Natural Gas Market Indicators

American Gas Association

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Reported Prices – futures at Henry Hub for natural gas currently point to natural gas pricing at $3.00 per MMBtu or below through the the 2020-2021 winter heating season. Low and stable prices seems to be the feeling of the market for natural gas in the near and medium term. Crude oil, on the other hand, has been susceptible to recent upward pressure with Brent above $74.50 and West Texas Intermediate above $68 at the end of April.

Weather – AGA does not publish heating or cooling degree day data for the months of April and September. However, winter has persisted thorugh much of the lower-48 United States, which in turn has driven late-season heating demand and withdrawals from storage. Meanwhile, the Atlantic hurricane season is arriving in a little more than a month and the forecasts are being issued. The Wather Company outlook is forecasting a near-average 2018 Atlantic hurricane season comprised of 13 named storms including six hurricanes, two of which are Category 3 or higher. How many of these will make landfall, or even become a disruption to energy production, remains much more uncertain.

Working Gas in Underground Storage – more than half way through April and we still see double-digit withdrawals from storage. EIA reported a 36 Bcf pull from underground stocks for the week ending April 13, 2018. Working gas in underground storage then fell another 18 Bcf the following week, ending April 20. Storage stocks are finishing the winter heating season just below 1.3 Tcf, which is 41 percent below the five-year average and 29 percent down from last season's conclusion. Current inventories portend an average to strong injection season in order to restore working gas levels to 3.6 Tcf or perhaps more prior to the 2018-19 winter heating season.

Natural Gas Production – domestic dry natural gas production has flirted with 79 Bcf per day recently but settled at 78.2 Bcf per day on average for the month of April 2018. That is 6.9 Bcf per day higher than one year ago in April 2017, according to S&P Global.

Shale Gas **–** a recent article in S&P's *Daily Gas Report* (Thursday, April 19, 2018) noted that among the ten largest shale gas producers in the Appalachian basin more than 50 percent of their expected production in 2018 was hedged at a premium to current NYMEX pricing. In a relatively low commodity price environment for natural gas, capital discipline and seller price stability may be rewarded in the market. Among the 10 largest Appalachian producers individually, volumes hedged for 2018 ranged from 13 to 105 percent and from $2.73 to $3.50 per MMBtu. Total potential production hedged for 2018 from the basin is nearly 4 Tcf, according to S&P Global. It is not surprising that hedging strategies are considered. For planning purposes among the companies, price stability and reasonable cash flow expectations are important business factors.

Rig Count – after passing the 1,000-count threshold in early April, operators have once again added to the total number of active drilling rigs. As of the week ending April 20, the US rotary rig count stood at 1,013, which is up 5 rigs for the week and 18 percent higher year than one year ago. Oil rigs dominate the mix as four out of every five rigs are currently directed toward oil targets. Nearly nine out of every ten rigs are designated horizontal. This indicates shale oil is a dominating factor for most US drilling activity. And much of it is concentrated in west Texas as rigs operating in the Permian basin represents nearly one out of every two rigs operating in the US.

Pipeline Imports and Exports – imports from Canada have yet to ease despite the end of the winter heating season. April average daily flows have averaged 5.5 Bcf per day, the same as the level of daily year-to-date imported volumes. As cool weather retreats, we will look for some relative easing of pipeline import supplies. South of the US border, exports to Mexico have remained strong and consistent through April with a month-to-date average of 4.3 Bcf per day, which is about 12 percent higher than 2017.

LNG Markets – collective imports of LNG into China, Japan, South Korea, and Taiwan were up 11% this winter compared with last year. Chinese imports alone jumped 53% above last year. This helped pull spot prices for LNG above $10 per MMBtu at times this winter. Meanwhile, back-to-back cold snaps pulled European storage inventories to their lowest point in seven years. In addition, UK futures have gained 20 percent in the past three months; prompt-month prices at the National Balancing Point are now $7.16 per MMBtu. Here in the US feedgas for LNG exports in April 2018 averaged 3.5 Bcf per day – up 1.4 Bcf per day from April 2017. Of course, some of that growth can be attributed to the commercial start-up of Cove Point in Maryland earlier this year.

Natural Gas Market Summary – a consistently cooler close to the winter heating season and start of spring have left storage inventories at just under 1.3 Tcf. What is the significance of that metric. Well, let's do the math. Based on recent underground storage history, inventories should refill to a collective volume somewhere between 3.5 and 4.0 Tcf prior to the beginning of the coming winter heating season, so pick a number. Let's say 3.7 Tcf. Starting at 1.3 Tcf, storage volumes would require a net build of 2,400 Bcf over a 200-day (+) injection season or about 12 Bcf per day. Interesting. Given the history of net injection seasons a daily average of 8 Bcf per day is on the low side. An average of 14 Bcf per day would be high, so 12 Bcf is certainly possible. And production volumes are up this year over last, so a high-end storage injection season might well be supported by growth in production even with the demands of natural gas to power generation and exports. Futures prices in the market certainly are pointing to relative stability. Just musing – let's see what happens.