Natural Gas Market Indicators

AGA American Gas Association

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Reported Prices – anticipation of colder temperatures, particularly in the eastern US, followed by a March Nor'easter and colder temperatures pushed April NYMEX prices for natural gas into a range of $2.90 to $3.18 per MMBtu for much of March. West Texas Intermediate pricing for crude oil dipped below $48 per barrel briefly in early March then rebounded by one dollar to more than $49 by March 16. Crude oil has bounced between $47–$52 per barrel for West Texas Intermediate and Brent, respectively, for most of March.

Weather – as we close out the traditional winter heating season, the count of heating degree days climbed above normal in mid-March for the first time since January when a major cold spell and snow storm descended upon the US Midwest and east coast. For the week ending March 18, temperatures in the United States were 105.9 percent colder than last year and 18.2 percent colder than normal, breaking a nine-straight week run with national temperatures warmer than normal. All regions experienced colder-than-normal temperatures except the Mountain and Pacific. Looking back, February was 13.8 percent warmer than last year and 24.3 percent warmer than normal. From October 1 through March 25 this past winter, heating degree day totals were about 16 percent fewer (warmer) than normal for the lower-48 states.

Working Gas in Underground Storage – following the major cold event referenced above, the weekly storage report from the US Energy Information Administration revealed a triple-digit net change of -150 Bcf across the lower-48 states for the first time in more than a month. The East and Midwest combined posted an 110 Bcf withdrawal of working gas while the South Central (producing) region posted a 45 Bcf pull. The Pacific region actually added 5 Bcf to working gas inventories. At that time total working gas was at 2,092 Bcf, which was 14.6 percent above the five-year average but 16 percent below year-ago levels. One week later only 43 Bcf was withdrawn from working gas and gas in storage registered 2,049 Bcf – 13.9 above the five-year average. Very soon net withdrawals will shift to net storage injections.

Natural Gas Production – industry analysts such as Wood Mackenzie report that US gas and oil producers are likely to increase drilling budgets for 2017. The consulting firm expects global investments in drilling to grow $25 billion this year with $15 billion originating in the US—much directed at tight oil plays like the Permian Basin in West Texas. Additionally, a report from S&P Global Market Intelligence analyzed average well costs for ten large producers in the Marcellus, noting a range of $1.01 per Mcf equivalent to $2.18 in 2016. These compared to realized pricing that ranged from $1.70 to $4.08 per Mcf, concluding that reductions in costs and efficiency kept producers profitable for the year. The next challenge for producers may be that field services may become more expensive as rig counts and drilling budgets increase in 2017. In the meantime, lower-48 daily dry natural gas production has averaged 70.7 Bcf per day in March, a decline of 2.8 Bcf per day for the same month in 2016.

Shale Gas – the Bureau of Land Management (BLM) plans to pull back its 2015 rule focused on updating controls on hydraulic fracturing (HF) on federal and Native American lands as a way of complying with President Trump's executive order calling for reduced federal government regulation. The rule has been tied up in court since its introduction with industry groups saying it is an overreach and that individual states regulate HF effectively. Environmental interest groups make the case that 30-year old federal rules needed to be updated. In fact, shale gas production in the United States dominates in locations much more likely to be associated with private mineral ownership than federal lands anyway, but the action appears to be an indicator of a Trump administration seeking ways to replace regulatory burdens.

Rig Count – rig counts have added to their total, again. For the week ending March 24, oil-directed rigs gained 21. At 652, the oil rig count is now at its highest level since September 2015. Natural gas rigs now total 155, the highest level since January 2016. At present, 90 percent of all rigs in operation are classified as horizontal or directional, a clear indicator of how production operations have largely targeted shale plays.

Pipeline Imports and Exports – imports from Canada overall have averaged 5.4 Bcf per day this month, which is 0.8 Bcf higher than in March 2016. Meanwhile, exports to Mexico at 3.9 Bcf per day are 0.6 Bcf per day higher than March 2016. Combining pipeline exports to Mexico and LNG exports from Sabine Pass the US is now exporting more than 6 Bcf of natural gas per day on a regular basis.

LNG Markets – feed gas for exports from Sabine Pass has averaged 1.8 Bcf per day during 2017 while LNG imports and distribution to the pipeline grid have averaged only 0.4 Bcf per day. With that said, Cheniere is seeking permission from the Federal Energy Regulatory Commission to operate fully its train #3 at Sabine Pass after completion of tests started back in September 2016. The unit produced its first LNG cargo in late January 2017.

Natural Gas Market Summary – US natural gas to power generation averaged 22 Bcf per day this March and was 2 Bcf per day higher than in February. That had never happened before during the current decade (more gas to power gen in March than in February) and is just another indicator of how mild February 2017 was for the lower-48 compared to history. The 103.7 Bcf recorded for total demand on March 14, 2017, according to *Bentek Energy*, was the first triple digit consumption day since February 9, again an indicator of a mild February and more biting temperatures in March. Many analysts believe that natural gas to power generation may be reduced 1 Bcf per day or more this summer in the Pacific Northwest (compared to last summer) given the status of water reservoirs (essentially full), promising more hydro-power and the general influence of more renewables including solar and wind compared with last year.