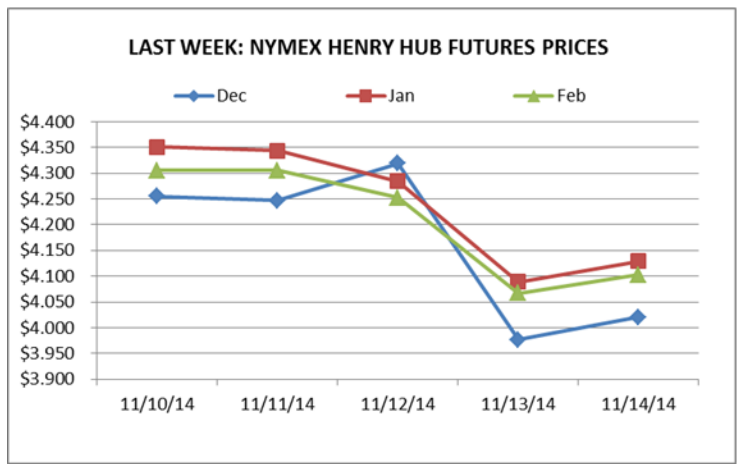
U.S. energy use is predicted to be above average this week, according to the Dominion Energy Index, as shown below. Dominion forecasts total U.S. residential energy usage, a component of which is natural gas.

Source: Dominion Energy Index



2014 prices. Natural gas prices for 2014, shown below in green, are the NYMEX settlement prices for Jan.-Nov. and futures prices for the remainder of the year.





NATURAL GAS PRICE SUMMARY AS OF 11/14/2014

	This Week	+/- Last Week	+/- Last Year	12-Month Strip Avg.
US Dec. futures				
NYMEX	$4.020	-$0.392	$0.202	$3.851