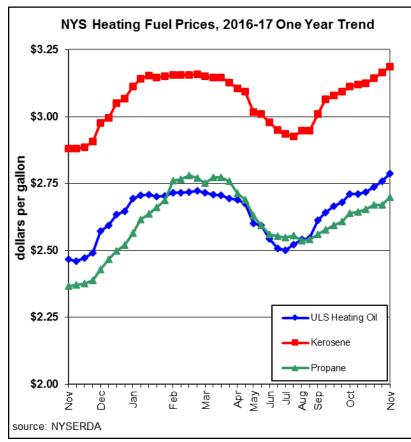
Highlights

- Cumulative New York statewide heating degree-days since October 1st (292) are behind last year (341) by 14.4% and the 30-year normal (467) by 37.5%.
- The weekly average U.S. WTI crude oil spot price increased by \$2.08 per barrel (4.0%) since last week to \$54.59 per barrel, the highest price since July 2015, and is now 20.0% above the year ago price of \$45.51 per barrel.
- New York statewide average retail prices of ultra-low sulfur (ULS) heating oil, kerosene, and propane all increased since the last survey.

Retail Petroleum Prices—On a statewide basis since the last survey on October 30th, prices increased \$0.029/gallon (1.1%) to \$2.788/gallon for ULS heating oil, \$0.022/gallon (0.7%) to \$3.187/gallon for kerosene, and \$0.028/gallon (1.0%) to \$2.698/gallon for propane. Compared to a year earlier, prices increased \$0.321/gallon (13.0%) for heating oil, \$0.307/gallon (10.7%) for kerosene and \$0.331/gallon (14.0%) for propane.

Crude Oil Prices—For the week ending 11/3/17, WTI crude oil spot prices averaged \$54.59/bbl, an increase of \$2.08/bbl (4.0%) from the week-ago average of \$52.51/bbl. WTI prices are now \$9.08/bbl (20.0%) above the year-ago weekly average of \$45.51/bbl. The all-time weekly average high of \$142.52/bbl occurred on 7/04/08.

Spot Natural Gas Prices—For the week ending 11/3/17, Henry Hub natural gas spot prices averaged \$2.758 per million Btu (mmBtu), a decrease of \$0.132/mmBtu (4.6%) from the prior week level of \$2.890/mmBtu. Prices are currently \$0.332/mmBtu (13.7%) above the year-earlier weekly average of \$2.426/mmBtu.



Residential Natural Gas Prices—The NYS average price in August 2017 was \$1.831/therm, a decrease of \$0.009/therm (0.5%) from the prior month of \$1.840/therm, and was \$0.103/therm (5.9%) higher than the year earlier average of \$1.728/therm.

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

| Middle Atlantic Region, Weekly Inventories (million barrels) | | | | | | | |
|--|-----------|------------|---------------------------|----------|---------------------------|-------------------|-----------------------------|
| Fuel Type | 11/3/2017 | 10/27/2017 | % Change ws. Last Week | Year Ago | % Change vs. Last Year | 5-Year Average | % Change vs. 5- Year Avg |
| ULS Distillate (0-15 ppm) | 23.0 | 22.4 | 2.4% | 34.0 | -32.6% | 20.3 | 12.9% |
| Non-road Diesel (15-500 ppm) | 1.0 | 1.1 | -4.6% | 2.3 | -55.9% | 1.1 | -12.1% |
| High Sulfur Distillate (>500 ppm) | 3.0 | 3.0 | -0.2% | 3.7 | -18.6% | 6.3 | -52.8% |
| Total Distillate Oil | 27.0 | 26.5 | 1.8% | 40.0 | -32.6% | 27.8 | -3.1% |
| Propane | 4.397 | 4.480 | -1.9% | 3.651 | 20.4% | 3.399 | 29.4% |
| #6 Residual Oil | 4.8 | 5.2 | -9.0% | 7.7 | -38.1% | 6.6 | -28.2% |
| US Natural Gas | 3,790 | 3,775 | 0.4% | 4,009 | -5.5% | 3,861 | -1.8% |
| US Crude Oil | 457.1 | 454.9 | 0.5% | 485.0 | -5.7% | 398.7 | 14.7% |

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



| REGION | 11/6/2017 | 10/30/2017 | % Change ws. Prior Survey | Year Ago | % Change vs. Last Year |
|------------------|-----------------------------|-----------------------|-------------------------------|------------------------|---------------------------|
| Long Island | 2.993 | 2.942 | 1.7% | 2.621 | 14.2% |
| New York City | 2.896 | 2.884 | 0.4% | 2.558 | 13.2% |
| Lower Hudson | 2.875 | 2.874 | 0.0% | 2.558 | 12.4% |
| Upper Hudson | 2.719 | 2.673 | 1.7% | 2.401 | 13.2% |
| Capital District | 2.617 | 2.604 | 0.5% | 2.304 | 13.6% |
| North Country | 2.597 | 2.580 | 0.7% | 2.333 | 11.3% |
| Central | 2.570 | 2.538 | 1.3% | 2.325 | 10.5% |
| Western | 2.841 | 2.784 | 2.0% | 2.466 | 15.2% |
| Statewide | 2.788 | 2.759 | 1.1% | 2.467 | 13.0% |
| Nev | v York State Retail Propane | Posted Credit Prices | - 1,100 gallon usage categor | y (dollars per gallon) |) |
| Long Island | 3.245 | 3.180 | 2.0% | 2.910 | 11.5% |
| Mid-Hudson | 2.667 | 2.655 | 0.5% | 2.310 | 15.5% |
| Capital District | 2.672 | 2.674 | -0.1% | 2.569 | 4.0% |
| North Country | 3.290 | 3.275 | 0.5% | 2.737 | 20.2% |
| Central | 2.454 | 2.392 | 2.6% | 2.107 | 16.5% |
| Western | 2.353 | 2.336 | 0.7% | 2.115 | 11.3% |
| Statewide | 2.698 | 2.670 | 1.0% | 2.367 | 14.0% |
| | New York State | Retail Kerosene Poste | d Credit Prices (dollars per | gallon) | • |
| Mid-Hudson | 3.286 | 3.269 | 0.5% | 2.963 | 10.9% |
| Capital District | 3.085 | 3.076 | 0.3% | 2.813 | 9.7% |
| North Country | 3.174 | 3.174 | 0.0% | 2.933 | 8.2% |
| Central | 3.073 | 3.041 | 1.1% | 2.806 | 9.5% |
| Western | 3.250 | 3.183 | 2.1% | 2.797 | 16.2% |
| Statewide | 3.187 | 3.165 | 0.7% | 2.880 | 10.7% |
| | New York Sta | ate Average Residenti | al Natural Gas Prices (\$/the | rm) | |
| REGION | August 2017 | July 2017 | % Change vs. Prior Month | August 2016 | % Change vs. Last Year |
| Statewide | 1.831 | 1.840 | -0.5% | 1.728 | 5.9% |

^{*} Revision

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

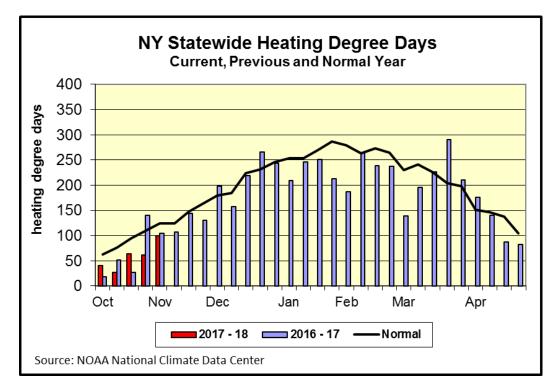
- Heating oil—highest price \$4.778/gallon on 7/14/08, lowest price \$0.876/gallon on 9/08/98.
- Propane—highest price \$3.811/gallon on 2/17/14, lowest price \$1.072/gallon on 9/20/99.
- Kerosene—highest price \$5.068/gallon on 7/14/08, lowest price \$1.309/gallon on 9/09/02.

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.

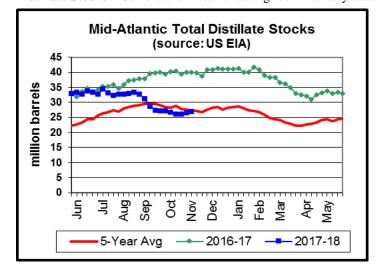
New York State Regions: Long Island: Nassau and Suffolk New York City: Bronx, Kings, New York, Queens, and Richmond Lower Hudson: Dutchess, Putnam, Rockland, and Westchester Upper Hudson: Columbia, Greene, Orange, Sullivan, and Ulster Capital District: Albany, Fulton Montgomery, Rensselaer, Saratoga, Schenectady, Schoharie, and Washington North Country: Clinton, Essex, Franklin, Hamilton, Jefferson, Lewis, St. Lawrence, and Warren Central: Broome, Cayuga, Chenango, Cortland, Delaware, Herkimer, Madison, Oneida, Onondaga, Oswego, Otsego, Tioga, and Tompkins Western: Allegany, Cattaraugus, Chautauqua, Chemung, Erie, Genesee, Livingston, Monroe, Niagara, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Wyoming, and Yates counties. Propane & Kerosene: Mid-Hudson: Columbia, Dutchess, Greene, Orange, Putnam, Rockland, Sullivan, Ulster, and Westchester counties.

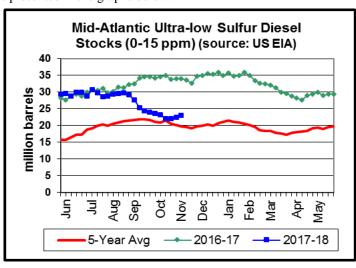
Heating Degree Days— On a statewide basis during the past week, the number of heating degree-days (99) was 5.7% below the year-ago level of (105) and 20.2% below the normal trend (124). On a cumulative basis since October 1st, current year heating degree-days (292) are behind the year-ago level (341) by 14.4% and behind the normal trend (467) by 37.5%.

| New York State Heating Degree Day Information, Weekly & Cumulative | | | | | | | |
|--|------|------|--------|---------------------------|---------|--------|--|
| Week Ending November 04 | | | | Cumulative From October 1 | | | |
| Region | 2017 | 2016 | Normal | 2017-18 | 2016-17 | Normal | |
| Albany | 90 | 125 | 141 | 303 | 439 | 545 | |
| Binghamton | 139 | 146 | 154 | 400 | 557 | 604 | |
| Buffalo | 141 | 105 | 137 | 334 | 372 | 522 | |
| Glens Falls | 110 | 150 | 161 | 419 | 524 | 644 | |
| Massena | 133 | 145 | 166 | 400 | 539 | 660 | |
| NYC | 48 | 52 | 89 | 102 | 178 | 302 | |
| Rochester | 133 | 105 | 138 | 313 | 379 | 528 | |
| Syracuse | 140 | 138 | 140 | 336 | 471 | 542 | |
| Watertown | 138 | 141 | 158 | 396 | 524 | 628 | |
| Statewide | 99 | 105 | 124 | 292 | 341 | 467 | |

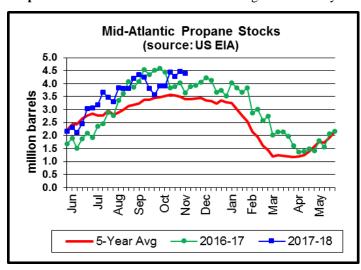


Distillate Stocks—Current and historic heating fuel inventory data is presented in the graphs below.

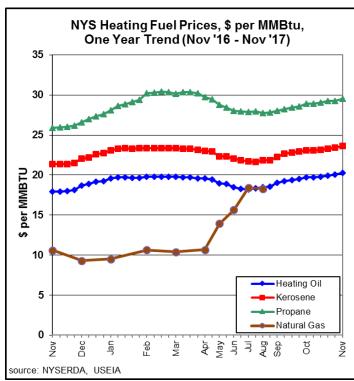




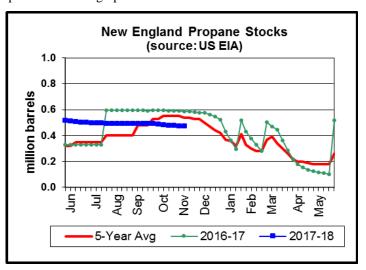
Propane Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



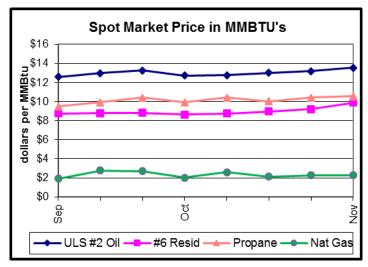
Retail Btu Price Equivalents—The New York State Heating Fuel Prices Btu graph equates the retail price for New York Statewide average residential ultra-low sulfur heating oil, kerosene, propane, and natural gas on a dollar per million Btu (MMBtu) basis.



Note: Natural gas prices are from the U.S. EIA and provided on a monthly basis and delayed by 3 months.



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 City gate natural gas price on a dollar per million Btu (MMBtu) basis.



| New York Spot Prices, Weekly Average | | | | | | |
|--------------------------------------|-----------|----------|----------|--|--|--|
| Fuel | 11/3/2017 | Year Ago | % Change | | | |
| Ultra LS Diesel | 1.875 | 1.469 | 27.6% | | | |
| #2 Fuel Oil | 1.781 | 1.399 | 27.3% | | | |
| #6 Residual 0.3% | 1.476 | 1.148 | 28.6% | | | |
| Propane | 0.965 | 0.559 | 72.6% | | | |
| Natural Gas | 2.264 | 1.564 | 44.8% | | | |

Note: Fuel in \$/gallon, natural gas (\$/mmBtu)=NYcitygate

Additional historic <u>regional specific prices and supply information</u> is available at NYSERDA's website. For more information please contact Charlie Wesley at (518) 862-1090 ext. 3364, e-mail <u>Charles.Wesley@nyserda.ny.gov.</u>