Natural Gas Market Indicators

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Reported Prices – oil prices have seen a recent surge, rising to five-month highs on April 24 with Brent at $74.45 per barrel and West Texas Intermediate at $66.30. Oil has rallied in part following a decision from the US government to end sanctions waivers on Iran oil imports, which have led to broader supply concerns within the market. In the natural gas space, the forward strip for natural gas at Henry Hub had backed off a little more such that no price above $2.83 per MMBtu is to be found in the monthly, seasonal, or calendar-year expectations through 2022. Daily prices for prompt-month Henry Hub futures were down to under $2.50 per MMBtu on April 23, 2019, as the market continues its transition from winter heating season to storage injections and seasonal natural gas to power generation for cooling loads.

Weather – the transition to Spring arrived abruptly for much of the East and Midwest, with mid-April supply/demand balances impacted by strong domestic gas production and falling demand. US temperatures warmed seven degrees week-over-week in mid-April, reducing total gas demand by 8.5 Bcf per day. Cooling degree day data will begin to show increases in temperatures as the US starts to see warmer daily conditions. AGA will begin reporting the aggregation of cooling degree days from April in early May and continue through September.

Working Gas in Underground Storage – injections of working gas into storage hit 92 Bcf for the week ending April 12 bringing early inventories to 1,247 Bcf, then did it again adding 92 Bcf for the week ending April 19. Working gas volumes are only 4.3 percent less than the corresponding week in 2018 but nearly 22 percent lower than the five-year average. With that said, May and June are usually the most active injection months of the year because inventories are low and physically it is easy to push gas into the ground, and the onset of peak summer demand for gas to power generation has not yet started.

Natural Gas Production – domestic daily dry gas production in April has averaged 86.7 Bcf and is running 8.2 Bcf per day higher than in April 2018. Average daily production is also nearly 8 Bcf per day higher year-to-date than one year ago as we observe January-April statistics.

Shale Gas – a recent comparison of US shale gas production by basin was offered by the Energy Information Administration (EIA) and accounted for nearly 80 Bcf per day of shale gas being produced as of April 15, 2019. The Appalachian basin was unsurprisingly the largest daily production source at 32 Bcf with the Permian basin second at 14 Bcf per day. The Haynesville, Anadarko, Eagle Ford, Niobrara, and Bakken round out the top seven in order of highest to lowest, producing 10.7 to 2.7 Bcf per day.

Rig Count – rig counts in North America have continued a pattern of decreasing week-after-week in the spring months of 2019. For the third week of April, the gas rig count was 187, down two compared to the week prior and is eight rigs lower than this week last year. The third week of April culminates with the decline of operating rigs, totaling 1,012, ten fewer (gas and oil) compared to last week's working and one less than rigs in operation this same week in 2018.

Pipeline Imports and Exports – pipeline natural gas import volumes from Canada are down 1.2 Bcf/d from this time last year comparing monthly daily average volumes. Daily averages for imports from Canada have stayed consistent at 4.3 Bcf/d for April, fluctuating generally only 0.1 Bcf per day. Turning to Mexico, pipeline exports to Mexico from the U.S. have been strong in early 2019 and are now 4.9 Bcf per day year-to-date, which is 0.6 Bcf higher than the same period in 2018.

LNG Markets – the LNG export project at Elba Island, GA operated by Kinder Morgan is expected to produce its first LNG soon as the company brings the first small production units into service. Once all ten of the modular liquefaction units are online, the facility could produce about 2.5 million tonnes per year, making it the smallest LNG project already under construction or in operation in the U.S. Royal Dutch Shell PLC has a 20-year contract to off-take 100% of volumes at Elba Island. Also, the Federal Energy Regulatory Commission (FERC) has granted certificate approvals for two new export terminals on the gulf coast: Port Arthur LNG in Texas (1.78 Bcf per day capacity) and Driftwood LNG (3.55 Bcf per day) in Louisiana. Furthermore, FERC has recently issued positive environmental impact statements to Texas LNG, Eagle LNG, Gulf LNG, and Annova LNG. Year-to-date flows of feedgas for export from all US facilities has reached 4.5 Bcf per day and is 1.4 Bcf per day higher than the first four months of 2018.

Natural Gas Market Summary – typically April is a transition month as the winter heating season ends and the warmer temperatures of Spring begin to shift demand from space heating to air conditioning loads around the country. Storage injections build and opportunities to turn to maintenance projects for pipeline systems start to take hold. Although not much less than one year ago, current storage inventories are nearly 22 percent below the five-year average. So, now it will be power generation requirements as the months grow warmer that set the margin for gas demand and begin to influence gas prices going forward. The current Henry Hub seasonal strip through 2022 hints at relative stability and lower gas costs in the near term. That said, the reason we have written this report twice a month for the past 15 years is that things change. Observing those changes and reporting them to you is what we will continue to do.