

OCD Exhibit 24

Natural Gas

Natural Gas Weekly Update

for week ending February 12, 2020 | Release date: February 13, 2020 | Next release: February 20, 2020 |

In the News:

North Dakota provides regulatory guidance to reduce natural gas flaring

Natural gas production in North Dakota reached 3.1 billion cubic feet per day (Bcf/d) in November 2019, a more than ten-fold increase compared with January 2010 levels. In the first 11 months of 2019, North Dakota flared about 20% of its natural gas production, or 0.56 Bcf/d, which is 40% higher than in 2018. Increases in natural gas production are primarily related to associated gas produced from oil wells in the Bakken formation. Flaring refers to combusting natural gas in the atmosphere instead of capturing and processing natural gas in a processing plant.

North Dakota implemented natural gas capture goals in 2014 to limit the amount of natural gas flared into the atmosphere. Natural gas processing capacity has increased alongside crude oil production but has lagged behind the growth in associated natural gas production. The state natural gas capture target—currently at 88% and set to increase to 91% in November 2020—has not been met in every month since March 2018. In the most recent data month, November 2019, only 83% of natural gas produced in North Dakota was captured.

Insufficient natural gas processing capacity has placed constraints on crude oil production, and oil producers are looking for ways to comply with natural gas capture targets. According to the North Dakota Pipeline Authority, natural gas processing plant capacity additions in 2019 increased total capacity by 0.71 Bcf/d to reach 3.1 Bcf/d. They expect an additional 0.9 Bcf/d of natural gas processing to enter service during 2020 and 2021. These additions will support crude oil production growth, but the new capacity may fill up faster than anticipated.

On November 15, 2019, the North Dakota Industrial Commission (NDIC), the regulatory entity that oversees the state's flaring reduction rules, held a hearing to consider both how to raise natural gas capture levels using alternative natural gas capture strategies and how to provide regulatory clarity in natural gas gathering agreements. According to the North Dakota Pipeline Authority, about three-fourths of flaring is associated with oil wells connected to natural gas gathering pipelines.

As a result of the hearing, the NDIC issued an order to encourage *firm service* contractual agreements along natural gas gathering pipelines. In North Dakota, most contractual agreements between natural gas producers and purchasers are for *interruptible service*, which means a producer may be denied the ability to transport natural gas in a gathering system. *Firm service* contracts provide a greater level of certainty to producers because service along the gathering line is guaranteed and may reduce the amount of well shut-ins and flared natural gas.

A low natural gas price environment relative to crude oil poses a challenge to the buildout of natural gas gathering pipelines and natural gas processing facilities. However, according to NDIC, firm service contracts may encourage a faster buildout of gathering line infrastructure because investments with guaranteed commitments provide economic certainty for project developers.

Overview:

(For the week ending Wednesday, February 12, 2019)

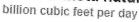
• Natural gas spot prices rose at most locations this report week (Wednesday, February 5 to Wednesday, February 12). The Henry Hub spot price rose from \$1.85 per million British thermal units (MMBtu) last Wednesday to \$1.87/MMBtu yesterday.

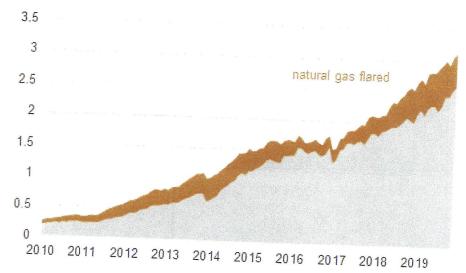
According to a Bloomberg survey of natural gas analysts, estimates of the weekly net change to working natural gas stocks ranged from a net withdrawal of 102 Bcf to 116 Bcf, with a median estimate of 110 Bcf.

The average rate of withdrawal from storage is 13% lower than the five-year average so far in the withdrawal season (November through March). If the rate of withdrawal from storage matched the five-year average of 11 Bcf/d for the remainder of the withdrawal season, the total inventory would be 1,912 Bcf on March 31, which is 215 Bcf higher than the five-year average of 1,697 Bcf for that time of year.

More storage data and analysis can be found on the Natural Gas Storage Dashboard and the Weekly Natural Gas Storage Report.

North Dakota natural gas production





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Source: North Dakota Industrial Commission (January 2010–November 2019)

North Dakota natural gas capture percent

