Natural Gas Market Indicators

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Reported Prices – oil prices have firmed slightly since January 31 with West Texas Intermediate (WTI) and Brent nearly $57 and $66 per barrel, respectively. Natural gas prices for March 2019, in the meantime, have moved up but also bounced down and are now about $2.83 per MMBtu, reflecting a solid supply position even though a month of winter still is ahead. The current monthly and seasonal strip for Henry Hub natural gas futures peaks at $3.04 per MMBtu during the 2019-2020 winter but is below $3 otherwise through 2022.

Weather – by mid-February, eight of the past ten weeks going back to December 8, 2018 had been warmer than normal and seven of ten had been warmer than the prior year. That left heating degree day measures for the winter heating season (starting October 1, 2018) pointing to conditions for the country that were 3.5 percent warmer than normal. In fact by region, only the West North Central census area had been colder than normal for the current winter heating season – all others were warmer. With one more week of data not much has changed even though the week was significantly colder across the country. Aggregate heating degree days for the week ending February 23 are now running 2.7 percent fewer than normal (warmer) but still the West North Central region is the only one in the lower-48 to have been colder than normal for the balance of the winter heating season.

Working Gas in Underground Storage – if history, natural gas supply and demand relationships and measured heating degree days mean anything, withdrawals of natural gas from underground storage will begin to slow as winter edges into March. For the week ending February 15, inventories of underground storage sat at 1,705 Bcf, which was admittedly 17.5 percent lower than the five-year average and 4.1 percent behind last year. Moving forward one week to February 22, working gas has declined to 1,539 Bcf with a 166 Bcf net withdrawal for the week. That metric is strong and exceeds the five-year average for this week of the winter heating season by 66 Bcf.

Natural Gas Production – domestic natural gas production year-to-date in 2019 compared to January 1 through February 28, 2018, is running 8.1 Bcf per day higher at 85 Bcf than one year ago. Daily dry gas production this February has clocked in at 85 Bcf, also, which is 7.6 Bcf higher than February 2018. These increases in production come at a time when natural gas reserves in the US are also at an all-time high and are now exceeding 438 Tcf (EIA YE2017). With these supply indicators so strong, once again the market features gas molecules in search of long-term demand.

Shale Gas – year-over-year production from some companies in Pennsylvania – 2018 over 2017 – are up but stand in contrast to over all state results for November and December 2018 when month-over-month shale production levels actually decreased slightly. Many shale producers in booming Pennsylvania have reported intentions to reduce drilling investments until natural gas demand catches up with supply from the region once again. With those developments noted, the Energy Information

Administration now reports that dry shale gas production has reached nearly 65 Bcf per day and therefore accounts for more than two-thirds of daily gas production in the United States.

Rig Count – domestic rotary rig operations fell by four for the week ending February 22, 2019 to 1,047 with all of the decline attributable to oil-directed drilling. That said, rig counts are up from one year ago with both oil- and gas-directed drilling increases. Gas rigs operating total 194 this week compared to 179 one year ago and oil rigs total 853 rigs compared to 799 in late February 2018. Clearly domestic gas and oil production is being sustained with a smaller, more productive and more efficient drilling fleet than in years and decades earlier. These changes in technology and drilling effectiveness ultimately influence accounting of natural gas reserves and resources in the country along with the overall economics of developing the enormous resource base here in the US and North America more broadly.

Pipeline Imports and Exports – pipeline natural gas import volumes from Canada have slowed during the past two weeks to about 4.4 Bcf per day after reaching 7 Bcf per day earlier in the winter heating season. Year-to-date daily averages have been 5 Bcf per day but are 0.4 Bcf lower when compared to the first two months of 2018. On the flip side of that coin, pipeline exports to Mexico have been steady at 5 Bcf per day, which is 0.6 Bcf higher than the first six weeks of 2018.

LNG Markets – two developing US LNG facilities received permission from the Federal Energy Regulatory Commission in February to commission their flare systems (Elba Island, GA and Freeport LNG in Texas), which is one of the boxes that needs to be checked before becoming fully operational. In addition, Cheniere Energy Inc. expects to place two more trains into operation "imminently" – Sabine Pass Train 5 in Louisiana and Corpus Christi Train 1 in Texas. Total US feedgas for LNG exports dropped from 4.4 Bcf per day in January 2019 to 4.2 Bcf per day in February but has averaged 4.3 Bcf per day year-to-date. That is up 1.4 Bcf per day from this time last year.

Natural Gas Market Summary – market prices for Henry Hub futures have already popped up a bit during the past two weeks to about $2.90 per MMBtu but then back down as February has come to a close. Pricing in the longer-term market likewise appears stable, as it barely noses above $3 per MMBtu during the next three calendar years. This consistency paints a picture of a well-supplied natural gas mid-term market. As we begin to point ahead to summer and storage injections, domestic production has all of the markings of continued strength to handle peak air-conditioning loads, growing pipeline and LNG exports and working gas refill.