NATURAL GAS MARKET INDICATORS

January 15, 2021
Edition 382

Natural Gas Market Summary – historically cold weather has boosted Asian LNG spot prices to record levels. Combined Asian and European gas demand has helped lift LNG exports from the US. Strong export demand has supported domestic natural gas prices, which have increased since the beginning of the year despite warmer-than-normal temperatures. Cold temperatures that are expected in the Northern Hemisphere through, at least, the end of the month, could be a further bullish indicator for domestic pricing.

Reported Prices – in 2020, natural gas spot prices at the Henry Hub averaged $2.05 per MMBtu, the lowest average since at least 1997, which is as far back as EIA currently reports. Late December 2020 prices were also low on expectations of warmer-than-normal temperatures, bottoming out at $2.27 per MMBtu on December 28. However, prices have rallied in the first two weeks of January 2021, bolstered by expectations of colder weather across the lower-48 and increasing LNG export demand. On January 12, prices spiked to nearly $2.90 per MMBtu and ultimately settled at $2.80. While prices are expected to remain volatile in the short run due to changing weather forecasts across the US, long-term expectations are that prices will increase throughout the year. A Tudor, Pickering, Holt & Co. analyst expects demand to remain strong in Asia and Europe, affecting US natural gas and LNG prices. The analyst expects US prices to be "… north of $3.25 per MMBtu this summer and $3.50 per MMBtu by year-end." Oil prices continue to rise as well, extending an almost uninterrupted upward trend that started in October. Between December 21 and January 11, West Texas Intermediate prices increased by more than 10 percent from $48.23 to $53.20, and Brent prices increased by almost 10 percent from $51.29 to $56.24.

Weather – all regions of the country have been warmer than normal since the beginning of the heating degree day season in October. This trend continued over the first two weeks of January, when temperatures were 12.3 and 14.7 percent warmer than normal, respectively. Sporadic cold spells since October have kept cumulative differentials at 12.7 percent warmer than the 30-year average. By January 11, the increase in temperatures reduced total demand by nearly five Bcf per day, mainly driven by declines in residential and commercial sector consumption. However, prices have remained relatively high over the first two weeks of January as lower temperatures are expected over the weekend and through the end of the month. The 16-day GFS forecast released by NOAA expects a cold front to hit the West Coast around January 22 and move across the country to the East Coast by January 28.

Working Gas in Underground Storage – since mid-December, the largest net underground storage withdrawal was 152 Bcf for the week ending December 18, 2020. Since then, continued strong LNG export demand has kept draws relatively large in early 2021, despite warmer-than-expected weather. The EIA storage report showed a net pull of 130 Bcf for the week ending January 1 and 134 Bcf for the week ending January 8. Working gas inventories now stand at 3,196 Bcf, 4.1 percent above one year ago, and 7.3 percent above the five-year average.

Natural Gas Production – historically, operators ramp up natural gas production in Q3/Q4 to build up reserves for the heating season, while output in Q1/Q2 remains relatively flat. Even so, domestic natural gas production flows have begun the year at 90.0 to 91.5 Bcf per day, a slight increase from the December average of 90.3 Bcf per day, but 2.7 Bcf per day lower than the average production rate in January 2020.

Rig Count – with 360 rigs operating as of January 8, the rig count remains about 45 percent below year-ago levels. However, the number of rigs in service has increased by almost six per week since a low of 244 in mid-August 2020. A similar, albeit more subdued pattern, is also present when analyzing gas rigs only. Currently, 84 gas rigs (23 percent of total activity) are in operation, an increase of 20 percent since August.

Pipeline Imports and Exports – according to S&P Global Platts, the US has been consistently importing from Canada about 5.7 Bcf per day and exporting to Mexico 5.5 Bcf per day for the week ending January 15. These volumes are expected to remain reasonably stable over the next seven days. Imports from Canada are up over 60 percent from year-ago levels, while exports to Mexico are consistent with year-ago levels. Nonetheless, for the reasons described in the LNG markets section, exports to Mexico over the past week represent only about 37 percent of total exports over the first two weeks of 2021.

LNG Markets – North Asian LNG prices have spiked to record highs. The coldest winter in a decade in North Asia has boosted demand and led to a scramble to procure gas supplies. Declining storage and delays in shipping through the Panama Canal have helped fueled the price rally. Reports of delivery purchases exceeding $30 dollars have been common, including at least one cargo that sold at nearly $40. These prices are especially startling considering the record low prices at JKM in April amid the pandemic and the fact that it was trading at $11.10 in early December 2020. However, on January 13, Asian LNG prices for delivery in February closed lower for the first time since the beginning of the year, a sign that prices might begin to stabilize as we enter the second half of January. In Europe, Dutch natural gas prices are up 58 percent due to colder weather and higher carbon market prices. The low temperatures in Europe are expected to last through at least January 22, fueled by sudden stratospheric warming that has disrupted the polar vortex, allowing cold temperatures to escape the arctic into Europe. World demand has given a boost to US LNG, supporting record daily feedgas for exports. On average, US LNG feedgas flows 11.0 Bcf per day to begin the year, up 26 percent from January 2020.