Natural Gas Winter Snapshot
U.S. Power and Gas Weekly

Morningstar Commodities Research
Oct. 23, 2019

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Data Sources Used in This Publication
U.S. Energy Information Administration
PointLogic Energy

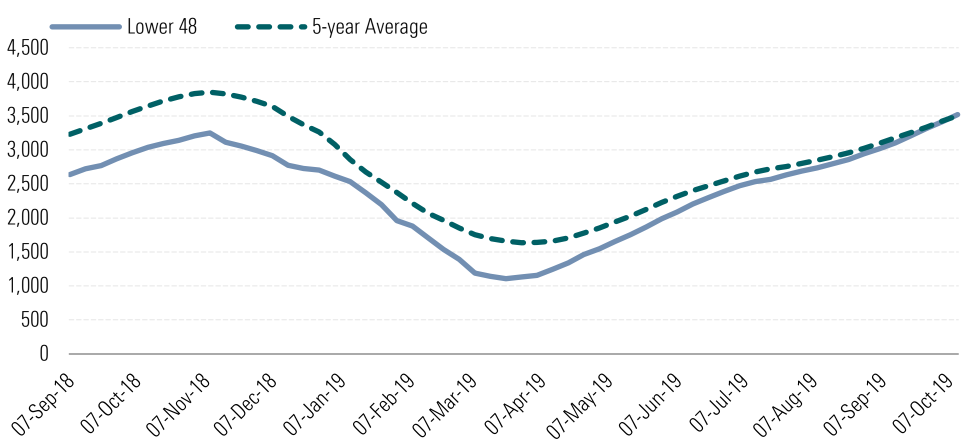
Lower 48 Storage Levels

At the end of summer 2018, natural gas storage levels fell well below their five-year average, and questions arose regarding the ability to restore inventory in time to meet winter demand. These inventory concerns, along with some production challenges at the time, led to the largest jump in natural gas prices at Henry Hub since 2014, as spot month prices almost hit $5 per million British thermal units. This year, prices at Henry Hub have stayed stubbornly low for the whole shoulder season. This note looks at current conditions to determine whether a repeat of last year's massive price move is still in the cards.

Return to Normal

While certain areas of the country experienced periods of extreme heat, this summer in general was somewhat normal across the United States. Moderate demand coupled with production growth from 89 billion cubic feet per day in March 2019 to 93.6 bcf/d in October to date, helped restore storage to historically normal levels (Exhibit 1). Current forecasts for the end of October show 3.8 trillion cubic feet of working natural gas in inventory, which is 17% higher than last year and would end the month slightly above the five-year average of 3.6 tcf. As a result, inventory levels should be healthy going into the peak winter months.

Exhibit 1 Lower 48 Natural Gas Storage Volumes
Bcf



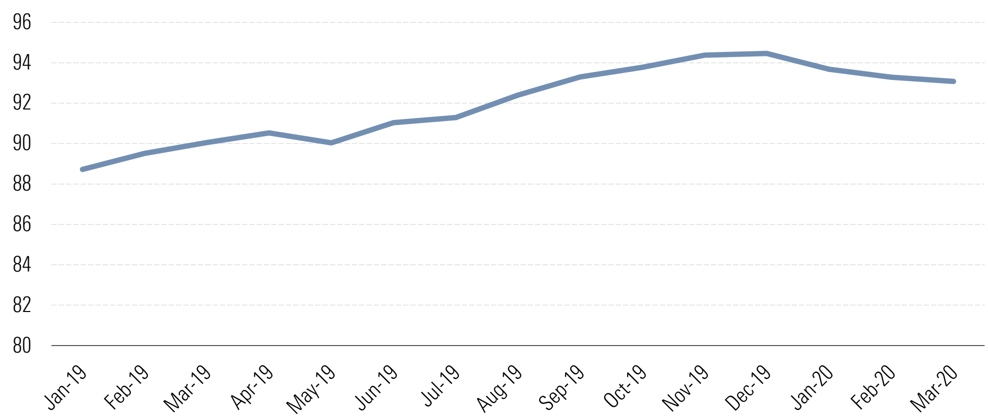
Source: U.S. Energy Information Administration

Flattening Production

Natural gas production has continued to grow in 2019, adding around 5 bcf/d since January (Exhibit 2), and this growth is expected to continue. The EIA's latest Short-Term Energy Outlook forecasts production growth through the end of the year, with December total dry production averaging 94.5 bcf/d. However, the outlook forecasts a slight production decline in the first quarter of 2020 to around 93.3 bcf/d. Regardless, production this year will be higher than last winter. The winter strip (October-March) averaged 88.2 bcf/d of production last winter, and the EIA forecasts the strip this winter averaging 93.8 bcf/d. With inventory at or slightly above the five-year average and supply stronger this winter than last, any price movements at Henry Hub will likely hinge on changes in demand.

Exhibit 2 Total Dry Production

Bcf/d



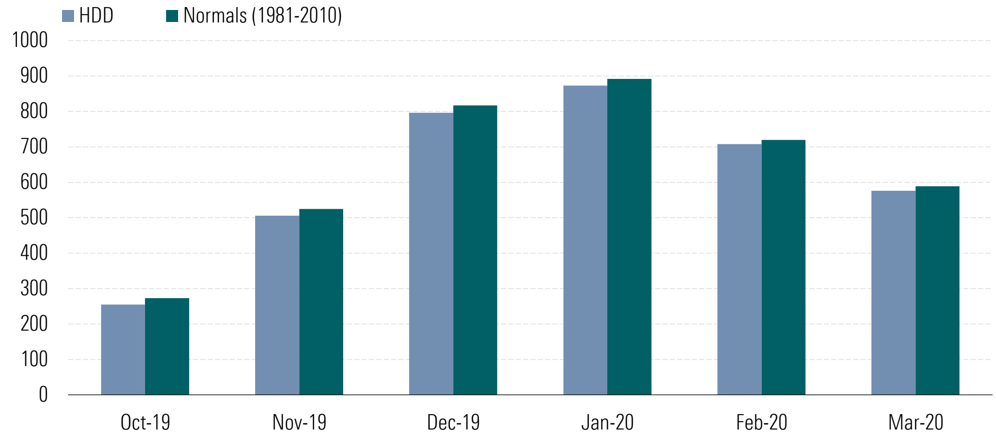
Source: EIA

Slightly Lower Demand

Demand will drive the price bus once again this winter, and according to the National Oceanic and Atmospheric Administration's forecast, the bus looks to be starting slowly. The current forecast shows heating degree-days falling 4% below last year and 3% below the 30-year average for all six of the winter months (Exhibit 3). The greatest divergence from normal levels should be in December, which is forecast to have 21 fewer degree-days.

Two different scenarios were run as a part of this year's EIA Winter Fuels Outlook, one assuming a 10% colder-than-forecast winter and the second assuming a 10% warmer winter. In the case of a 10% colder winter, residential natural gas demand was only expected to increase by 4%, while a 10% warmer scenario would produce a 12% reduction in consumption. In either case, available supplies will likely cap any significant moves at Henry Hub.

Exhibit 3 Monthly Heating Degree Day Forecast



Source: NOAA

Conclusion

As the country gears up for winter, the fundamentals point to a pretty typical, and some may say, boring season. Natural gas storage levels have returned to five-year averages, and supplies are expected to stay strong through the season. Residential heating demand is expected to be normal, with seasonal forecasts showing warmer conditions than last year and warmer than the 30-year historical average. Barring a significant change to the colder side for the season, or some supply-side surprise that overwhelms today's healthy inventory, prices are likely to stay low at the Hub, making the potential for a repeat of last year's excitement unlikely.

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