Natural Gas Market Indicators
American Gas Association

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Reported Prices – natural gas prices have fallen below $3 per MMBtu despite relatively strong demand this July. Current prompt-month futures are priced at $2.96 per MMBtu and contracts through November remain below $3. Crude oil prices have also struggled, but recently West Texas Intermediate prompt-month trading has bumped above $49 per barrel and Brent crude is trading for more than $51.

Weather – three straight weeks of warmer-than-normal temperatures for the US has pushed the aggregate count of cooling degree days up to 16 percent warmer than normal since early May. Every region of the lower-48 states has been warmer than normal cumulatively since May, and four regions of the country were more than 20 percent warmer. Amazingly, New England has been 61 percent warmer, and the Pacific region has not been far behind at 58 percent warmer than normal.

Working Gas in Underground Storage – perhaps the biggest recent storage news was reported by Bentek Energy and others on July 20 with the announcement that storage injection operations at Aliso Canyon have been allowed to resume. Even though SoCal Gas received permission to resume injections, a statement from the company noted that injections would not resume immediately. In bringing Aliso Canyon back online, each of the 114 wells in the facility was required to pass multiple tests to resume gas injections, and roughly 60 percent of the wells were ultimately taken out of operation and isolated from the larger storage facility. Furthermore, the pressure in the storage reservoir will be lowered by approximately 17 percent, although the impact on injection and withdrawal rates, if any, has not been stated. For the first three weeks of July, national data showed modest injections with 57 Bcf added for the week ending July 7, 28 Bcf injected the following week, and a tepid 17 Bcf added the week ending July 21. Working gas stocks now total 2,990 Bcf. These numbers are aligning this summer's injection season with an observed strategy of bringing underground storage back in line with the five-year average rather than challenging another record.

Natural Gas Production – Bentek data shows natural gas production steadily increasing as flows out of the Northeast (Ohio, West Virginia, and Pennsylvania) continue to ramp-up. Dry gas production tied the year-to-date record on July 24 with 72.8 Bcf produced. The Northeast shows a 1.4 Bcf per day incremental increase in production compared to the winter average. Even with the recent increases in domestic production, since January the year-to-date volumes have averaged 71.3 Bcf per day, down 0.8 Bcf per day from 2016.

Shale Gas – based on the recently published work of the Potential Gas Agency (Colorado School of Mines), shale gas now represents nearly two-thirds of the potential resource to be developed in the United States. The year-end 2016 report published on July 19, *Potential Supply of Natural Gas in the United States*, identifies a traditional resource base of 2,658 Tcf of which 1,797 Tcf is attributed to shale gas. With the addition of coal gas resources and proved reserves, the total future supply of natural gas is pegged at more than 3,100 Tcf—the largest future supply of natural gas ever reported by the organization in its 52-year history of national undiscovered natural gas resource assessments. Also, the Energy Information Administration in a recent installment of the "Drilling Productivity Report" expects August shale gas production to increase to 52.86 Bcf per day, a 1.6 percent increase over July 2017. All seven of the shale basins that EIA tracks are expected to show increases in production for August with the Marcellus showing the largest increase in volume.

Rig Count – July has brought with it an apparent stalling of the growth in oil and gas rigs in operation. Total rigs hit 952 during the first week of the month only to stay flat the following week. The most recent report for the week ending July 21 showed a decline of 2 rigs; the total now stands at 950 after both oil and gas rigs shed one rig. Perhaps persistently low commodity prices, especially for petroleum liquids and crudes, are taking its toll and operators are having to pull back. Or, this is a temporary hiccup in a still growing rig count. The next few weeks will illuminate the trend.

Pipeline Imports and Exports – imports from Canada often act as a swinging source of supply for the lower-48. As dry gas production shows 0.9 Bcf per day increase from last July, pipeline gas from Canada has fallen 0.6 Bcf per day, thus keeping supplies close to parity with July 2016. Meanwhile, exports to Mexico have climbed 0.4 Bcf per day to 4.1 Bcf per day total.

LNG Markets – interestingly, Canada's National Energy Board (NEB) released an analysis on July 18, which points to the fact that building LNG export facilities in Canada has fallen behind efforts in the US and other LNG suppliers such as Australia. According to the NEB, C$20B has already been spent on proposing facilities, but no major construction project has started to date. Malaysian oil and gas company Petronas had reached a tentative decision to proceed with the Northwest LNG facility in northern British Columbia but this week pulled back from the project. Woodfibre LNG, also in BC, has made a final investment decision to proceed. Even so, the NEB recognizes that new startups face stiff competition with the current and expanding LNG operations developing in the United States.

Natural Gas Market Summary – exports have been the main driver of incremental demand this July as domestic consumption has remained tepid compared with one year prior. Exports to Mexico and LNG feedgas combined has added 1.9 Bcf per day of demand to the market and, aside from a modest increase in industrial natural gas use this July, accounts for nearly the entire increase in natural gas use in the lower-48 compared with last year. No doubt this additional demand is a key reason why natural gas prices remain near $3, which in turn has helped support additional drilling rigs. However, the consequences are not apparent that a new daily natural gas production record for 2017 is imminent.