

July 14, 2014

Natural Gas Trends

Highlights

Industrial demand will surge in LA.; Texas: Study

About 80 percent of 103 industrial projects that are likely to be built in Texas and Louisiana – potentially using 23.5 Bcf/d of natural gas – will be built and completed by 2020, the Center for Energy Economics said Tuesday.

“It is just so easy to get things done here,” Michelle Michot Foss, chief energy economist and program manager for the Bureau of Economic Geology’s CEE, said in an email. The attractions are based on the two states’ coastal access, infrastructure for exports, and market centers for pricing, such as Henry Hub and the Houston Ship Channel for gas and Mont Belvieu for liquids, she noted.

She also expressed doubts about proposed gas-intensive projects in the Marcellus Shale in Pennsylvania and West Virginia, such as a proposed ethane cracker that Shell is considering for Pennsylvania. “Those folks are too late in the game,” she asserted.

She also disputed assertions that labor and supply shortages would delay the Gulf Coast projects. “Good projects are getting what they need. At a price, of course, but that is the EPC (engineering, procurement and construction) world these days anyway,” she said.

Michot Foss said the center is tracking projects by their stage of development. “Confidence level goes up as milestones are met: front-end engineering design (FEED), final investment decision, permitting and groundbreaking. The most speculative projects are gas to liquids,” she said. “Most of the 103 projects are in some form of construction or close to it.”

She also said she doesn’t expect the ever-growing demand for gas to generate power will be a deterrent for future manufacturing growth in the region. “Industrials use gas for fuel and feedstock. Gas for power gen is either inside or outside the fence. Industrials are taking both,” she said.

In a report this week the CEE identified plants that it fully expects will be built. They include the expansion of nine ethane crackers and five new crackers. CEE also said it believes that six methanol and 16 ammonia-urea-fertilizer plants will be built along with five gas-to-liquids plants. The CEE estimated the ethane crackers would cost \$26 billion and produce 9.3 million metric tons/year of ethylene.

The study’s reference case anticipates 22 methanol and ammonia plants will be built by 2020 at a cost of \$18 billion. The six methanol plants would have combined 5.9 million metric tons/year of capacity and cost \$3.5 billion.

Sixteen of these plants will be able to produce mixes of ammonia, urea, ammonium nitrate and methanol, CEE said. Three of these plants have been completed for a cost of \$4 billion; \$5.4 billion has been invested in ten that are under construction and three are in the FEED stage. Seven that are in the planning stage are projected to cost \$6.1 billion.

Among the seven GTL projects, five are either in the FEED or permitting stage, CEE said. Among those is the Sasol large-scale GTL facility at Lake Charles, Louisiana, which is projected to produce 96,000 barrels/day.

Source: Platts Gas Daily

Data

- August 2014 Natural Gas Futures Contract (as of July 11), NYMEX at Henry Hub closed at \$4.146 per million British thermal units (MMBtu)
- August 2014 Light, Sweet Crude Oil Futures Contract WTI (as of July 11), closed at \$100.83 per U.S. oil barrel (Bbl.) or approximately \$17.38 per MMBtu

Last week: Texas warmer than normal

For the week beginning 7/6/14 and ending 7/12/14, cooling degree days (CDD) were higher than normal (warmer) 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 7/12/14	*Week CDD +/- from normal	Year-to-date total CDD	* YTD % +/- from normal
Amarillo	97	6	657	20%
Austin	113	-20	1162	-9%
DFW	153	16	1246	17%
El Paso	135	9	1352	28%
Houston	128	2	1293	1%
SAT	134	1	1482	11%
Texas**	123	-3	1149	-1%
U.S.**	75	4	541	10%

* 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 2,022 Bcf

For the week ending 7/4/2014 working gas in storage increased from 1,929 Bcf to 2,022 Bcf. This represents an increase of 93 Bcf from the previous week. Stocks were 653 Bcf lower than last year at this time and 769 Bcf below the 5 year average of 2,791 Bcf.

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

U.S. WORKING GAS IN STORAGE				
Region	Week ending 7/4/14	Prior week	One-week change	Current Δ from 5-YR Average (%)
East	979	923	56	-26.8%
West	345	331	14	-20.9%
Producing	698	675	23	-34.4%
Lower 48 Total	2,022	1,929	93	-27.6%

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

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

The gas rig count for the U.S. remained the same for the week and was down 51 when compared to twelve months ago. The total rig count for the U.S. was up one from last week and up 116 when compared to twelve months ago. The total rig count includes both oil and natural gas rotary rigs.

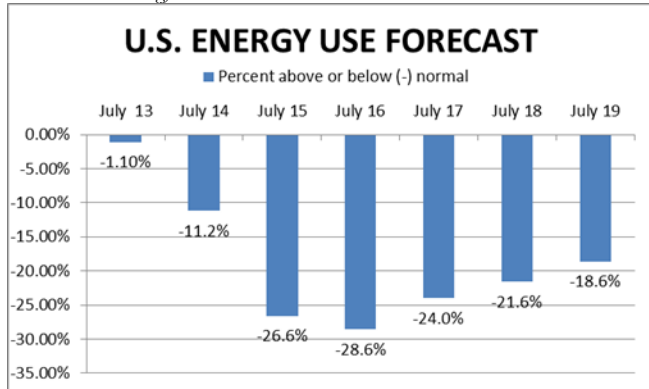
Source: Baker Hughes

BAKER HUGHES ROTARY RIG COUNT				
	As of 7/11/2014	+/- prior week	Year ago	+/- year ago
Texas	898	2	836	62
U.S. gas	311	0	362	-51
U.S. oil	1563	1	1391	172
U.S. total	1875	1	1759	116
Canada	315	6	294	21

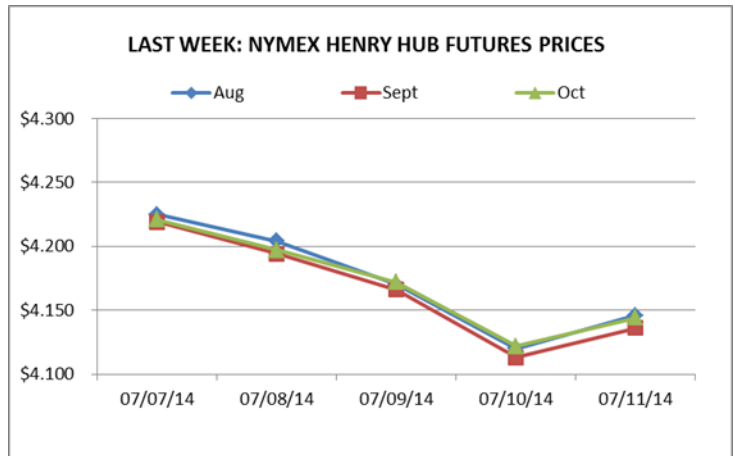
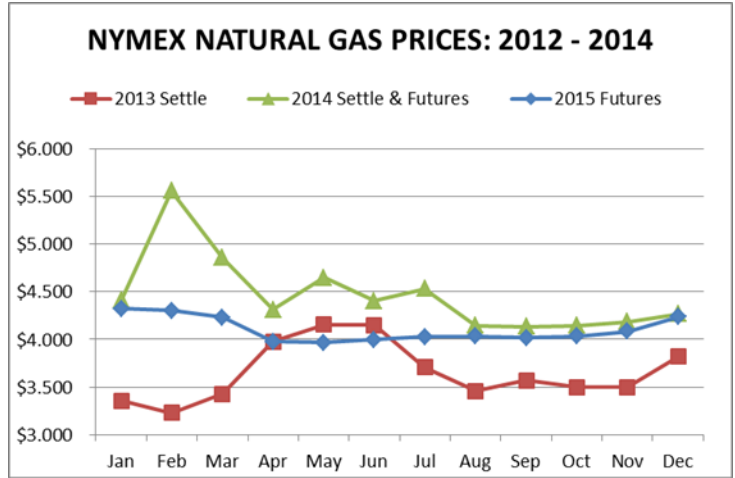
This week: U.S. energy below normal

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



2014 prices. Natural gas prices for 2014, 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 7/11/2014

	This Week	+/- Last Week	+/- Last Year	12-Month Strip Avg.
US Aug. futures				
NYMEX	\$4.146	-\$0.260	\$0.687	\$4.143