Natural Gas Market Indicators

Market Summary

Over the past two weeks, natural gas prices have dropped precipitously, coinciding with high production and warmer weather. Prices dropped as low as $3.67 per MMBtu on December 6, the lowest since July.

- Warmer weather has kept demand at bay. Average monthly demand through December 13 has been 91.3 Bcf per day, compared to 95.2 Bcf per day in December 2020.

- On the supply side, natural gas production is trending higher at 93.8 Bcf per day on December 14. Record high production in the Northeast region this month and healthy growth throughout the year in other regions has led to production averaging 91.2 Bcf per day year to date.

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At 91.2 Bcf per day, year-to-date, dry gas production is 1.4 percent greater than 2020’s year-to-date average.

Temperatures have been 17.6 percent warmer than normal year-to-date since the beginning of October.
Weather

Several weeks of relatively warm temperatures and La Niña patterns contributed to atmospheric instability which led to a series of catastrophic tornadoes hitting parts of the South and the Midwest over the weekend. The tornadoes had devastating effects that typically hit at the height of tornado season in the spring. Following several weeks of warm temperatures, colder weather systems are expected to bring lower temperatures to much of the US this weekend into the start of next week. All in all, based on heating degree days, temperatures have been 2.0 percent warmer than last year year-to-date and 17.6 percent warmer than normal year-to-date since the beginning of October. All regions of the country have been warmer than normal since the beginning of the heating degree day season.

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. This trend proves true this year as dry natural gas production is now routinely reaching 94 Bcf per day and is often surpassing 95 Bcf per day, according to S&P Global Platts Analytics. At 91.2 Bcf per day, year-to-date, dry gas production in 2021 is 1.4 percent greater than 2020’s year-to-date average. Thirty-day average dry gas production in the North is up 3.8 percent year-to-date compared to 2020, as production of natural gas in the Northeast recently reached all time highs of nearly 35 Bcf per day.

Pipeline Imports and Exports

Gas volumes from Canada have been ranging from 4.2 to 5.6 Bcf per day the past week, with flowing supplies averaging 4.7 Bcf per day in month-to-date. Pipeline imports from Canada year-to-date are 5.1 Bcf per day, 0.9 Bcf higher than this time last year at 4.2 Bcf per day. Meanwhile, exports to Mexico are averaging 5.7 Bcf per day this December, an increase of 3.8 percent, or 0.2 Bcf compared to December 2020.

Demand

Domestic natural gas demand in December has averaged 91.3 Bcf per day, representing a 4.6 Bcf (5 percent) reduction from average demand in 2020. The year-over-year drop in demand has been almost entirely driven by the effect of warmer weather on residential and commercial consumption. Year-to-date, residential and commercial demand is averaging 35.9 Bcf per day, a 3.9 Bcf (10 percent) reduction from December 2020. On the other hand, despite power outages in parts of the Midwest and South as a result of the tornadoes, natural gas demand for power generation is averaging 28.9 Bcf per day this December, 0.4 Bcf more than last year at this time.

Reported Prices

Over the past two weeks, natural gas prices have dropped precipitously, coinciding with higher production and warmer than expected weather. Prompt-month prices dropped as low as $3.67 per MMBtu on December 6, the lowest since July, before bouncing back up slightly. As of December 14, prompt month future prices were trading at $3.80 per MMBtu. Long-term strip prices were even lower through the end of the fall 2022. Spot prices have been higher than the prompt-month future prices, with the national average price hovering above $4.00 per MMBtu and trading as high as $4.18 per MMBtu on December 13.

LNG Markets

On December 14, European TTF prompt-month futures prices were trading at $37 per MMBtu, while Asian JKM prompt-month future prices also remained very high at $35 per MMBtu. These high prices are a strong incentive for US LNG exporters who continue to ship LNG at near-capacity. Now that the sixth train at Sabine Pass in Louisiana is producing LNG, the amount of gas flowing from US LNG export plants has averaged 11.9 Bcf per day so far in December. That compares to 11.4 Bcf per day in November and a monthly record of 11.5 Bcf per day in April 2020. Looking ahead, the EIA forecasts high levels of LNG exports to continue into 2022, averaging 11.5 Bcf per day for the year, a 17 percent increase from 2021.

Working Gas in Underground Storage

Since the beginning of November, the typical beginning of withdrawal season, the largest net underground storage withdrawal was 59 Bcf for the week ending November 26 and December 3, 2021. Continued warm temperatures and mild demand has kept draws relatively small in late 2020. The EIA storage report shows working gas inventories now stand at 3.505 Bcf, 9.2 percent below one year ago and 2.5 percent below the five-year average.

Rig Count

The number of gas rigs in operation increased by three for the week ending December 10, 2021. Gas rigs are up 33 percent to 105 units from year ago levels. Meanwhile, oil-directed rigs rose four for the same week in December. Oil rigs are up 83 percent from this time last year, while also up 31 percent from the beginning of 2021. As a result of these recent increases, total working domestic rotary rigs in operation stand at their highest level since mid-April at 576 rigs.