MISSOURI ENERGY BULLETIN
December 20, 2018

(Data are for the week ended December 14, 2018, unless stated otherwise.)

**Crude Oil**

U.S. crude oil prices decreased by $7.43 to $47.20 per barrel in the past month and are 19 percent lower compared to this time last year.

| Crude Oil - Near Month Future Prices (dollars per barrel) |
|----------------|-----------------|-----------------|-----------------|-----------------|
| NYMEX          | 12-19-18        | 11-21-18        | change          | 12-20-17        | change          |
|                | $47.20          | $54.63          | down 14%        | $58.09          | down 19%        |

- Crude oil futures for January delivery on the NYMEX ended $0.96, or 2.03 percent, higher on December 19 to settle at $47.20 per barrel. The price for crude oil futures is $7.43, or 14 percent, below the month-ago level.

- A glut of crude oil in the U.S. and abroad has reduced gasoline prices, although prices could rise following an announcement by the Organization of the Petroleum Exporting Countries and Russia of a crude oil production cut next year.

- Compared to this time last year, the U.S. crude oil futures settlement price of $47.20 is $10.89, or 19 percent, lower.

- Domestic crude production was unchanged over the prior week at 11.6 million barrels per day (MMB/D). Last year at this time, production stood at approximately 9.8 MMB/D. Total crude imports were up over the prior week at approximately 7.4 MMB/D. Imports at this time last year were approximately 7.8 MMB/D.

- U.S. crude oil supplies dropped 0.5 MMB on the week to 441.5 MMB. U.S. supplies are 5.0 MMB higher compared to this time last year.
• U.S. refinery crude runs were lower over the prior week with refiners processing approximately 17.4 MMB/D. U.S. refinery capacity utilization was higher on the week at 95.4 percent. Last year at this time, capacity use stood at 94.1 percent.

• Gasoline output was lower on the week at approximately 10.3 MMB/D. Output was approximately 10.1 MMB/D at this time last year. Distillate output was lower than the prior week at approximately 5.4 MMB/D. Last year at this time, production stood at 5.2 MMB/D.

• Total petroleum products supplied to market, a measure of consumption, over the last four-week period stood at 21.2 MMB/D, up by 4.5 percent compared to the same period last year.

**Transportation Fuels**

On December 17, Missouri’s statewide average retail price for gasoline was approximately $1.97 per gallon, down 29.4 cents in the past month and down 17.8 cents in the past year.

<table>
<thead>
<tr>
<th>Regular Unleaded Gasoline - Retail Prices (cents per gallon)</th>
<th>12-17-18</th>
<th>11-19-18</th>
<th>change</th>
<th>12-19-17</th>
<th>change</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>236.9</td>
<td>261.1</td>
<td>down 9%</td>
<td>245.0</td>
<td>down 3%</td>
</tr>
<tr>
<td>Missouri</td>
<td>197.1</td>
<td>226.5</td>
<td>down 13%</td>
<td>214.9</td>
<td>down 8%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diesel Fuel - Retail Prices (cents per gallon)</th>
<th>12-17-18</th>
<th>11-19-18</th>
<th>change</th>
<th>12-19-17</th>
<th>change</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>312.1</td>
<td>328.2</td>
<td>down 5%</td>
<td>290.1</td>
<td>up 8%</td>
</tr>
<tr>
<td>Missouri</td>
<td>281.4</td>
<td>301.6</td>
<td>down 7%</td>
<td>262.5</td>
<td>up 7%</td>
</tr>
</tbody>
</table>

• On December 17, Missouri’s average retail price for gasoline was approximately $1.97 per gallon, down 29.4 cents in the past month.

• Missouri’s average price for diesel fuel was about $2.81 per gallon, down 20.3 cents in the past month.

• Compared to last year at this time, Missouri’s average retail gasoline price is 17.8 cents per gallon, or 8 percent, lower while the average retail diesel fuel price is 18.8 cents per gallon, or 7 percent, higher.

• At approximately $2.37, the U.S. average price for regular gasoline is 24.2 cents per gallon, or 9 percent, lower compared to last month.

• The U.S. average price for regular gasoline is 8.1 cents per gallon, or 3 percent, lower compared to this time last year. In the past week, the U.S. average decreased by 5.2 cents per gallon.
• Gasoline imports increased from the prior week at approximately 0.6 MMB/D. Last year at this time, imports stood at approximately 0.5 MMB/D.

• Implied demand for gasoline was higher on the week at approximately 9.2 MMB/D. Demand stood at approximately 9.4 MMB/D at this time last year.

• In the past four weeks, U.S. gasoline demand has averaged approximately 9.1 MMB/D.

• U.S. gasoline supplies were up 1.8 MMB on the week at 230.1 MMB. U.S. supplies are 2.3 MMB higher than this time last year.

• Distillate stocks decreased 4.2 MMB on the week at 119.9 MMB and stand 8.9 MMB lower compared to the same period last year.

• Distillate demand was higher on the week at approximately 4.9 MMB/D. Demand stood at approximately 3.9 MMB/D at this time last year. On a four-week average, distillate demand was higher at approximately 4.2 MMB/D.

• On December 17, Missouri’s average retail price for E85 motor fuel, conventional motor fuel containing 85 percent ethanol, was $1.71 per gallon, 26.4 cents per gallon, or 13.4 percent, lower than the average price for conventional motor gasoline.

• On December 17, Missouri’s average retail price for B20, diesel fuel containing 20 percent biofuel, was $2.85 per gallon, 3.5 cents per gallon, or 1.3 percent, higher than the average price for conventional diesel fuel.

• According to EIA’s latest Short Term Energy Outlook dated December 11, 2018, U.S. regular gasoline retail prices, which averaged $2.15 per gallon in 2016 and $2.42 in 2017, are projected to average $2.73 in 2018.
**Natural Gas**

Approximately 51.4 percent (1,218,420) of Missouri households use natural gas to heat their homes. (Data updated from the most recent U.S. Census report.) Natural gas is also used to produce goods and electricity.

On December 19, 2018, natural gas futures on the NYMEX closed at $3.73 per million British thermal units (MMBtu), down approximately $0.73, or 16.3 percent, in the past month.

| Natural Gas - Near Month Future Prices (dollars per MMBtu) |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| NYMEX           | 12-19-18        | 11-21-18        | change          | 12-20-17        | change          |
|                 | $3.73           | $4.45           | down 16%        | $2.64           | up 41%          |

- The January 2019 NYMEX futures contract settled at $3.73 per MMBtu on December 19, down $0.11 from the December 18 settlement.
- In the past month, the futures contract has decreased 72.5 cents, or 16 percent.
- Futures are up $1.09, or 41 percent, in the past year.
- According to EIA’s December 14, 2018 Weekly Natural Gas Storage Report, U.S. natural gas supplies are 697 billion cubic feet (Bcf), or 20.1 percent, lower than last year at this time.
- According to the EIA, net withdrawals from working gas totaled 141 Bcf for the week ending December 14. Working natural gas stocks are at 2,773 Bcf, which is approximately 20 percent lower than the year-ago level and 21 percent lower than the five-year (2013–17) average for this week.
- Temperatures in the Lower 48 states averaged 36 degrees Fahrenheit (°F) for the week ending December 19th, 2°F lower than normal and 1°F lower than last year at that time. Temperatures were 5°F colder than the prior report week. Cooling degree days nationally were 1 day below the normal, with regional variations above and below their respective normals. Heating degree days were above the normal nationally, although the Mountain and Pacific regions had fewer heating degree days than the normal.
- According to the EIA, total U.S. consumption of natural gas fell 16% percent for the week ending December 19th, compared with the prior report week. In the residential and commercial sectors, consumption decreased by 25 percent. Natural gas consumed for power generation declined 11 percent week over week. Industrial sector consumption fell 3% percent week over week. Natural gas exports to Mexico decreased 2% percent over the week.
Propane

Approximately 9.0 percent (212,748) of Missouri households use propane to heat their homes. (Data updated from the most recent U.S. Census report.) Propane is also used to support commercial operations, produce goods, dry grain harvests and fuel vehicles.

On December 17, the average Missouri retail price for residential propane was approximately $1.70 per gallon, down 27 cents, or less than 1 percent, in the past year.

<table>
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<tr>
<th>Propane - Retail Prices (cents per gallon)</th>
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• According to the Division of Energy’s most recent statewide propane price survey conducted December 17, the average Missouri retail residential propane price was approximately $1.70 per gallon, down 27 cents compared to last year at this time.

• According to the survey, the highest Missouri retail residential price for propane was almost $1.95 per gallon. The lowest retail price was almost $1.40 per gallon.

• U.S. propane/propylene stocks decreased over the report week at 73.2 MMB as of December 14, 2018, 5.6 MMB, or 7.1 percent, lower than the five-year average inventory level for this same time of year. Midwest inventories decreased by approximately 2.5 MMB to 21.9 MMB for the report week. Midwest inventories stood at approximately 23.6 MMB at the same time last year.

• U.S. propane consumption was lower week over week at approximately 1.8 MMB/D. Consumption stood at over 1.3 MMB/D at the same time last year.

For more information on propane, please visit: https://energy.mo.gov/resources/be-prepared-for-propane

To access previous issues of the Energy Bulletin, or to subscribe, please visit: https://energy.mo.gov/energy-bulletins

To learn more about Missouri energy issues, please visit: http://energy.mo.gov/energy

For more information about the Comprehensive State Energy Plan, please visit: https://energy.mo.gov/comprehensive-state-energy-plan

The Missouri Energy Bulletin is distributed twice a month by the Missouri Department of Economic Development’s Division of Energy. The Division of Energy collects transportation and propane heating fuel prices from a sample of retail providers located
throughout the state. The average price reported is based on these sample prices and may or may not reflect the actual price of a particular retail provider. To preserve confidentiality, price data are averaged and reported by region. The bulletin is a public resource made available to state government decision-makers, other interested individuals upon request and online at the Division’s web address. The Department thanks each of the following in helping to provide accurate, timely data on fuel supplies and prices: the U.S. Department of Energy's Energy Information Administration; the National Association of State Energy Officials; the St. Louis AAA Auto Club; and Missouri’s energy retailers. For more information, contact: MO Dept. of Economic Development, Division of Energy, P.O. Box 1766, Jefferson City, MO 65102-1766; Phone: 573-751-2254; Fax: 573-751-6860; Email: energy@ded.mo.gov; Web Address: http://energy.mo.gov/energy/stay-informed/missouri-energy-bulletins.