

August 25, 2014

Natural Gas Trends

Highlights

Hawaii, Puerto Rico shifting to natural gas, away from oil: EIA

Hawaii and Puerto Rico are diversifying their energy supplies to include natural gas because of the relatively low price of gas relative to petroleum and new shipping technology, the US Energy Information Administration said Tuesday.

The island governments are motivated by the high cost of oil, the EIA said. The Hawaiian Islands, Guam, the Northern Mariana Islands and American Samoa in the Pacific and Puerto Rico and the US Virgin Islands in the Caribbean depend on petroleum products to meet their energy needs.

“As a result, given relatively high crude oil prices in recent years, residential electricity prices on the islands have been three to five times the average residential prices of electricity on the Lower 48 states,” the EIA said in an Energy Today report.

High electricity prices on the more remote islands “have encouraged distributed generation from technologies such as rooftop solar panels and solar thermal collectors, as well as energy efficiency improvements that reduce consumption,” the report said.

The combination of relatively low natural gas prices and the development of standardized cryogenic (refrigerated) shipping containers means small amounts of liquefied natural gas can now be trucked, railed and shipped like other containerized cargo, the EIA said. Once received by ship, the LNG is connected to portable regasification units adjacent to electric power plants or industrial facilities.

LNG is not an option for many small islands because it is typically shipped in bulk carriers in quantities far greater than many island economies could absorb. Furthermore, LNG requires expensive regasification and distribution infrastructure, the EIA said.

But that is not the case in Puerto Rico and Hawaii, which “have begun to diversify their electric generation mix with the addition of coal plants,” the report said.

Puerto Rico has one independent power plant operating on natural gas, imported as LNG at a terminal adjacent to the plant, the report said.

The Puerto Rico Electric Power Authority has converted a petroleum-fired generating station to use LNG imported to that terminal from the US mainland, and is planning to convert a second petroleum-fired station if federal approvals are received for a separate floating offshore LNG receiving terminal, the EIA said.

Two privately owned bottling plants in Puerto Rico’s industrial north will begin this fall to receive containerized LNG shipments, the EIA said. The LNG will be bought through third-party suppliers from southeastern US peakshaving plants and shipped from Jacksonville, Florida.

Excelerate Energy, a private company that develops floating LNG facilities, said August 6 that it has received a Draft Environmental Impact Statement from the Federal Energy Regulatory Commission for its Aguirre Offshore Gasport Project located offshore Puerto Rico. The FERC staff concluded in its statement that the construction and operation of the project would result in limited adverse environmental impacts that would mostly occur only during construction.

Hawaii’s first shipment using a standardized cryogenic container was completed in April, taking about 7,100 gallons – about 67,000 Mcf – of LNG from a liquefaction plant in Boron, California, through the port of Los Angeles to Honolulu, where it was regasified and injected into the Hawaii Gas distribution system, the EIA said. This LNG was the first nonsynthetic gas ever put into the system. Hawaii Gas typically makes a synthetic gas from a naphtha feedstock produced in one of Hawaii’s two crude oil refineries. Source: Platts Gas Daily

Data

- September 2014 Natural Gas Futures Contract (as of August 22), NYMEX at Henry Hub closed at \$3.840 per million British thermal units (MMBtu)
- October 2014 Light, Sweet Crude Oil Futures Contract WTI (as of August 22), closed at \$93.65 per U.S. oil barrel (Bbl.) or approximately \$16.15 per MMBtu

Last week: Texas warmer than normal

For the week beginning 8/17/14 and ending 8/23/14, 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 8/23/14	*Week CDD + / - from normal	Year-to-date total CDD	* YTD % +/- from normal
Amarillo	113	38	1209	13%
Austin	163	24	2003	-5%
DFW	149	15	2085	9%
El Paso	107	1	2090	19%
Houston	150	24	2122	3%
SAT	177	43	2414	12%
Texas**	143	20	1919	-1%
U.S.**	71	7	936	1%

* 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 2,555 Bcf

For the week ending 8/15/2014 working gas in storage increased from 2,467 Bcf to 2,555 Bcf. This represents an increase of 88 Bcf from the previous week. Stocks were 500 Bcf lower than last year at this time and 535 Bcf below the 5 year average of 3,090 Bcf.

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

U.S. WORKING GAS IN STORAGE				
Region	Week ending 8/8/14	Prior week	One-week change	Current Δ from 5-YR Average (%)
East	1,277	1,219	58	-17.5%
West	398	387	11	-14.2%
Producing	792	783	9	-23.2%
Lower 48 Total	2,467	2,389	78	-18.9%

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 nine for the week but was down 57 when compared to twelve months ago. The total rig count for the U.S. was down 17 from last week but up 120 when compared to twelve months ago. The total rig count includes both oil and natural gas rotary rigs.

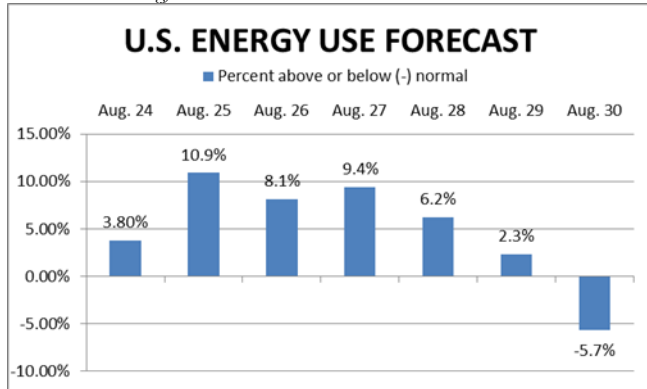
Source: Baker Hughes

BAKER HUGHES ROTARY RIG COUNT				
	As of 8/22/2014	+/- prior week	Year ago	+/- year ago
Texas	888	-13	848	40
U.S. gas	330	9	387	-57
U.S. oil	1564	-25	1382	182
U.S. total	1896	-17	1776	120
Canada	405	4	383	22

This week: U.S. energy above normal

U.S. energy use is predicted to be above normal most of 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.-Aug. and futures prices for the remainder of the year.

