

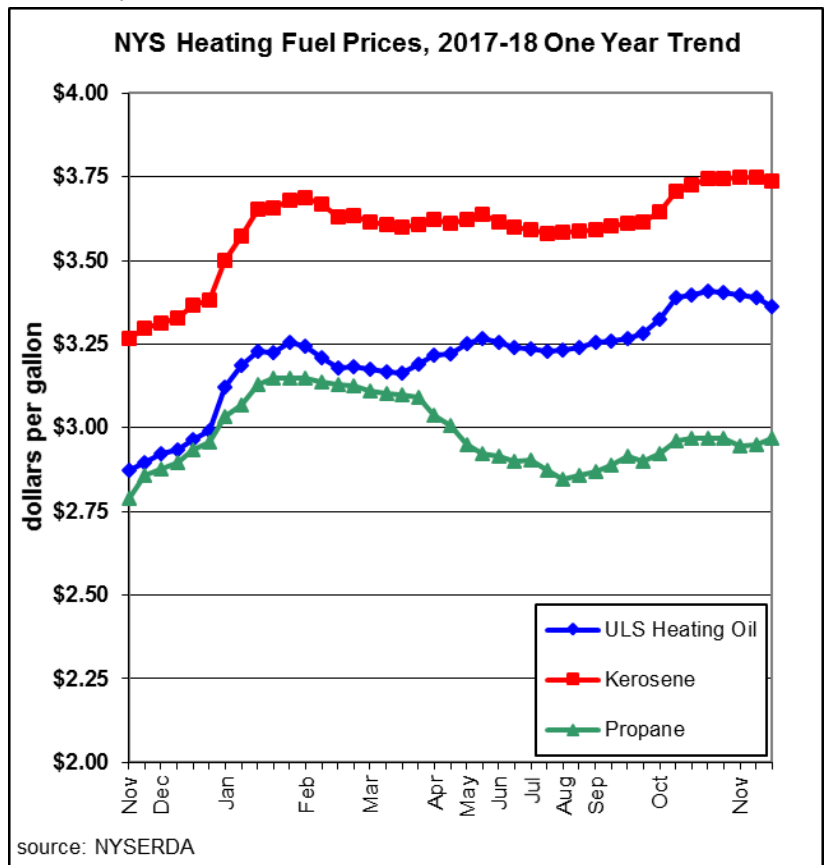
Highlights

- The weekly average WTI crude oil spot price decreased by \$4.65 per barrel (7.6%) to \$56.92 per barrel since last week. The weekly average price has decreased by \$18.21 per barrel (24.2%) over the past six weeks.
- For the week ending November 17, New York statewide heating degree-days (209) were 3.5% more than last year and 31.4% greater than the 30-year normal. Cumulative New York statewide heating degree-days since October 1st (811) are ahead of last year (634) by 27.9% and ahead of the 30-year normal (756) by 7.3%
- New York Statewide average retail prices of ultra-low sulfur (ULS) heating oil and kerosene decreased while the average price of propane increased since the last survey.

Retail Petroleum Prices—On a statewide basis since the last survey on November 12th, prices decreased \$0.026/gallon (0.8%) to \$3.362/gallon for ULS heating oil, \$0.014/gallon (0.4%) to \$3.736/gallon for kerosene, and the price increased \$0.018/gallon (0.6%) to \$2.969/gallon for propane. Compared to a year earlier, prices increased \$0.488/gallon (17.0%) for heating oil, \$0.467/gallon (14.3%) for kerosene and \$0.179/gallon (6.4%) for propane.

Crude Oil Prices—For the week ending 11/16/18, WTI crude oil spot prices averaged \$56.92/bbl, a decrease of \$4.65/bbl (7.6%) from the week-ago average of \$61.57/bbl. WTI prices are now \$1.11/bbl (2.0%) above the year-ago weekly average of \$55.81/bbl. The all-time weekly average high of \$142.52/bbl occurred on 7/04/08.

Spot Natural Gas Prices—For the week ending 11/16/18, Henry Hub natural gas spot prices averaged \$4.286 per million Btu (mmBtu), an increase of \$0.716/mmBtu (20.1%) from the prior week level of \$3.570/mmBtu. Prices are currently \$1.198/mmBtu (38.8%) above the year-earlier weekly average of \$3.088/mmBtu.



Residential Natural Gas Prices—The NYS average price in August 2018 was \$2.016/therm, an increase of \$0.069/therm (3.6%) from the July 2018 price of \$1.947/therm, and was \$0.172/therm (9.3%) higher than the year earlier average of \$1.844/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	11/16/2018	11/9/2018	% Change vs. Last Week	Year Ago	% Change vs. Last Year	5-Year Average	% Change vs. 5-Year Avg
ULS Distillate (0-15 ppm)	17.8	18.9	-5.9%	25.2	-29.6%	23.1	-22.9%
Non-road Diesel (15-500 ppm)	0.6	0.6	-4.4%	1.1	-42.6%	1.2	-48.6%
High Sulfur Distillate (>500 ppm)	2.7	2.6	0.6%	2.9	-7.8%	4.6	-42.8%
Total Distillate Oil	21.0	22.2	-5.1%	29.2	-27.9%	28.9	-27.2%
Propane	4,911	5,362	-8.4%	4,834	1.6%	3,927	25.1%
#6 Residual Oil	3.8	4.3	-11.3%	5.3	-27.3%	6.5	-40.8%
US Natural Gas	3,113	3,247	-4.1%	3,733	-16.6%	3,823	-18.6%
US Crude Oil	446.9	442.1	1.1%	457.1	-2.2%	423.0	5.7%

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



New York State Retail ULS #2 Heating Oil Posted Credit Prices (dollars per gallon)					
REGION	11/19/2018	11/12/2018	% Change vs. Prior Survey	Year Ago	% Change vs. Last Year
Long Island	3.542	3.574	-0.9%	3.046	16.3%
New York City	3.429	3.468	-1.1%	2.963	15.7%
Lower Hudson	3.469	3.500	-0.9%	2.971	16.8%
Upper Hudson	3.268	3.290	-0.7%	2.782	17.5%
Capital District	3.085	3.128	-1.4%	2.687	14.8%
North Country	3.305	3.304	0.0%	2.739	20.7%
Central	3.190	3.219	-0.9%	2.678	19.1%
Western	3.446	3.449	-0.1%	2.984	15.5%
Statewide	3.362	3.388	-0.8%	2.874	17.0%
New York State Retail Propane Posted Credit Prices - 1,100 gallon usage category (dollars per gallon)					
Long Island	3.264	3.214	1.6%	3.260	0.1%
Mid-Hudson	2.918	2.924	-0.2%	2.682	8.8%
Capital District	2.828	2.850	-0.8%	2.859	-1.1%
North Country	3.748	3.685	1.7%	3.414	9.8%
Central	2.745	2.721	0.9%	2.549	7.7%
Western	2.650	2.636	0.5%	2.472	7.2%
Statewide	2.969	2.951	0.6%	2.790	6.4%
New York State Retail Kerosene Posted Credit Prices (dollars per gallon)					
Mid-Hudson	3.843	3.847	-0.1%	3.350	14.7%
Capital District	3.518	3.557	-1.1%	3.148	11.8%
North Country	3.790	3.796	-0.2%	3.274	15.8%
Central	3.641	3.670	-0.8%	3.153	15.5%
Western	3.821	3.821	0.0%	3.383	12.9%
Statewide	3.736	3.750	-0.4%	3.269	14.3%
New York State Average Residential Natural Gas Prices (\$/therm)					
REGION	August 2018	July 2018	% Change vs. Prior Month	August 2017	% Change vs. Last Year
Statewide	2.016	1.947	3.6%	1.844	9.3%

* Revision

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

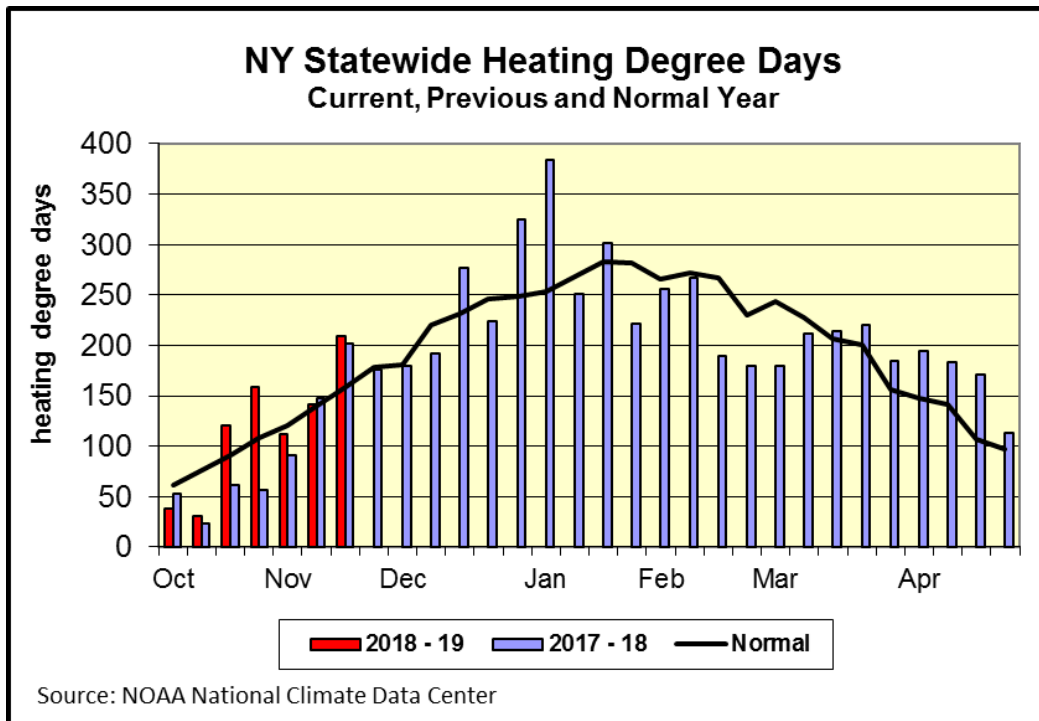
- Heating oil—highest price \$4.778/gallon on 7/14/08, lowest price \$0.876/gallon on 9/08/98.
- Propane—highest price \$3.811/gallon on 2/17/14, lowest price \$1.072/gallon on 9/20/99.
- Kerosene—highest price \$5.068/gallon on 7/14/08, lowest price \$1.309/gallon on 9/09/02.

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>.

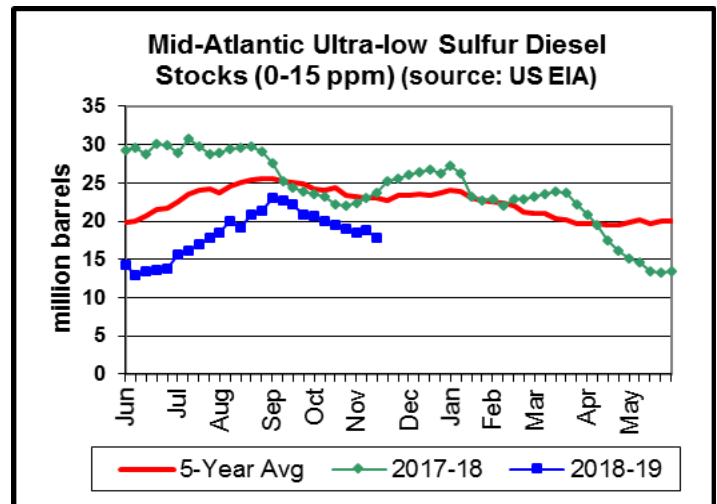
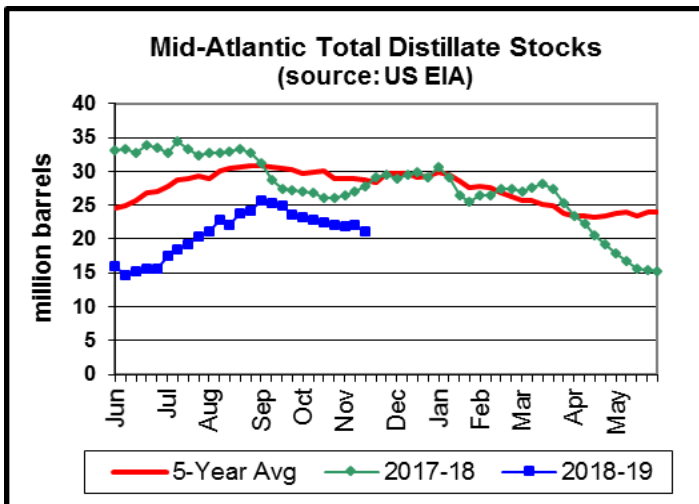
New York State Regions: *Long Island:* Nassau and Suffolk *New York City:* Bronx, Kings, New York, Queens, and Richmond *Lower Hudson:* Dutchess, Putnam, Rockland, and Westchester *Upper Hudson:* Columbia, Greene, Orange, Sullivan, and Ulster *Capital District:* Albany, Fulton Montgomery, Rensselaer, 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 (209) was 3.5% above the year-ago level (202) and 31.4% above the normal trend (159). On a cumulative basis since October 1st, current year heating degree-days (811) are ahead of the year-ago level (634) by 27.9% and ahead of the normal trend (756) by 7.3%.

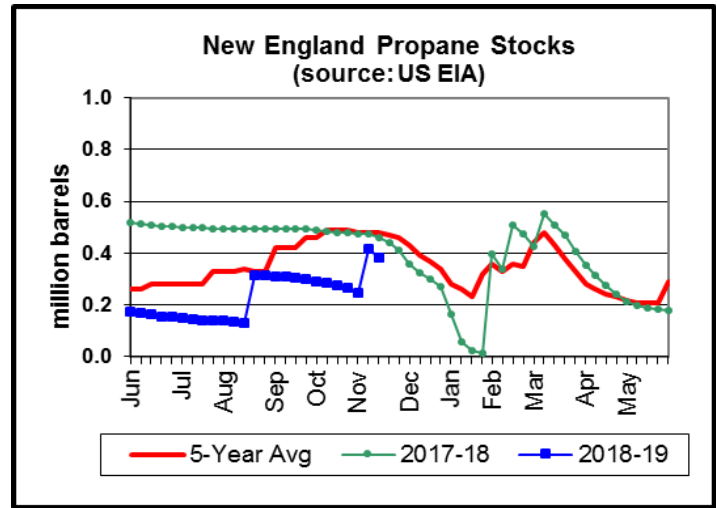
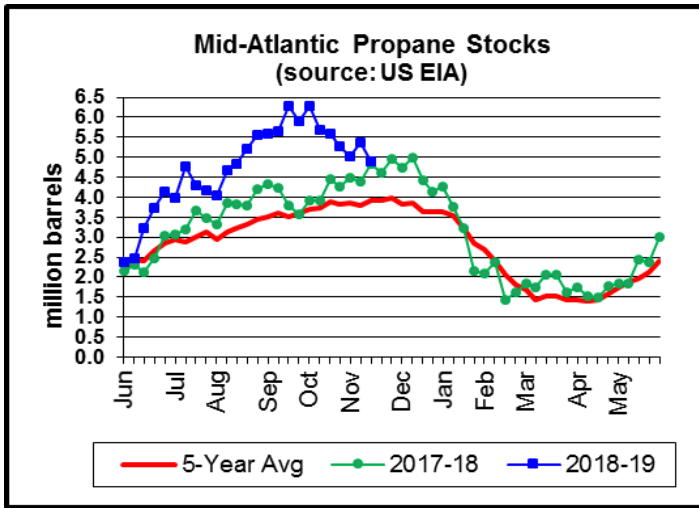
New York State Heating Degree Day Information, Weekly & Cumulative						
Region	Week Ending November 17			Cumulative From October 1		
	2018	2017	Normal	2018-19	2017-18	Normal
Albany	219	204	168	881	672	855
Binghamton	251	225	185	1,018	814	945
Buffalo	224	205	168	930	703	830
Glens Falls	244	229	189	1,036	834	994
Massena	269	234	200	1,140	809	1,029
NYC	162	150	119	493	352	514
Rochester	221	203	168	895	674	836
Syracuse	239	220	170	947	727	853
Watertown	242	228	189	1,057	796	976
Statewide	209	202	159	811	634	756



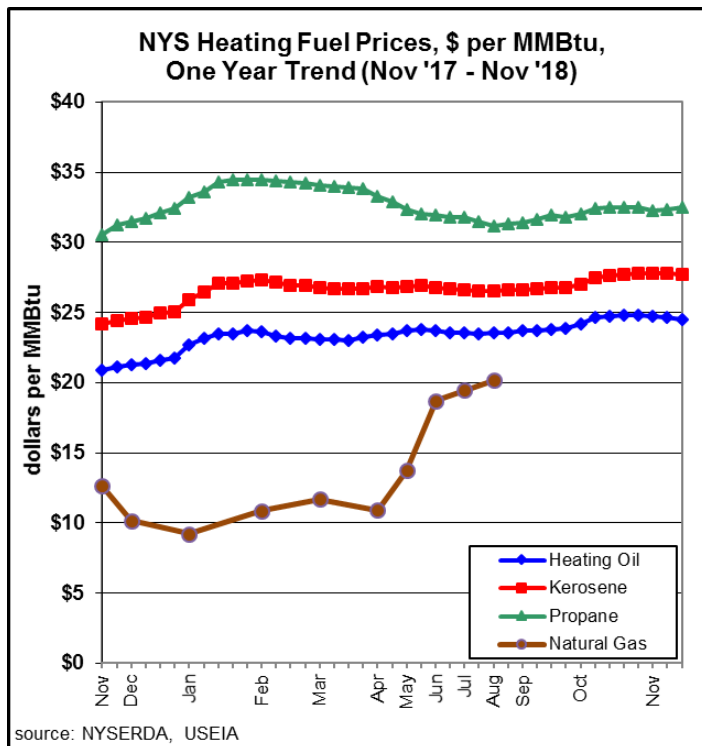
Distillate Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



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

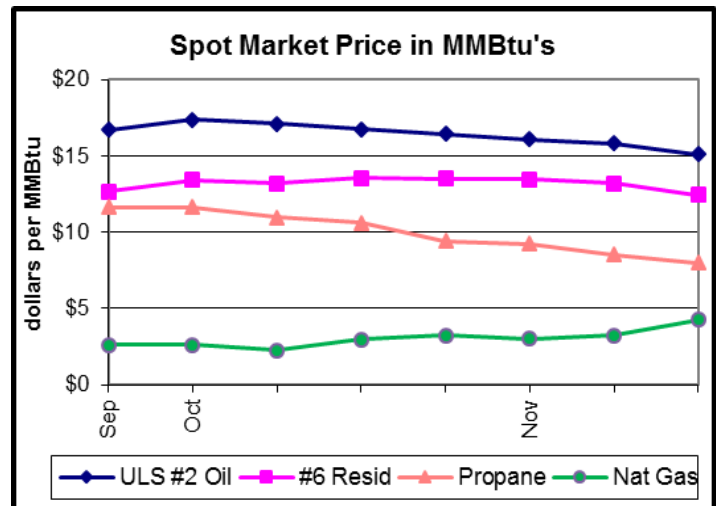


Retail Btu Price Equivalents—The New York State heating fuel prices Btu graph equates the retail price for New York Statewide average residential ultra-low sulfur heating oil, kerosene, propane, and natural gas on a dollar per million Btu (MMBtu) basis.



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



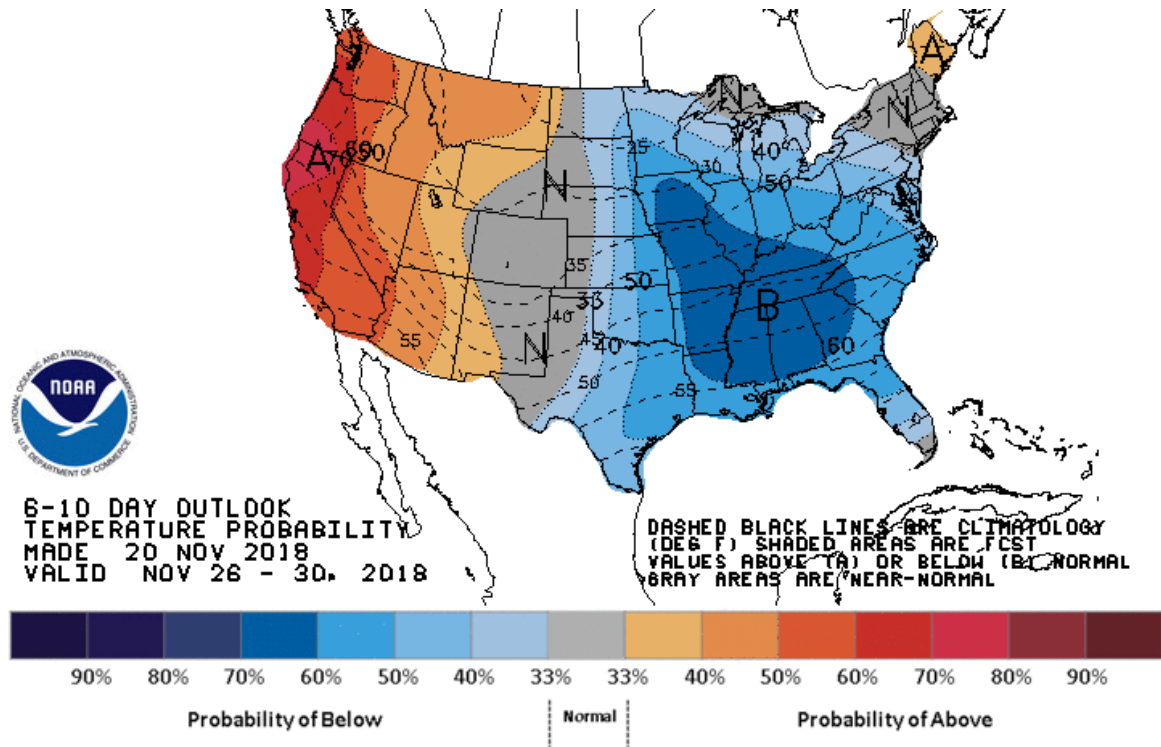
New York Spot Prices, Weekly Average			
Fuel	11/16/2018	Year Ago	% Change
Ultra LS Diesel	2.092	1.910	9.6%
#2 Fuel Oil	2.075	1.815	14.3%
#6 Residual 0.3%	1.861	1.472	26.5%
Propane	0.730	0.988	-26.1%
Natural Gas	4.255	3.268	30.2%

Note: Fuel in \$/gallon, natural gas (\$/MMBtu)=NYCitygate

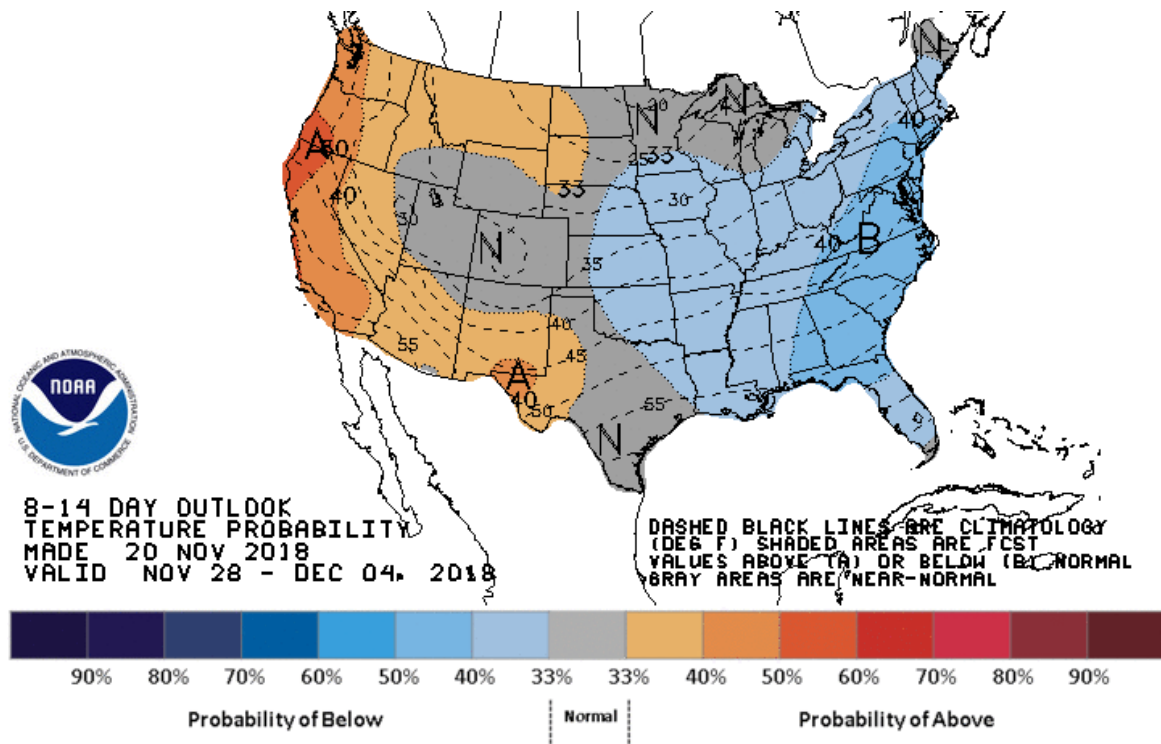
Weather Outlooks – Based on data and maps provided by the National Oceanic and Atmospheric Administration (NOAA)

Forecast HDD: On a statewide basis for the week ending November 24th, the number of forecasted heating degree-days (212) is the 24.7% higher than last year (170) and 24.0% higher than the normal trend (171).

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 26-30. 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 Nov. 28 - Dec. 4. 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@nyserdera.ny.gov.