Natural Gas Market Indicators

American Gas Association

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Reported Prices – the natural gas market has found a reason, or reasons, for some tightness in pricing. Henry Hub futures have climbed modestly to $2.94 per MMBtu after spending much of the winter and spring in between a range of $2.60 to $2.80. Summer temperature outlooks, expected production, and anticipation of storage refills are all factored into the market's expectations. In liquids markets, the WTI crude oil index is approaching $67 per barrel and Brent rude is calling for nearly $77. Interestingly, that is a $10 spread in the two benchmarks and harkens back to days gone by. The WTI-Brent spread widening has developed since March, as geopolitical concerns related to Iran, Venezuela, and North Korea have been on the front pages.

Weather – as the United States officially enters the 2018 hurricane season, the Atlantic basin has already seen one cyclone, Subtropical Storm Alberto, which formed on May 25. The storm appeared off the coast of Mexico but made its way into the Gulf and impacted the US during the Memorial Day weekend. The *Oil and Gas Investor* reported that some major oil corporations evacuated workers from production platforms in the Gulf. However, there were no reports of production shut-ins due to Alberto. Moving to late spring temperatures, the AGA Cooling Degree Day (CDD) summary shows warmer-than-normal conditions for every week since May. Cumulatively, US CDDs are 36.2 percent above the 1980-2010 average. Temperatures still have a ways to go before we're full bore into the cooling season but this could be a bullish signal to energy markets if warm temperature trends continue.

Working Gas in Underground Storage – total inventories of domestic working gas in underground storage have reached 1,913 Bcf for the week ending June 8, 2018. A net build of 96 Bcf (or nearly 14 Bcf per day) brings working gas to 29 percent below year-ago volumes and 21 percent below the five-year average. Remember, we need about 11.5 Bcf per day on average from now until the beginning of November to see working gas levels reach 3.5 Tcf before the turnaround to withdrawals. We are on our way.

Natural Gas Production – an explosion on TransCanada's TCO Leach Xpress segment in West Virginia recently disrupted natural gas flows in the Northeast and created a need to re-route supplies, according to the "Spotlight" blog from S&P Global Platts. Despite the explosion, Northeast production has not decreased significantly and US production is averaging 78.2 Bcf per day this June, a gain of 6.2 Bcf above June last year.

Shale Gas – the May edition of EIA's *Drilling Productivity Report* shows that new-well oil and gas production per rig is expected to increase for all major shale basins between May and June. The trend noted here is nothing new to readers. Progress attributable to drilling and recovery technologies have been steady and impressive. However, technology is not the only answer, understanding that continued capital discipline and the propensity for operators to identify and drill the best productive zones in a play help make resource development economic.

Rig Count – supportive pricing continues to buoy drilling activity. The total US rotary rig count for the week ending June 8, was 1.062 according to Baker Hughes. Today's drilling rig numbers reflect a 15 percent increase from year-ago levels. Drilling activity in the Permian is the elephant in the room, with 480 rigs or 45 percent of the US total targeting this west Texas and eastern New Mexico play. The Eagle Ford, Woodford, Haynesville, Marcellus, and Williston basins all show respectable double-digit drilling rig totals ranging from 54 to 80 rigs per play. And the US total of 934 horizontal rigs, which represents 88 percent of total activity, reflects the importance shale oil and gas have become in US hydrocarbon output.

Pipeline Imports and Exports – as a testament to how dynamic the North American natural gas system has become the US currently exports (on net) natural gas to Canada from domestic *Northeast* production – about 900 MMcf per day according to S&P Global. Yet the US still imports pipeline gas into the Midwest and West, which accounts for an import balance of about 5 Bcf per day for the country from Canada. South of the border, US exports to Mexico are averaging about 4.5 Bcf per day.

LNG Markets – global LNG trade continues to grow, according to a new analysis from the Energy Information Administration. The *Today in Energy* blog notes recently that global LNG trade reached 38.2 Bcf per day in 2017, a 10 percent increase from 2016. Australia and the US have grown exports very rapidly since 2013, though Qatar remains the single-largest exporting country for LNG. In terms of consumption, Japan remains number one, importing 11 Bcf per day in 2017. However, China is driving much of the growth in global LNG consumption and became the second-largest importer in 2017 averaging 5 Bcf per day. Back to the US: feedgas for LNG exports out of Cove Point is running 0.7 Bcf per day this June, while at Sabine Pass feedgas volumes have totaled 2.8 Bcf per day this month.

Natural Gas Market Summary – the shoulder season is turning toward summer as temperatures rise and natural gas markets follow suit. The combination of temperature outlooks, power burn, potential production, new infrastructure projects, and the pace of injections of gas into storage all factor into the market's view of commodity prices, as usual. Gas volumes for power generation are nearly six percent higher this June from 2017 and have contributed to prices inching toward $3 per MMBtu. The push and pull between power generation requirements and structural gas storage refill necessities will determine whether the market moves above $3.00 per MMBtu for commodity pricing this summer.