Natural Gas Market Indicators

AGA American Gas Association

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Reported Prices – natural gas prices surged in late September—a surge for this market at least. Nuclear outages and a late-season heat wave drove Henry Hub prompt-month futures up 20 cents, hitting $3.06 per MMBtu during trading on September 27. Crude oil prices have risen, also. West Texas Intermediate is now over $72 per barrel and Brent is nearly $82. That is up about three dollars per barrel from just two weeks ago and up about $5 from mid-June.

Weather – hurricane Florence and two more weeks of warmer-than-normal temperatures across the country dominated the weather news in the first half of September 2018. Conditions have cumulatively reached 26.2 percent warmer than normal going back to the first week in May and extending through September 22 – twenty-one straight weeks of elevated cooling degree days compared to the 30-year normal. Every region of the lower-48 was cumulatively warmer than normal, also, and significantly warmer during the same period. New England leads the regions with 75.1 percent more cooling degree days this summer.

Working Gas in Underground Storage – with one month left in the typical injection season, which usually ends as November opens, the volume of working gas in underground storage is 2.8 Tcf, well below the year-ago and five-year average. The details of EIA's weekly natural gas storage report show that the largest deviation from historical norms are in the South Central, particularly salt caverns, which are 39 percent behind last year's levels at this time. Salt dome storage is highly flexible as these facilities can cycle between injection and withdrawal modes and have a high rate of withdrawal. With an increasing production of natural gas in in the southern portion of the US, does additional salt cavern storage capacity, with its versatility and optionality, add a layer of flexibility to the market? Perhap some spare injection capacity will be helpful this winter in managing prices amid roaring production volumes.

Natural Gas Production – since setting a record during Labor Day weekend, lower-48 daily dry gas production has continued to exceed those levels and establish new all-time highs. The most recent high-water mark was set on September 24, where preliminary data from S&P Global shows daily production of 84.3 Bcf. Daily records aside, dry gas production has averaged 83.3 Bcf per day this September, which is 9.8 Bcf per day or 13 percent above last year.

Shale Gas – new-well gas production per rig is expected to increase in every major shale basin, according to the September release of EIA's *Drilling Productivity Report.* The monster continues to be Appalachia, which is expected to show 16.2 MMcf per day of new-well natural gas production per rig in October 2018, which would be a record based on EIA's historical data. The Haynesville, notably, is also increasing and EIA sees 8.7 MMcf per day of new-well natural gas production per rig.

Haynesville new-well production is approaching its prior high of 9.5 MMcf per day established in 2016.

Rig Count – year-over-year, natural gas drilling has slowed. The natural gas-directed rig count is 4 rigs or 2 percent behind totals during this time last year. Yet, incredibly, dry production is 13 percent higher, and at record levels! Of course, oil-directed rigs are up 122 rigs or 16 percent compared with year-ago levels, and some incremental natural gas production is associated with oil. However, most of the incremental production across the US is from natural gas plays. Given that gas production continues to grow despite rig counts staying flat or even declining speaks to the advances in technology and the efficiency of natural gas production.

Pipeline Imports and Exports – daily natural gas pipeline imports from Canada registered 4.3 Bcf in September 2018, which is 0.7 Bcf per day or 14 percent below the volume imported in September 2017. In contrast, pipeline exports to Mexico were up 0.8 Bcf per day to 5.1 Bcf per day in September 2018 compared to one year ago. Total exports of natural gas and LNG now routinely reach 8 Bcf per day or nearly 10 percent of daily dry gas production.

LNG Markets – a 10 percent tariff on LNG imports from the United States by China took effect on September 24 as the latest shot fired in the trade war initiated earlier by the Trump Administration when $200 billion in tariffs on Chinese goods were proposed. The move by China was less than the 25 percent tariff initially threatened by Chinese authorities back in August. This news comes after US LNG exports to China had fallen in June but spiked once more in July with three cargoes cumulatively measuring 10.6 Bcf. With that said, even more LNG was sent to Mexico in July (21.2 Bcf) and Korea (14 Bcf). Daily LNG exports from the United States have averaged 3.2 Bcf per day year to date in 2018. That is 1.3 Bcf per day more than the same period in 2017.

Natural Gas Market Summary – the country has been warmer than normal since May 1 and now we begin looking forward to the 2018-2019 winter heating season. Early outlooks from the National Weather Service point to a better-than-average chance for above-average temperature conditions for large areas of the country, October 2018 through March 2019. Of course, such forecasts change with time and average conditions do not mean that periods of extreme cold in certain regions of the country may not develop. Fortunately, for natural gas consumers planning for these possibilities and positioning themselves to serve peak requirements is what local gas utilities do.