Southeastern Ohio Oil and Gas Association
Gas Committee Report
February, 2019

PRICING

Prices February 12, 2019

NYMEX Settle – February -2019 $2.95
One Year NYMEX strip (Mar., 2019 – Feb., 2020) $2.86
Summer NYMEX strip for 2019 (April-October, 2019) $2.76

TCO Index Posting – February, 2019 $2.74
DTI Index Posting – February, 2019 $2.71

Working gas in underground storage, Lower 48 states

<table>
<thead>
<tr>
<th>Region</th>
<th>02/01/19</th>
<th>01/25/19</th>
<th>net change</th>
<th>implied flow</th>
<th>Year ago (02/11/18)</th>
<th>% change</th>
<th>5-year average (2014-18)</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>East</td>
<td>468</td>
<td>527</td>
<td>-9</td>
<td>-9</td>
<td>493</td>
<td>-5.1</td>
<td>530</td>
<td>-11.7</td>
</tr>
<tr>
<td>Midwest</td>
<td>522</td>
<td>606</td>
<td>-84</td>
<td>-84</td>
<td>551</td>
<td>-5.3</td>
<td>612</td>
<td>-14.7</td>
</tr>
<tr>
<td>Mountain</td>
<td>105</td>
<td>114</td>
<td>-9</td>
<td>-9</td>
<td>132</td>
<td>-20.5</td>
<td>142</td>
<td>-26.1</td>
</tr>
<tr>
<td>Pacific</td>
<td>172</td>
<td>178</td>
<td>-6</td>
<td>-6</td>
<td>214</td>
<td>-19.6</td>
<td>232</td>
<td>-25.9</td>
</tr>
<tr>
<td>South Central</td>
<td>692</td>
<td>771</td>
<td>-79</td>
<td>-79</td>
<td>705</td>
<td>-1.8</td>
<td>858</td>
<td>-19.3</td>
</tr>
<tr>
<td>Salt</td>
<td>241</td>
<td>278</td>
<td>-37</td>
<td>-37</td>
<td>182</td>
<td>32.4</td>
<td>241</td>
<td>-0.0</td>
</tr>
<tr>
<td>Nonsalt</td>
<td>451</td>
<td>493</td>
<td>-42</td>
<td>-42</td>
<td>523</td>
<td>-13.8</td>
<td>617</td>
<td>-26.9</td>
</tr>
<tr>
<td>Total</td>
<td>1,960</td>
<td>2,197</td>
<td>-237</td>
<td>-237</td>
<td>2,095</td>
<td>-6.4</td>
<td>2,375</td>
<td>-17.5</td>
</tr>
</tbody>
</table>
Summary

Working gas in storage was 1,960 Bcf as of Friday, February 1, 2019, according to EIA estimates. This represents a net decrease of 237 Bcf from the previous week. Stocks were 135 Bcf less than last year at this time and 415 Bcf below the five-year average of 2,375 Bcf. At 1,960 Bcf, total working gas is within the five-year historical range.

![Graph showing working gas in underground storage compared with the 5-year maximum and minimum.](image)

Source: U.S. Energy Information Administration

**EIA WEEKLY REPORT OCTOBER 4, 2018:**

**Natural Gas**

Prices/Supply/Demand:

**Prices fall in the Midwest and Northeast.** This report week (Wednesday, January 30 to Wednesday, February 6), Henry Hub spot prices fell 40¢ from $2.96/MMBtu last Wednesday to $2.56/MMBtu yesterday.

At the Chicago Citygate – where prices were heavily affected by last week’s polar vortex - prices decreased $2.41 from $4.99/MMBtu last Wednesday to $2.58/MMBtu yesterday. The polar vortex brought record cold weather to the Midwest and pushed heating demand in the region to record levels.

Similarly, temperatures in the Northeast moderated substantially by the end of the report week. At the Algonquin Citygate, which serves Boston-area consumers, prices went down $6.41 from $9.10/MMBtu last Wednesday to $2.69/MMBtu yesterday. At the Transcontinental Pipeline
Zone 6 trading point for New York City, prices decreased $10.04 from $12.51/MMBtu last Wednesday to $2.47/MMBtu yesterday.

Marcellus-region prices also fell for the report week. Tennessee Zone 4 Marcellus spot prices decreased 55¢ from $2.92/MMBtu last Wednesday to $2.37/MMBtu yesterday. Prices at Dominion South in southwest Pennsylvania fell 58¢ from $2.94/MMBtu last Wednesday to $2.36/MMBtu yesterday.

**Discount at Permian Basin trading hub widens sharply on outage.** Prices at the Waha Hub in West Texas, which is located near Permian Basin production activities, averaged $2.37/MMBtu last Wednesday and fell to $0.51/MMBtu yesterday, $2.05/MMBtu lower than Henry Hub prices. This price drop is related to a force majeure on El Paso Natural Gas’s Line 1600 because of a potential leak. This outage restricted westbound flows out of the Permian and pushed the Waha price down sharply, reaching prices as low as $0.09/MMBtu on Monday.

**Supply remains flat.** According to data from PointLogic Energy, the average total supply of natural gas fell by 1% compared with the previous report week. Dry natural gas production remained constant week over week. Average net imports from Canada decreased by 22% from last week as warmer weather reduced the need for Canadian natural gas supplies.

**Demand declines, driven by the residential/commercial sector.** Total U.S. consumption of natural gas fell by 15% compared with the previous report week, according to data from PointLogic Energy. In the residential and commercial sectors, consumption declined by 21% as space heating demand receded. Natural gas consumed for power generation declined by 11% week over week. Industrial sector consumption decreased by 7% week over week. Natural gas exports to Mexico decreased 3%.

**U.S. LNG exports decrease week over week.** Five LNG vessels (three from Sabine Pass and two from Cove Point) with a combined LNG-carrying capacity of 17.3 Bcf departed the United States from January 31 to February 6, according to shipping data compiled by Bloomberg. Foggy conditions caused a decline in exports from the Sabine Pass terminal, prompting closure of the Sabine Pass waterway for large ships, including LNG ships, since February 2. The waterway will reopen when heavy fog subsides, according to the Sabine Pilots Association. An LNG tanker, which has been docked at Sabine Pass since February 1, began maneuvers to depart the berth yesterday, indicating that the restrictions may have been lifted.

U.S. LNG exports in January have set another record with 37 exported cargoes (28 from Sabine Pass, 6 from Cove Point, and 3 from Corpus Christi), exceeding the previous record in December of 36 exported cargoes.

The proposed Golden Pass liquefaction project became the first U.S. export facility among the fully approved liquefaction projects to announce that it reached a final investment decision. The liquefaction facility will be located on site at the existing regasification terminal in Sabine Pass, Louisiana, and will have the capacity to produce 16 million metric tons of LNG (2.1 Bcf/d). The project is expected to be in service in 2024.
Ohio's Utica Shale Third Quarter Production

During the third quarter of 2018, Ohio’s horizontal shale wells produced 5,545,536 barrels of oil and 605,716,125 Mcf (605 billion cubic feet) of natural gas, according to figures released today by the Ohio Department of Natural Resources (ODNR).

Natural gas production from the third quarter of 2018 showed a 31.44% increase over the third quarter of 2017, while oil production increased 31.79% for the same period.

<table>
<thead>
<tr>
<th></th>
<th>2017 Quarter 3 (Shale)</th>
<th>2018 Quarter 3 (Shale)</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barrels of oil</td>
<td>4,207,674 bbl</td>
<td>5,545,536 bbl</td>
<td>31.79%</td>
</tr>
<tr>
<td>Mcf of natural gas</td>
<td>460,844,826 Mcf</td>
<td>605,716,125 Mcf</td>
<td>31.44%</td>
</tr>
</tbody>
</table>

The ODNR quarterly report lists 2,242 horizontal shale wells, 2,198 of which reported oil and natural gas production during the quarter. Of the wells reporting oil and natural gas results:

- The average amount of oil produced was 2,523 barrels.
- The average amount of natural gas produced was 275,576 Mcf.
- The average number of third quarter days in production was 84.

As of February 9, 2019, there have been 3,000 Utica shale permits issues in Ohio, and 2,531 of them have been developed.

There are currently 2,143 Utica shale wells in production, with 14 rigs running.