Natural Gas Market Indicators

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Reported Prices – oil prices have generally held their ground since January 31 with West Texas Intermediate (WTI) and Brent over $54 and $64 per barrel, respectively. All the while, domestic natural gas futures for March 2019 have continued to fall and are now about $2.60 per MMBtu—down 30 cents from two weeks ago.

Weather – on balance, winter heating season temperatures for 2018-19 have been warmer than normal in the lower-48 states since October 1, 2018, but 2.5 percent colder than last year. Heating degree day totals this winter season are running 3.7 percent less than normal (warmer than normal) after recording 11.1 percent warmer in December 2018 and 4.6 percent warmer in January 2019. November 2018 had started colder than normal, if you can remember back that far. Also, every region of the country has been cumulatively warmer except for the West North Central, which has been 1.0 percent colder since October 1.

Working Gas in Underground Storage – three straight weeks of net withdrawals, averaging 191 Bcf per week, reduced national underground storage inventories by 573 Bcf, leaving 1,960 Bcf in storage for the week ending February 1, 2019. One week later another 78 Bcf had been withdrawn with the result that inventories are 15.0 percent lower than the five-year average and now only 1.6 percent below this time last year. The largest net withdrawal of the season was recorded for the week ending February 1 when 237 Bcf were supplied from storage to the market. However, our qualitative view of storage utilization this year is that that net withdrawals during cold spells and less-intensive winter heating season conditions have been moderated by higher volumes of flowing supply compared to past years, even with strong pipeline and LNG exports. Once the winter is through, that premise can be more thoroughly analyzed.

Natural Gas Production – domestic natural gas production year-to-date in 2019 compared to January 1 through February 15, 2018, is running 8 Bcf per day higher at 84.8 Bcf— a strong gain year over year. Daily dry gas production this February has clocked in at 84.5 Bcf, which is 7.2 Bcf higher than February 2018. Many analysts do not expect production to grow another 7–8 Bcf per day in 2019, but to slow slightly.

Shale Gas – data from 2018 and recent US production data in 2019 point to the extraordinary growth of natural gas from shale reservoirs during the past 13 years. Before 2006, domestic natural gas production from shales was negligible. Then, of course, technology issued in the shale revolution and what had been the source of hydrocarbons in more traditional producing formations became a reservoir target. Since that time, gas production from shales has expanded dramatically. Today, the country produces about 84 Bcf of dry natural gas per day and is the largest gas producer in the world. According to the Energy Information Administration in 2018, 54 Bcf per day of that dry gas production was coming from shales (two-thirds of domestic gas production) and, for the most part, from horizontally-drilled and fracked wells. Quite a story and one that has played out in oil production, also.

Rig Count – more than four out of every five rigs in operation in the United States is directed toward oil, a reflection of the increased premium that petroleum liquids garner within the market place. Look only to East Texas and the Permian shale, which accounts for 35 percent of all US drilling activity, as evidence of how shale oil has become so prolific. However, even with only 195 gas-directed rigs in operation, a total that is up 11 rigs from one year ago, lower-48 natural gas production is at near-record levels. Of course, production is bolstered by associated production from oil. However, dry gas fields, particularly in the Northeast, have propelled natural gas production to historic highs, even with a relatively modest rig count compared to oil.

Pipeline Imports and Exports – pipeline natural gas import volumes from Canada have slowed during the past two weeks to about 4.2 Bcf per day after reaching 7 Bcf per day, recently. Year-to-date daily averages have been just over 5 Bcf per day but are 0.3 Bcf lower when compared to the first six weeks of 2018. On the flip side of that coin, pipeline exports to Mexico have been steady at 5 Bcf per day, which is 0.7 Bcf higher than the first six weeks of 2018.

LNG Markets – total US feedgas for LNG exports dropped from 4.4 Bcf per day in January to 3.4 Bcf per day in February, averaging 4.1 Bcf per day year-to-date. That is up 1.3 Bcf per day from this time last year.

Natural Gas Market Summary – market prices for Henry Hub futures (March 2019) have already dropped into the $2.60s per MMBtu, and the longer-term market does not show prices above $3 per MMBtu in the seasonal and calendar year strips through 2022, according to NYMEX. Those numbers can and do fluctuate, but current information is pointing to low and stable prices once more this spring/summer and beyond. These developments come at a time when a new daily record for demand for natural gas was established in late January 2019. Also, domestic production is serving about 9 Bcf per day of pipeline exports to Mexico coupled with international LNG shipments. Going back to the observations made regarding shale gas developments since 2006, virtually no one in 2006 envisioned the result we have seen in the last decade for natural gas production and demand growth. Way to go USA!