Natural Gas Market Indicators

AGA American Gas Association

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Reported Prices – some technical analysts of energy commodity prices point out that the recent range of oil pricing has narrowed to a point where historical analysis says Brent and West Intermediate prices should soon break up or down. What they don't agree on is the direction: up or down? WTI and Brent have fallen slightly to a range of $48-52 per barrel in recent days, respectively, but is that a harbinger of things to come? The April NYMEX for natural gas, on the other hand, has gained to about $3.05 per MMBtu during the past week as colder temperatures in the Northeast and a snowstorm set the stage for late-season heating demand.

Weather – it's been a warm winter. The average temperature across the lower-48 for February 2017 was the warmest of the past 37 years (1981-2017), per analysis from meteorologists at Weatherbell while NOAA reports it was the 2nd warmest on record with thirty-six states much warmer than average. Additional data from NOAA shows that February was 24 percent warmer than normal (gas-weighted heating degree days). All of which is to say that heating demand largely remained on the sidelines during the past month. But wait! An early-March cold snap has broken the trend. The east coast, which in some cases had seen flowers blooming by mid-February, finds itself amid well-below normal temperatures at mid-month.

Working Gas in Underground Storage – the US natural gas market continues to deliver historical firsts. For the week ending February 24, the EIA reported a *net injection into storage*. The South Central region posted a relatively strong injection of 21 Bcf for the week, more than enough to offset the net withdrawals in the eastern US and Midwest, both traditional heating load regions. EIA has never reported a net injection in mid-February. Normally, during this time of year, a triple-digit storage *withdrawal* would be part of the supply equation for a typically cold week in February. The following week, EIA noted a net withdrawal of 64 Bcf (implied flow). The withdrawal pulled working gas inventories to 2,295 Bcf, which is 18.8 percent higher than the five-year average of 1,932 Bcf.

Natural Gas Production – lower-48 daily dry natural gas production has averaged 70.6 Bcf per day in March, a decline of 3.3 Bcf per day for the same month in 2016. Producer-focused discussions at CERA Week in Houston in early March (attended by AGA) often pointed to expectations of higher natural gas demand on the horizon but questioned supply-based investment during the past three years, which for the producer segment of the value chain could mean higher natural gas prices in the near-term. Is this wishful thinking? Clearly, time will tell. Recent industry responses to natural gas acquisition prices above $3 per MMBtu seem to indicate resiliency in the supply curve.

Shale Gas – the EIA *Drilling Productivity Report* (DPR) notes, once again, improvements to new gas well production per rig. All major shale plays gained, per the DPR report for March 2017. Except for the Eagle Ford, natural gas production is on the rise in all major shale plays and increased one percent from February to March overall for the country. Drilled but uncompleted wells gained 92 to 5,381 for the country as well, suggesting some latent inventory growth as drilling has resumed.

Rig Count – the active rig count is now at its highest level since November 2015, shortly after oil prices collapsed. Gains in oil and gas activity reflect renewed action from producers reacting to modest rises in prices for oil and natural gas. The oil rig count at 609 is very nearly double the number from the low set in May 2016. Same with gas rigs, which are up 80 from their lows. Will this activity be sustained? A mild winter has depressed natural gas prices somewhat and overtures from the Kingdom of Saudi Arabia suggest OPEC cuts to oil production may not last, which would prove bearish for crude oil prices. For now, though, producers are getting back into the field.

Pipeline Imports and Exports – *imports* from Canada overall have averaged 5.3 Bcf per day this month, which is 0.8 Bcf higher than in March 2016. Meanwhile, *exports* to Mexico at 4.0 Bcf per day are 0.7 Bcf per day higher than March 2016.

LNG Markets – a report from Cheniere notes that liquefaction train three at Sabine Pass should be fully operating this month and that train four may be operational by November 2017. Also, trains 1 and 2 at Cheniere's Corpus Christi LNG are expected to come online in 2019 signaling continued growth in future domestic LNG export capacity. At the same time, trains 1, 2 and 3 at Cameron LNG are scheduled to come online in 2018–2019 and, of course, the first phase of export capacity at Dominion's Cove Point, MD facility is nearing completion. Overseas, the Platts JKM marker averaged $6.86 in February and Japan's Ministry of Economy, Trade, and Industry showed an average price of $8.50 for LNG spot cargoes last month. The UK NBP price for May futures is about $5.00 per MMBtu. Meanwhile, feedgas for exports from Sabine Pass have averaged 1.8 Bcf per day during 2017; LNG *imports* and distribution to the pipeline grid have averaged only 0.4 Bcf per day.

Natural Gas Market Summary – now is when we begin to line-up questions regarding the expectations for the coming summer and the injection season for natural gas storage. Inventories for working gas are likely to end the season higher than the five-year average. Does that imply softer natural gas prices? How will that effect production this summer? Will high summer temperatures lead to more natural gas generation to serve cooling loads? What will be the net effect of additional hydroelectric electricity this year with many reservoirs full in the west? Will infrastructure continue to build out to connect supply growth areas with existing and incremental demand growth centers? And, what of policy changes with a new Trump Administration? Will a rollback on EPA and other regulations incentivize additional infrastructure and upstream supply activity? What is the fate of the Clean Power Plan, and what does that mean for natural gas? All serious questions to ponder.