Natural Gas Market Indicators

American Gas Association

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Reported Prices – while natural gas prompt-month futures for April 2016 slid below $1.65 per MMBtu during the first week of March, Brent and West Texas Intermediate oil pushed above $35 per barrel, then over $40 with Brent currently at about $40.71 and WTI slightly above $38 per barrel. To some extent Henry Hub futures for April (natural gas) have rebounded and are now about $1.75 per MMBtu. However, there are locations around the country, particularly in the Marcellus producing region, where daily purchases are below $1.00 per MMBtu.

Weather – only 2 of 23 weeks going back to early October 2015 have been colder than normal this winter heating season. Cumulatively, heating degree days have been 15.8 percent fewer than normal (indicating warmer than normal) for the country as a whole, which is an extraordinary deviation from the norm. For the first four months of the traditional winter heating season (November-February), each month individually was 5 to 28 percent warmer than normal. In addition, as evaluated on the basis of geography, every region of the country individually has seen higher than normal temperatures (from 10.0 to 22.8 percent warmer), since the beginning of the 2015-16 winter heating season.

Working Gas in Underground Storage – working gas inventories for the nation stand at 2,479 Bcf with volumes a whopping 58.1 percent ahead of this time last year and 41.5 percent higher than the five year average. Two question persist when examining the current storage position in the United States. (1) Will the traditional net injection season of approximately 210 days be lengthened by an early start given mild temperatures for much of the country? (2) If working gas inventories are going to remain significantly above 2 Tcf by winter's end, how much injection capacity will legitimately be available for future injections this summer and fall and will those limitations be impactful on the natural gas market? More to come on that as the winter/spring seasonal transition develops.

Natural Gas Production – domestic natural gas production is still solid at 72.8 Bcf per day in the month of March, which is 2 percent higher than in March 2015. Year to date dry gas production has been 1.2 Bcf per day higher in 2016 compared to production during the first quarter of 2015.

Shale Gas – the Energy Information Administration has helped to quantify the meaning of the drilled but not yet producing overhang of wells in the Marcellus shale, primarily in Pennsylvania. In early 2015 it was reported that 2,000 wells in PA still had not been hooked up to pipeline assets. In their March 7, 2016 *Drilling Productivity Report*, EIA revised upward near-term expectations of Marcellus production by a positive 1.7 Bcf per day to about 17.5 Bcf daily. The significance of the increase is (to some extent) a proxy for accounting for production being introduced to the pipeline grid even with declining rig counts because of a backlog of wells ready to flow but waiting for pipeline takeaway improvements. In the Marcellus shale region, pipeline outgrowth such as the east to west flow of REX, Leidy Southeast and others are beginning to debottleneck the heretofore constrained eastern US production.

Rig Counts – rotary rig counts in the United States for the week ending March 4 fell to below 500 for the first time since April 1999 – almost seventeen years ago.

Pipeline Imports and Exports – imports from Canada in 2016 have dropped year to date on warmer weather and lower demand from the Northeast. Imported pipeline volumes have averaged only 5.6 Bcf per day so far in 2016, compared with 6.1 Bcf per day year to date last year. March 2016 imports on average are even lower at 4.6 Bcf per day compared to 5.4 Bcf per day in March 2015. Exports to Mexico on the other hand are very strong. Volumes are up to 3.3 Bcf per day year to date, which is a full 1 Bcf higher than the same time last year.

LNG Markets – the first liquefied natural gas (LNG) export terminal to be constructed in the Lower 48 states, shipped its first cargo of US sourced natural gas on February 24 aboard the Asia Vision to Brazil's TRBA (Bahia) offshore terminal. Sabine Pass will load several commissioning cargos as part of its start-up process and will need approval from the Federal Energy Regulatory Commission to continue commercial operations. Two of its proposed six liquefaction trains, each with a capacity to liquefy 0.55 billion cubic feet per day of natural gas have been completed. Three other trains at Sabine Pass are in various stages of construction and are scheduled to come online in 2017-19, while the sixth train is waiting for a final investment decision. Examining other LNG export news, Tokyo Gas has signed an agreement with Cameron LNG to purchase about 2.1 million tonnes of LNG per year for 19 years beginning 2020. In the US, LNG import volumes have settled down once again as temperatures have warmed even more. March 2016 daily volumes injected into the pipeline grid from LNG import facilities fell to 0.1 Bcf per day but have been higher – 0.5 Bcf per day – year to date.

Natural Gas Market Summary – total natural gas demand for a day in the lower-48 states fell below 80 Bcf for only the second time in 2016 over the last weekend of February due to warmer than normal temperatures in the Northeast and Midwest, according to Bentek Energy. Demand rebounded slightly over 80 Bcf per day during the first week of March, then fell under that mark once again at the start of the second week. Is winter over for much of the country? In fact, consumption excluding exports to Mexico averaged only 89 Bcf per day in February 2016. By any measure that is weak demand on a February winter heating season day. In comparison, Bentek reported about 104 Bcf per day of *average* natural gas consumption in February 2015 (also without including exports to Mexico) – a month that had been 20.3 percent colder than normal, as measured by heating degree days.