Highlights

- Mid-Atlantic propane inventories increased 998,000 barrels (22.7%) since last week to 5.392 million barrels. Inventories are 2.4% below the year-ago level and 17.3% above the 5-year average.
- Mid-Atlantic ultra-low sulfur (ULS) distillate inventories decreased 0.5 million barrels (1.8%) since last week to 32.3 million barrels. Inventories are 133.8% above the year-ago level and 34.3% above the 5-year average.
- New York Statewide average retail prices of ultra-low sulfur (ULS) heating oil and propane increased while the average retail price of kerosene remained the same since the last survey.

Retail Petroleum Prices—On a statewide basis since the last survey on November 2, the price increased $0.014/gallon (0.6%) to $2.375/gallon for ULS heating oil, the price remained the same at $2.894/gallon for kerosene and the price increased $0.002/gallon (0.1%) to $2.534/gallon for propane. Compared to a year earlier, prices decreased $0.820/gallon (25.7%) for heating oil, $0.701/gallon (19.5%) for kerosene, and $0.209/gallon (7.6%) for propane.

Crude Oil Prices—For the week ending 11/6/2020, WTI crude oil spot prices averaged $37.71/bbl, an increase of $0.39/bbl (1.0%) from the week-ago average of $37.32/bbl. WTI prices are now $18.98/bbl (33.5%) below the year-ago weekly average of $56.69/bbl. The all-time weekly average high of $142.52/bbl occurred on 7/04/08.

Spot Natural Gas Prices—For the week ending 11/6/2020, Henry Hub natural gas spot prices averaged $2.736 per million Btu (mmBtu), a decrease of $0.306/mmBtu (10.1%) from the prior week level of $3.042/mmBtu. Prices are currently $0.054/mmBtu (1.9%) below the year-earlier weekly average of $2.790/mmBtu.

Residential Natural Gas Prices—The NYS average price in August 2020 was $1.922/therm, an increase of $0.048/therm (2.6%) from the July 2020 price of $1.874/therm, and was $0.028/therm (1.4%) lower than the year-earlier average of $1.950/therm.

Middle Atlantic Stocks—Current and historic heating fuel inventory data is presented in the table below.

<table>
<thead>
<tr>
<th>Fuel Type</th>
<th>11/6/2020</th>
<th>10/30/2020</th>
<th>% Change vs. Last Week</th>
<th>Year Ago</th>
<th>% Change vs. Last Year</th>
<th>5-Year Average</th>
<th>% Change vs. 5-Year Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>ULS Distillate (0-15 ppm)</td>
<td>32.3</td>
<td>32.8</td>
<td>-1.8%</td>
<td>13.8</td>
<td>133.8%</td>
<td>24.0</td>
<td>34.3%</td>
</tr>
<tr>
<td>Non-road Diesel (15-500 ppm)</td>
<td>0.8</td>
<td>1.0</td>
<td>-20.7%</td>
<td>0.8</td>
<td>4.3%</td>
<td>1.2</td>
<td>-34.5%</td>
</tr>
<tr>
<td>High Sulfur Distillate (&gt;500 ppm)</td>
<td>1.8</td>
<td>1.9</td>
<td>-2.9%</td>
<td>2.7</td>
<td>-32.8%</td>
<td>3.5</td>
<td>-48.4%</td>
</tr>
<tr>
<td>Total Distillate Oil</td>
<td>34.9</td>
<td>35.7</td>
<td>-2.4%</td>
<td>17.2</td>
<td>102.2%</td>
<td>28.7</td>
<td>21.3%</td>
</tr>
<tr>
<td>Propane</td>
<td>5.392</td>
<td>4.394</td>
<td>22.7%</td>
<td>5.524</td>
<td>-2.4%</td>
<td>4.598</td>
<td>17.3%</td>
</tr>
<tr>
<td>#6 Residual Oil</td>
<td>6.7</td>
<td>6.2</td>
<td>8.8%</td>
<td>7.0</td>
<td>-3.8%</td>
<td>6.3</td>
<td>6.7%</td>
</tr>
<tr>
<td>US Natural Gas</td>
<td>3.927</td>
<td>3.919</td>
<td>0.2%</td>
<td>3.731</td>
<td>5.3%</td>
<td>3.751</td>
<td>4.7%</td>
</tr>
<tr>
<td>US Crude Oil</td>
<td>488.7</td>
<td>484.4</td>
<td>0.9%</td>
<td>449.0</td>
<td>8.8%</td>
<td>457.6</td>
<td>6.8%</td>
</tr>
</tbody>
</table>

Notes: Natural Gas in billion cubic feet (Bcf); Middle Atlantic is DE, DC, MD, NJ, NY, and PA
ppm = parts per million sulfur content
Source: US DOE/EIA
New York State Retail ULS #2 Heating Oil Posted Credit Prices (dollars per gallon)

<table>
<thead>
<tr>
<th>REGION</th>
<th>11/9/2020</th>
<th>11/2/2020</th>
<th>% Change vs. Prior Survey</th>
<th>Year Ago</th>
<th>% Change vs. Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Island*</td>
<td>2.560</td>
<td>2.536</td>
<td>0.9%</td>
<td>3.400</td>
<td>-24.7%</td>
</tr>
<tr>
<td>New York City*</td>
<td>2.517</td>
<td>2.499</td>
<td>0.7%</td>
<td>3.317</td>
<td>-24.1%</td>
</tr>
<tr>
<td>Lower Hudson</td>
<td>2.335</td>
<td>2.299</td>
<td>1.6%</td>
<td>3.220</td>
<td>-27.5%</td>
</tr>
<tr>
<td>Upper Hudson</td>
<td>2.213</td>
<td>2.214</td>
<td>0.0%</td>
<td>3.044</td>
<td>-27.3%</td>
</tr>
<tr>
<td>Capital District</td>
<td>2.130</td>
<td>2.123</td>
<td>0.3%</td>
<td>2.912</td>
<td>-26.9%</td>
</tr>
<tr>
<td>North Country</td>
<td>2.362</td>
<td>2.350</td>
<td>0.5%</td>
<td>3.200</td>
<td>-26.2%</td>
</tr>
<tr>
<td>Central</td>
<td>2.195</td>
<td>2.187</td>
<td>0.4%</td>
<td>2.963</td>
<td>-25.9%</td>
</tr>
<tr>
<td>Western</td>
<td>2.622</td>
<td>2.628</td>
<td>-0.2%</td>
<td>3.361</td>
<td>-22.0%</td>
</tr>
<tr>
<td>Statewide</td>
<td>2.375</td>
<td>2.361</td>
<td>0.6%</td>
<td>3.195</td>
<td>-25.7%</td>
</tr>
</tbody>
</table>

New York State Retail Propane Posted Credit Prices - 1,100 gallon usage category (dollars per gallon)

<table>
<thead>
<tr>
<th>REGION</th>
<th>11/9/2020</th>
<th>11/2/2020</th>
<th>% Change vs. Prior Survey</th>
<th>Year Ago</th>
<th>% Change vs. Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Island*</td>
<td>3.091</td>
<td>3.088</td>
<td>0.1%</td>
<td>2.978</td>
<td>3.8%</td>
</tr>
<tr>
<td>Mid-Hudson*</td>
<td>2.719</td>
<td>2.716</td>
<td>0.1%</td>
<td>2.718</td>
<td>0.0%</td>
</tr>
<tr>
<td>Capital District</td>
<td>2.382</td>
<td>2.375</td>
<td>0.3%</td>
<td>2.558</td>
<td>-6.9%</td>
</tr>
<tr>
<td>North Country</td>
<td>2.625</td>
<td>2.628</td>
<td>-0.1%</td>
<td>3.528</td>
<td>-25.6%</td>
</tr>
<tr>
<td>Central</td>
<td>2.360</td>
<td>2.362</td>
<td>-0.1%</td>
<td>2.479</td>
<td>-4.8%</td>
</tr>
<tr>
<td>Western</td>
<td>2.365</td>
<td>2.362</td>
<td>0.1%</td>
<td>2.492</td>
<td>-5.1%</td>
</tr>
<tr>
<td>Statewide*</td>
<td>2.534</td>
<td>2.532</td>
<td>0.1%</td>
<td>2.743</td>
<td>-7.6%</td>
</tr>
</tbody>
</table>

New York State Retail Kerosene Posted Credit Prices (dollars per gallon)

<table>
<thead>
<tr>
<th>REGION</th>
<th>11/9/2020</th>
<th>11/2/2020</th>
<th>% Change vs. Prior Survey</th>
<th>Year Ago</th>
<th>% Change vs. Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid-Hudson</td>
<td>2.922</td>
<td>2.940</td>
<td>-0.6%</td>
<td>3.692</td>
<td>-20.9%</td>
</tr>
<tr>
<td>Capital District</td>
<td>2.742</td>
<td>2.734</td>
<td>0.3%</td>
<td>3.338</td>
<td>-17.9%</td>
</tr>
<tr>
<td>North Country</td>
<td>2.975</td>
<td>2.976</td>
<td>0.0%</td>
<td>3.677</td>
<td>-19.1%</td>
</tr>
<tr>
<td>Central</td>
<td>2.758</td>
<td>2.753</td>
<td>0.2%</td>
<td>3.428</td>
<td>-19.5%</td>
</tr>
<tr>
<td>Western</td>
<td>3.130</td>
<td>3.097</td>
<td>1.1%</td>
<td>3.835</td>
<td>-18.4%</td>
</tr>
<tr>
<td>Statewide</td>
<td>2.894</td>
<td>2.894</td>
<td>0.0%</td>
<td>3.595</td>
<td>-19.5%</td>
</tr>
</tbody>
</table>

New York State Average Residential Natural Gas Prices ($) per therm

<table>
<thead>
<tr>
<th>REGION</th>
<th>August 2020</th>
<th>July 2020</th>
<th>% Change vs. Prior Month</th>
<th>August 2019</th>
<th>% Change vs. Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statewide</td>
<td>1.922</td>
<td>1.874</td>
<td>2.6%</td>
<td>1.950</td>
<td>-1.4%</td>
</tr>
</tbody>
</table>

* Revision

Historic Retail Prices—Statewide average high and low prices since Sept. 1997 for heating oil & propane & Sept. 2000 for kerosene.

- Heating oil—highest price $4.778/gallon on 7/14/08, lowest price $0.876/gallon on 9/08/98.
- Kerosene—highest price $5.068/gallon on 7/14/08, lowest price $1.309/gallon on 9/09/02.

Residential Natural Gas Prices: Statewide average prices are derived from US EIA most currently available data. NYS gas utility specific prices can be found on the NYS DPS website at http://www.dps.ny.gov/TypicalBills.htm#GasRes.

Heating Degree Days — On a statewide basis during the past week, the number of heating degree-days (124) was 18.4% below the year-ago level (152) and 3.9% below the normal trend (129). On a cumulative basis since October 1st, current year heating degree-days (495) are behind the year-ago level (510) by 2.9% and behind the normal trend (552) by 10.3%.

<table>
<thead>
<tr>
<th>Region</th>
<th>2020</th>
<th>2019</th>
<th>Normal</th>
<th>2020-21</th>
<th>2019-20</th>
<th>Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albany</td>
<td>138</td>
<td>151</td>
<td>147</td>
<td>648</td>
<td>526</td>
<td>642</td>
</tr>
<tr>
<td>Binghamton</td>
<td>128</td>
<td>189</td>
<td>161</td>
<td>621</td>
<td>655</td>
<td>717</td>
</tr>
<tr>
<td>Buffalo</td>
<td>96</td>
<td>176</td>
<td>144</td>
<td>524</td>
<td>584</td>
<td>620</td>
</tr>
<tr>
<td>Glens Falls</td>
<td>79</td>
<td>176</td>
<td>167</td>
<td>315</td>
<td>673</td>
<td>761</td>
</tr>
<tr>
<td>Massena</td>
<td>126</td>
<td>185</td>
<td>174</td>
<td>714</td>
<td>725</td>
<td>782</td>
</tr>
<tr>
<td>NYC</td>
<td>68</td>
<td>99</td>
<td>96</td>
<td>240</td>
<td>251</td>
<td>359</td>
</tr>
<tr>
<td>Rochester</td>
<td>104</td>
<td>175</td>
<td>145</td>
<td>561</td>
<td>551</td>
<td>626</td>
</tr>
<tr>
<td>Syracuse</td>
<td>107</td>
<td>153</td>
<td>147</td>
<td>523</td>
<td>534</td>
<td>642</td>
</tr>
<tr>
<td>Watertown</td>
<td>115</td>
<td>168</td>
<td>164</td>
<td>654</td>
<td>642</td>
<td>744</td>
</tr>
<tr>
<td>Statewide</td>
<td>124</td>
<td>152</td>
<td>129</td>
<td>495</td>
<td>510</td>
<td>552</td>
</tr>
</tbody>
</table>

Distillate Stocks — Current and historic heating fuel inventory data is presented in the graphs below.
Propane Stocks—Current and historic heating fuel inventory data is presented in the graphs below.

Retail Btu Price Equivalents—The New York State heating fuel prices Btu graph equates the retail price for New York State-wide average residential ultra-low sulfur heating oil, kerosene, propane, and natural gas on a dollar per million Btu (MMBtu) basis.

Spot Btu Price Equivalents—The Btu spot market graph equates the spot market price, in table below, for NY Harbor ultra-low sulfur diesel fuel and 0.3% sulfur high pour #6 residual fuel, Mont Belvieu propane, and the New York Citygate natural gas price on a dollar per million Btu (MMBtu) basis.

Note: Natural gas prices are from the U.S. EIA and provided on a monthly basis and delayed by 3 months. The monthly average price of natural gas is higher during the summer months due to low delivery volumes and fixed delivery charges and does not necessarily indicate a higher underlying supply price. Higher average natural gas prices in the summer months are not indicative of higher future prices during the winter months.
Weather Outlooks – Based on data and maps provided by the National Oceanic and Atmospheric Administration (NOAA) and the Northeast Regional Climate Center at Cornell University (NRCC).

Statewide Forecast HDD: On a statewide basis for the week ending November 14th, the number of forecasted heating degree-days (58) is 73.1% below last year (216) and 60.5% below the normal trend (147). Regional HDD forecasts are provided in the map and table below.

Regional Heating Degree-Day Forecast

<table>
<thead>
<tr>
<th>City</th>
<th>6-Day Forecast</th>
<th>Last Year</th>
<th>Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albany</td>
<td>160</td>
<td>206</td>
<td>151</td>
</tr>
<tr>
<td>Binghamton</td>
<td>163</td>
<td>230</td>
<td>160</td>
</tr>
<tr>
<td>Buffalo</td>
<td>153</td>
<td>216</td>
<td>145</td>
</tr>
<tr>
<td>Glens Falls</td>
<td>164</td>
<td>240</td>
<td>167</td>
</tr>
<tr>
<td>Massena</td>
<td>171</td>
<td>276</td>
<td>176</td>
</tr>
<tr>
<td>NYC</td>
<td>101</td>
<td>161</td>
<td>101</td>
</tr>
<tr>
<td>Rochester</td>
<td>155</td>
<td>221</td>
<td>147</td>
</tr>
<tr>
<td>Syracuse</td>
<td>151</td>
<td>215</td>
<td>145</td>
</tr>
<tr>
<td>Watertown</td>
<td>166</td>
<td>244</td>
<td>159</td>
</tr>
</tbody>
</table>

Source: NOAA, Northeast Regional Climate Center at Cornell University (NRCC)

6-10 Day Outlook Temperature Probability from the Climate Prediction Center (NOAA). The forecasted map presents the 6-10 day temperature probability outlook for the United States for November 17, 2020 – November 21, 2020. This is in comparison to the 30-year normal (1981-2010).

8-14 Day Outlook Temperature Probability from the Climate Prediction Center (NOAA). The forecasted map presents the 8-14 day temperature probability outlook for the United States for November 19, 2020 – November 25, 2020. This is in comparison to the 30-year normal (1981-2010).

Additional historic regional specific prices and supply information is available at NYSERDA’s website. For more information please contact Matthew Milford at (518) 862-1090 ext. 3416, e-mail matthew.milford@nyserda.ny.gov.