Natural Gas Market Indicators

American Gas Association

July 26, 2018
EDITION 326

Reported Prices – crude prices have moderated somewhat in the past two weeks producing a $5 spread between West Texas Intermediate and Brent at $69+ and $74+ per barrel, respectively. In addition, natural gas prices have fallen to $2.77 per MMBtu for August futures at Henry Hub, even though strong flows of natural gas to power generators have persisted with consistantly warmer than normal temperature conditions for much of the country.

Weather – each week of this cooling season for the nation as a whole can be generally described with one word since the beginning of May 2018 – "warmer." That's right; for twelve straight weeks temperatures collectivley for the lower-48 states have been warmer than normal from the beginning of May through the week ending July 21. Cumulatively, cooling degree days exceed normal by 26.6 percent and even the Pacific region, which started the period cooler than normal, has caught up to be 27.5 warmer – similar to the rest of the country. Cumulative cooling degree days have varied by region but have a range throughout the lower-48 from 19.2 percent warmer in the West South Central to 44.6 percent warmer in New England.

Working Gas in Underground Storage – from early-May through the end of June, working gas injections in the lower-48 states averaged just under 13 Bcf per day. However, for the week ending July 13, 2018, injections were only 5 Bcf per day as flowing gas was comitted to meeting power generation requirements. Total injections for the week ending July 20 were only 24 Bcf – a function of net additions to working gas in the east and midwest regions but withdrawals to support gas to power generation in the Pacific and gulf coast areas. At a current volume of 2,273 Bcf, underground storage trails last year's total at this time by 23.7 percent and the five-year average by 19.7 percent.

Natural Gas Production – new production records for US dry gas seem to be set every week – the latest coming on July 23 and reaching 81.1 Bcf of the day. With dry natural gas production averaging 80.5 Bcf per day in July 2018, domestic gas is 11 percent higher than this time last year when 72.3 Bcf per day was being produced. Additionally, more than half way through the year daily gas production is averaging 6.1 Bcf more than the first seven months of 2017. Quite a record of daily production strength year over year.

Shale Gas **–** the Pennsylvania Department of Conservation and Natural Resources (DCNR) has released a recent report that analyzes the impacts of shale development on forest lands in the state. Generally, conclusions point to water monitoring that has not raised significant concerns regarding state forest headwater streams with notes that over 85 percent of the streams in the core forest area are designated as Exceptional Value or High Quality. Additionally, DCNR says that the agency has successfully minimized forest fragmentation from shale gas infrastructure, and that shale activities have not impacted other DCNR oversight actions such as timber harvesting.

Rig Count – growth in total domestic rig counts, which had slowly built into June, has slowed during the past five weeks, including an eight rig drop from July 13 to July 20. Eighty-two percent of current drilling activity is seeking oil targets. Gas-directed drilling which had a recent peak of 200 rigs operating in mid-May dropped to 187 at month-end June and is still there. Even so, drilling operations are up by 96 rigs compared with one year ago, and 1 rig higher at 187 for gas activities, specifically.

Pipeline Imports and Exports – pipeline imports for natural gas from Canada have been 5.6 Bcf per day this July, which is the same volume recorded in July 2017, according to S&P Global. At the same time, US exports to Mexico averaged 4.4 Bcf per day, 0.1 Bcf per day higher than in July 2017.

LNG Markets – US gulf coast presence in the international LNG market has become the impetus for the establishment of a trading hub in the area to create a price benchmark within the world LNG marketplace. Cheniere Energy and CME Group, Inc. have agreed to establish a LNG futures contract with physical delivery tied to the Sabine Pass terminal in Louisiana. This initiative follows the Intercontinental Exchange Inc. LNG futures contract that was established in May 2017 and linked to the S&P Global Gulf Coast Marker price. Both bring additional liquidity to a growing US role in international LNG supply. In addition, the US Department of Energy has issued a final rule regarding low-volume LNG projects (less than 51.75 Bcf per annum) such that these small projects would be treated as if they were being made with countries under a Free Trade Agreement (FTA) status with the US even if a FTA did not exist. The new DOE position is expected to expedite small project approval. With that said, export volumes of LNG from US facilities are running solidly above 3 Bcf per day from Sabine Pass (LA) and Cove Point (MD) and, in fact, are averaging 3.2 Bcf per day in aggregate – 1.0 Bcf per day more than in July 2017.

Natural Gas Market Summary – the consumption of natural gas for the purposes of generating power in the US has averaged 37.1 Bcf per day in July 2018 – a full 2.3 Bcf per day higher than in July 2017. US sector demand overall (not including gas exports) is up 5.7 Bcf per day year to date over last year but natural gas production is up 6.1 Bcf per day, also. Perhaps this explains why gas prices have been generally moderate during the year even with cold spells during the first quarter of the year and consistently warmer than normal temperatures this summer, which have increased demand for natural gas to power generation.