Natural Gas Market Indicators

AGA
American Gas Association

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Reported Prices – in a nutshell, natural gas prices at Henry Hub have held around $2.75 to $2.90 per MMBtu during recent weeks. As Henry Hub natural gas futures are priced at or below $3.10 per MMBtu for months up until the coming winter heating season, what emerges is a picture that may herald relative price stability during the storage injection season. Crude oil prices have firmed to a range of $60 to $67 per barrel during the first two weeks of May, depending on whether the crude price is reported as the West Texas Intermediate or Brent marker.

Weather – AGA's six-month May-through-October accounting of cooling degree days has begun, and early results indicate a warm start to the season. All regions of the US, with the exception of the Mountain states, were warmer than the 30-year average (1980-2010) for the first two weeks of May. The US as a whole posted cooling degree days that were 27 percent higher (warmer) than normal. Remember, however, that it's early, and this result is a high percentage change off a small baseline. Initial trends are likely to change as the summer proceeds.

Working Gas in Underground Storage – according to the Energy Information Administration, six straight weeks of working gas injections have put the storage refill season in full swing. The most recent build of 111 Bcf for the week ending May 8 lifted inventories to 1,897 Bcf, placing storage volumes well ahead of last year and only slightly behind the five-year average by 2.0 percent.

Natural Gas Production – pipeline maintenance projects, which are typical for this time of year, have constrained domestic production such that dry gas into the pipeline grid remains at 72 to 73 Bcf per day. However, many analysts believe there is still room for growth and expect 1 to 2 Bcf per day added incrementally through the course of the year. Their predictions come despite reductions in both rig counts and drilling budgets. Daily gas production is currently running 4.9 Bcf per day higher than in May 2014 and 5.4 Bcf more per day on average year to date.

Shale Gas – a study published by researchers from Penn State University in the *Proceedings of the National Academy of Sciences* on May 4, 2015 points to drinking water contamination in Bradford County, Pennsylvania along Sugar Run where multiple wells have been drilled from multiple drilling pads. The chemical signature sited in the drinking water samples was likely associated with drilling activities, according to the researchers, but the report is not conclusive whether the contamination originated from poor well integrity or the documented case of a leaking surface pit. In other research, earthquake activity in North Texas is being connected to high volume water disposal injection and the occurrence of local faulting near Azle. Apparently, there were no known incidents of earthquakes in the area prior to 2013 and the uptick of measureable seismic activity may cause the Texas Railroad Commission to consider revoking the disposal permits associated with the disposal wells in question. Interestingly enough, the academics from Southern Methodist University were supported by the oil and gas industry to advance the research and to help solve the problems of deep disposal injection in the area.

Rig Counts – the decline in the US rigs count during the past year is now greater than the number of rigs in operation. There are 894 rigs currently marked active, which follows a year-over-year drop of 961. The steep decline in rigs has been largely due to oil-directed units, which accounts for 860 of the shutdown rigs. Interestingly, the annual variance in operating rigs among the major basins is negative in all but one instance: the Cana Woodford rig count is up 12 rigs or 52 percent during the past year.

Pipeline Imports and Exports – averaging 5.0 Bcf per day so far in May, natural gas *imports* from Canada are on par with volumes recorded during May 2014. Looking southward, pipeline *exports* of natural gas to Mexico have exceeded 2 Bcf every day this year (except for the first four days of 2015 and two days in mid-March). Exports to Mexico year-to-date have averaged 2.5 Bcf per day, which is up about 0.7 Bcf compared to last year at this time.

LNG Markets – in a May 4, 2015 order the Federal Energy Regulatory Commission (FERC) has confirmed its assessment that construction and operation of the Cove Point LNG liquefaction project will have minimal environmental impact and may therefore continue its construction phase. Various environmental organizations have continued to oppose the project seeking to reduce Marcellus shale drilling and completion activities, as well as to oppose supporting pipeline and other infrastructure development needed to serve the facility. Challengers to the project now have the opportunity to file an appeal in Federal court. Other economic issues are affecting LNG potential around the globe. LNG capacity and contracted supply is expected to exceed demand projections for the coming five years. Oversupply coupled with softening oil prices will lend downward pressure on international LNG prices. How will that influence yet-to-be-constructed projects? That is the question to be answered with time. Interestingly, the US Department of Energy has given approval to the Cheniere Corpus Christi export facility for trade with non-Free Trade Agreement countries, adding one more project to the US LNG liquefaction and supply mix having both FERC and DOE approval. Operations could start as early as 2018 given a positive final investment decision by the Cheniere board of directors on May 13. Currently, LNG import volumes and sendout to the pipeline grid are minimal (near zero), and have been since the end of March.

Natural Gas Market Summary – more natural gas was produced and consumed during 2014 than ever before in the US and many analysts foresee 2015 as another record year, driven by increased industrial and power generation demand. Essentially the natural gas market has not disappointed many of its participants. Total US demand is up 1.0 Bcf per day even with reductions in seasonal heating load for the first quarter of 2015 relative to 2014 and its polar vortex. With combined low wellhead prices and structural shifts in the national electric generation mix already in motion, gas to power is up more than 3 Bcf per day, accounting for all of the net demand increase.