Natural Gas Market Indicators

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Reported Prices – when winter took hold of much of the country during the week between Christmas and New Years, natural gas at Henry Hub went to $3.00 per MMBtu—an increase though somewhat restrained. That said, other trading hubs saw significant price movements. For example, natural gas at Ventura in northern Iowa (Northern Natural market hub) traded as high as $100 per MMBtu briefly on December 28, 2017. The previous price record at that location had been set almost four years earlier during the polar vortex in late January 2014 reaching $54 per MMBtu. At the same time, by January 4 the commodity price index, in general, had increased for 15 straight days – a consecutive day record. Energy commodities such as oil were no exception as prices increased abruptly to over $63.40 per barrel for West Texas Intermediate and $69.15 for Brent by January 10.

Weather – finally another colder than normal week for the nation in mid-December, then two others (at month-end and the first week of January) to go with the first of the season seven weeks earlier in November. Temperatures across the country had been predominently warmer than normal since the first of October. However, the recent cold spell has shrunk the differential to only 4.3 percent warmer, cumulatively. By January 6, 2018 most regions of the country had still been warmer than normal since early October, particularly in the Mountain and Pacific regions. however, the East North and East South Central and South Atlantic regions had flipped to cumulatevely colder than normal based on heating degree day totals.

Working Gas in Underground Storage – the Platts *PIRA Short-Term Forecast* published December 19, 2017 pointed to a supply-demand balance through March 2018 that required underground storage to be drawn down to about 1.7 Tcf by the end of March. The forecast is dependent on several factors, not the least of which is demand increasing as a result of normal or even colder than normal temperature conditions across the country, which certainly materialized during the past several weeks. Triple-digit storage withdrawals for the last three weeks of December were reported by the Energy Information Administration and reduced inventories for the lower-48 states to 3,126 for the week ending December 29, 2017, which was 5.8 percent below last year and coincidentally 5.8 percent lower than the five-year average. The first week of January 2018 saw a record 359 Bcf of working gas withdrawn shattering the previous record withdrawal of 288 Bcf, which occurred during the 2014 Polar Vortex. Total inventories were reduced to 2,767 Bcf in one week – 13 percent lower than one year ago and 12 percent lower than the five-year average.

Natural Gas Production – as happened numerous times during the last month of 2017, domestic dry natural gas production set record on Monday, December 18 at 77.5 Bcf before it retreated by as much as 5 Bcf per day due to freeze-offs and production constraints associated with the bitter cold at the end of 2017. Platts most recent short-term gas market outlook (referenced above) anticipates domestic production growing to average 78 Bcf per day by February.

Shale Gas – the Trump administration appears determined to roll back Obama administration's hydraulic fracturing rules developed in 2015 but not yet implemented due to court actions. Their principle impact would have been felt in the West where there is extensive public land.

Rig Count – the domestic oil and gas rig count fell five rigs for the first week of January bringing the total rig count to 925, 182 of which are gas-focused. That count is 47 rigs higher than the gas-directed drilling one-year ago. Oil-directed drilling at 742 rigs are up 213 from one year ago.

Pipeline Imports and Exports – pipeline exports of natural gas to Mexico have held their own, even during the recent cold spell averaging 4.2 Bcf per day in January 2018, which is 0.3 Bcf per day higher than one year ago. To the north, imports of natural gas from Canada have averaged 6.1 Bcf per day in January – 1.0 Bcf per day higher than in January 2017.

LNG Markets – winter imports of LNG by China have been setting records and building a sense of optimism among US gulf coast facility operators that additional supplier opportunities will exist in the future. China has accounted for about 40 percent of LNG global demand growth since 2016 and now is in the midst of a government initiative to reduce airborne particulates by 15 percent year-over-year, which will likely increase gas demand. At the same time, Dominion Energy Cove Point is gearing up for a year of commercial operations with the supplier targeting GAIL Ltd. (India) and a joint venture between Sumitomo Corp. and Tokyo Gas in Japan. Meanwhile, LNG for import has averaged 1.3 Bcf per day in January 2018, which is 0.5 Bcf per day higher than in January 2017.

Natural Gas Market Summary – since last winter about 4.5 GW of coal-fired power generation has been retired and some analysts peg another 5.5 GW to be retired during the first quarter of 2018. To the extent that the lost generation capacity needs to be replaced, natural gas and renewables will satisfy the needs of the grid. Some of these measurable but subtle changes in the power market have been masked during winter by predominantly warmer than normal winter temperatures. As analysts, we wait to see the market reaction to just a *normal* winter season and the level of demand that ensues, considering, of course, that colder than normal conditions have dominated the country for the past several weeks. With the cold winter blast on New Year's Day 2018, total demand reached 147 Bcf – a new single-day consumption record. The polar vortex peak day, the prior record set nearly four years ago, reached 139 Bcf. At the moment, domestic supplies lead by production, underground storage, and pipeline imports from Canada are satisfying incremental demand increases in all sectors (and exports) to efficiently balance market conditions. In this business, there always seems to be something to look forward too.