

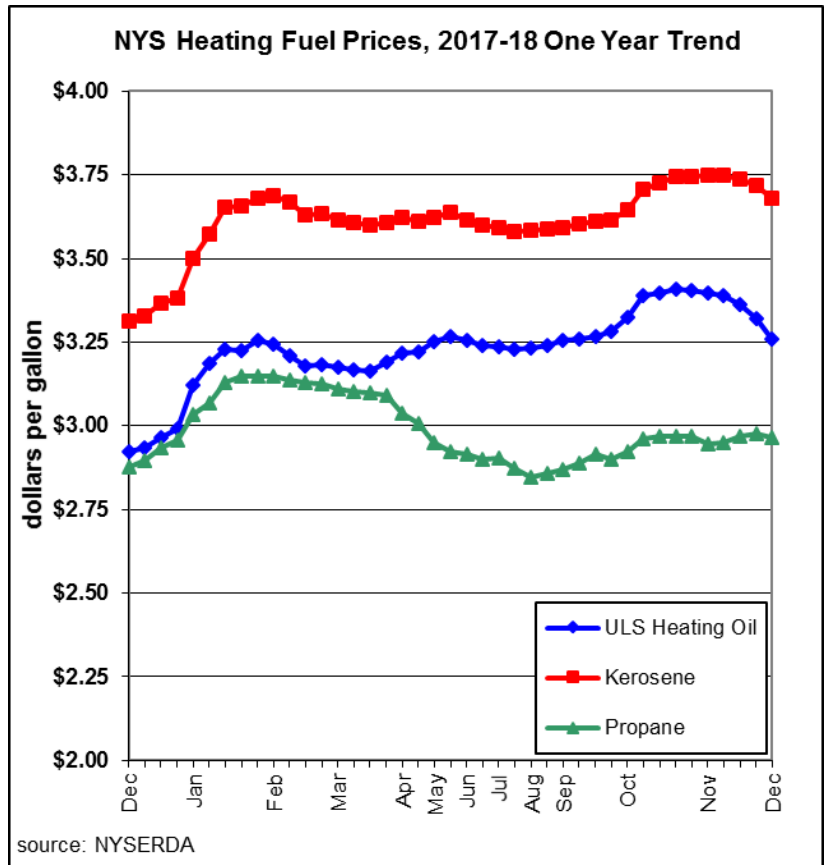
Highlights

- The weekly average WTI crude oil spot price decreased by \$3.98 per barrel (7.2%) to \$51.01 per barrel since last week. The weekly average price has decreased by \$24.12 per barrel (32.1%) over the past eight weeks.
- For the week ending December 1, New York statewide heating degree-days (194) were 11.5% more than last year and 7.8% greater than the 30-year normal.
- New York Statewide average retail prices of ultra-low sulfur (ULS) heating oil, kerosene, and propane all decreased since the last survey.

Retail Petroleum Prices—On a statewide basis since the last survey on November 26th, prices decreased \$0.060/gallon (1.8%) to \$3.261/gallon for ULS heating oil, \$0.037/gallon (1.0%) to \$3.682/gallon for kerosene, and \$0.010/gallon (0.3%) to \$2.966/gallon for propane. Compared to a year earlier, prices increased \$0.337/gallon (11.5%) for heating oil, \$0.367/gallon (11.1%) for kerosene and \$0.089/gallon (3.1%) for propane.

Crude Oil Prices—For the week ending 11/30/18, WTI crude oil spot prices averaged \$51.01/bbl, a decrease of \$3.98/bbl (7.2%) from the week-ago average of \$54.99/bbl. WTI prices are now \$6.80/bbl (11.8%) below the year-ago weekly average of \$57.81/bbl. The all-time weekly average high of \$142.52/bbl occurred on 7/04/08.

Spot Natural Gas Prices—For the week ending 11/30/18, Henry Hub natural gas spot prices averaged \$4.410 per million Btu (mmBtu), a decrease of \$0.260/mmBtu (5.6%) from the prior week level of \$4.670/mmBtu. Prices are currently \$1.500/mmBtu (51.5%) above the year-earlier weekly average of \$2.910/mmBtu.



Residential Natural Gas Prices—The NYS average price in September 2018 was \$1.952/therm, a decrease of \$0.064/therm (3.2%) from the August 2018 price of \$2.016/therm, and was \$0.198/therm (11.3%) higher than the year earlier average of \$1.754/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	11/30/2018	11/23/2018	% Change vs. Last Week	Year Ago	% Change vs. Last Year	5-Year Average	% Change vs. 5-Year Avg
ULS Distillate (0-15 ppm)	19.4	17.8	8.6%	26.1	-25.7%	23.4	-17.3%
Non-road Diesel (15-500 ppm)	0.4	0.6	-20.1%	0.8	-45.1%	1.3	-65.0%
High Sulfur Distillate (>500 ppm)	2.7	2.8	-3.1%	2.1	27.5%	4.7	-42.8%
Total Distillate Oil	22.5	21.2	6.3%	29.0	-22.4%	29.4	-23.5%
Propane	4.894	5.226	-6.4%	4.959	-1.3%	3.984	22.8%
#6 Residual Oil	4.4	4.1	6.5%	5.1	-14.3%	6.4	-31.4%
US Natural Gas	2,991	3,054	-2.1%	3,695	-19.1%	3,716	-19.5%
US Crude Oil	443.2	450.5	-1.6%	448.1	-1.1%	416.2	6.5%

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	12/3/2018	11/26/2018	% Change vs. Prior Survey	Year Ago	% Change vs. Last Year
Long Island	3.380	3.461	-2.3%	3.062	10.4%
New York City	3.265	3.365	-3.0%	2.991	9.2%
Lower Hudson	3.318	3.405	-2.6%	3.039	9.2%
Upper Hudson	3.196	3.241	-1.4%	2.835	12.7%
Capital District	3.009	3.069	-2.0%	2.730	10.2%
North Country	3.301	3.307	-0.2%	2.814	17.3%
Central	3.126	3.166	-1.3%	2.757	13.4%
Western	3.446	3.449	-0.1%	3.051	12.9%
Statewide	3.261	3.321	-1.8%	2.924	11.5%
New York State Retail Propane Posted Credit Prices - 1,100 gallon usage category (dollars per gallon)					
Long Island	3.247	3.264	-0.5%	3.294	-1.4%
Mid-Hudson	2.887	2.912	-0.9%	2.744	5.2%
Capital District	2.875	2.876	0.0%	2.964	-3.0%
North Country	3.751	3.751	0.0%	3.565	5.2%
Central	2.744	2.750	-0.2%	2.639	4.0%
Western	2.645	2.655	-0.4%	2.543	4.0%
Statewide	2.966	2.976	-0.3%	2.877	3.1%
New York State Retail Kerosene Posted Credit Prices (dollars per gallon)					
Mid-Hudson	3.746	3.807	-1.6%	3.380	10.8%
Capital District	3.444	3.497	-1.5%	3.184	8.2%
North Country	3.794	3.799	-0.1%	3.336	13.7%
Central	3.584	3.627	-1.2%	3.218	11.4%
Western	3.843	3.821	0.6%	3.433	11.9%
Statewide	3.682	3.719	-1.0%	3.315	11.1%
New York State Average Residential Natural Gas Prices (\$/therm)					
REGION	September 2018	August 2018	% Change vs. Prior Month	September 2017	% Change vs. Last Year
Statewide	1.952	2.016	-3.2%	1.754	11.3%

* Revision

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

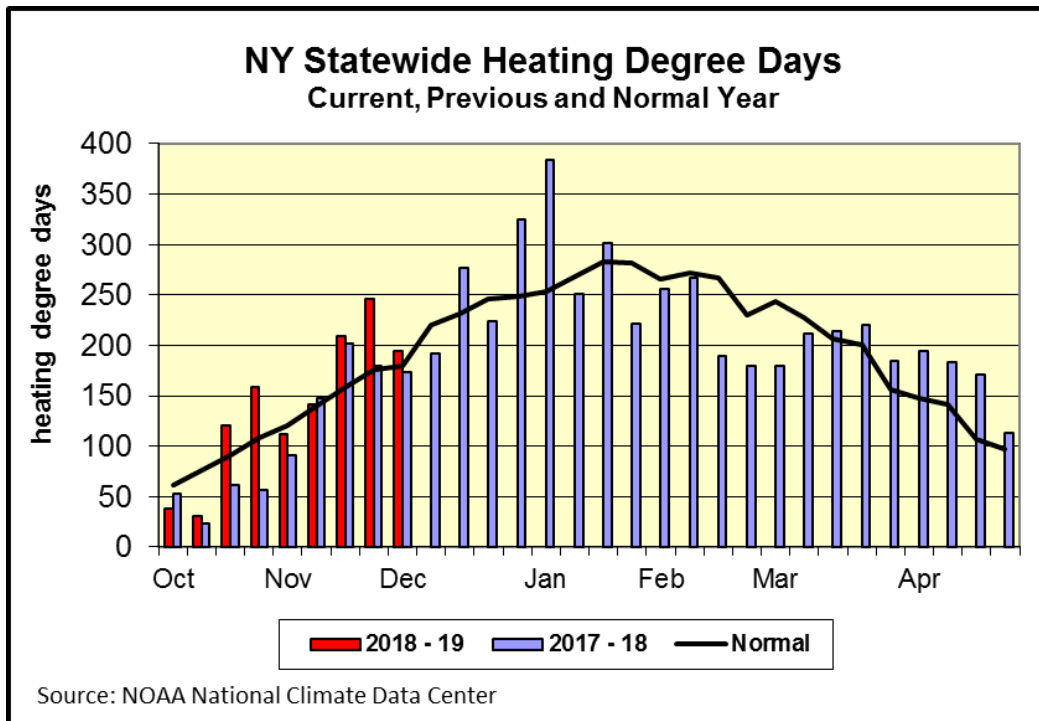
- Heating oil—highest price \$4.778/gallon on 7/14/08, lowest price \$0.876/gallon on 9/08/98.
- Propane—highest price \$3.811/gallon on 2/17/14, lowest price \$1.072/gallon on 9/20/99.
- Kerosene—highest price \$5.068/gallon on 7/14/08, lowest price \$1.309/gallon on 9/09/02.

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>.

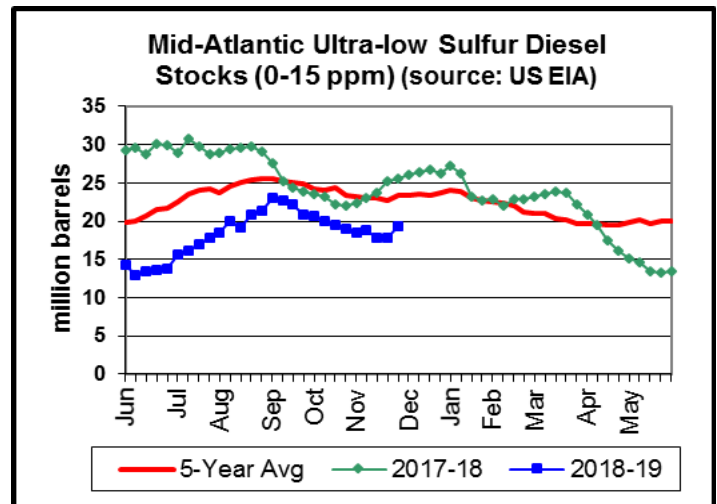
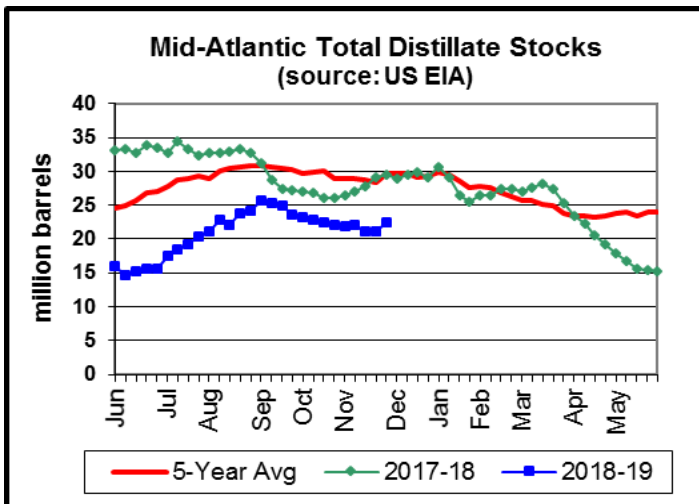
New York State Regions: *Long Island:* Nassau and Suffolk *New York City:* Bronx, Kings, New York, Queens, and Richmond *Lower Hudson:* Dutchess, Putnam, Rockland, and Westchester *Upper Hudson:* Columbia, Greene, Orange, Sullivan, and Ulster *Capital District:* Albany, Fulton Montgomery, Rensselaer, 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 (194) was 11.5% above the year-ago level (174) and 7.8% above the normal trend (180). On a cumulative basis since October 1st, current year heating degree-days (1,251) are ahead of the year-ago level (988) by 26.6% and ahead of the normal trend (1,112) by 12.5%.

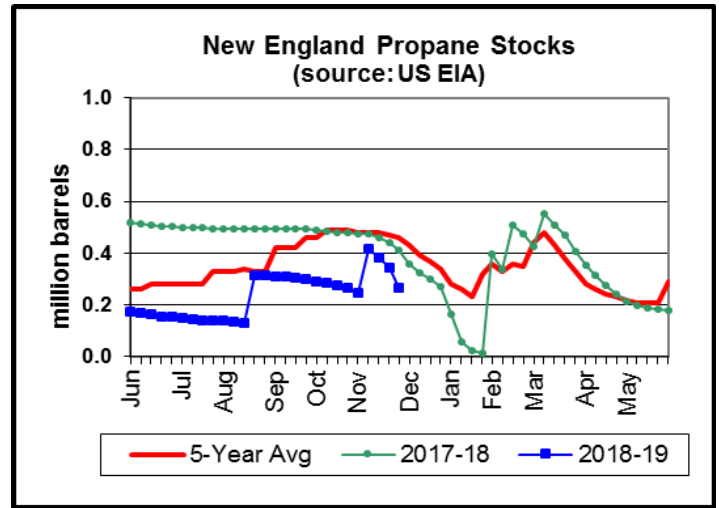
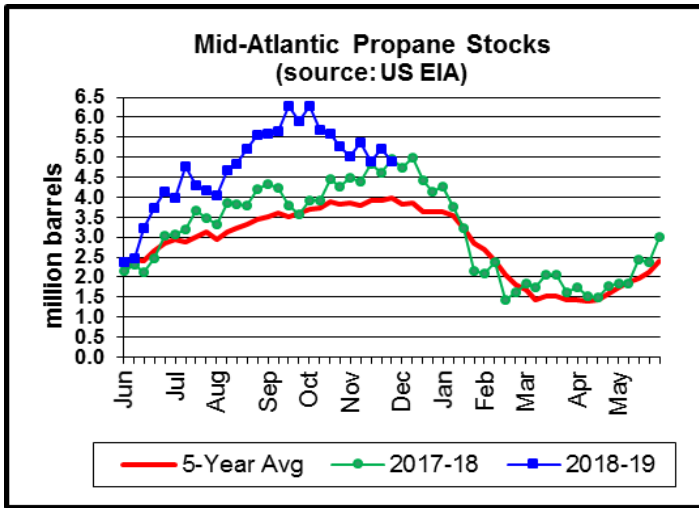
New York State Heating Degree Day Information, Weekly & Cumulative						
Region	Week Ending December 01			Cumulative From October 1		
	2018	2017	Normal	2018-19	2017-18	Normal
Albany	192	196	203	1,335	1,056	1,243
Binghamton	231	202	222	1,541	1,220	1,370
Buffalo	207	167	203	1,393	1,052	1,218
Glens Falls	210	209	229	1,536	1,263	1,431
Massena	201	223	247	1,661	1,268	1,498
NYC	146	116	151	836	602	800
Rochester	196	169	204	1,353	1,015	1,227
Syracuse	217	190	207	1,444	1,110	1,248
Watertown	207	204	229	1,567	1,192	1,412
Statewide	194	174	180	1,251	988	1,112



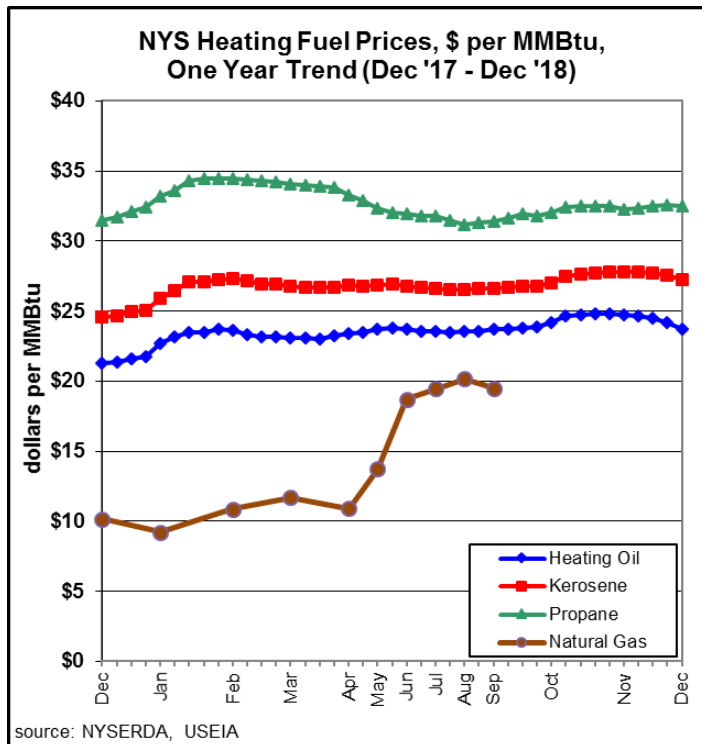
Distillate Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



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

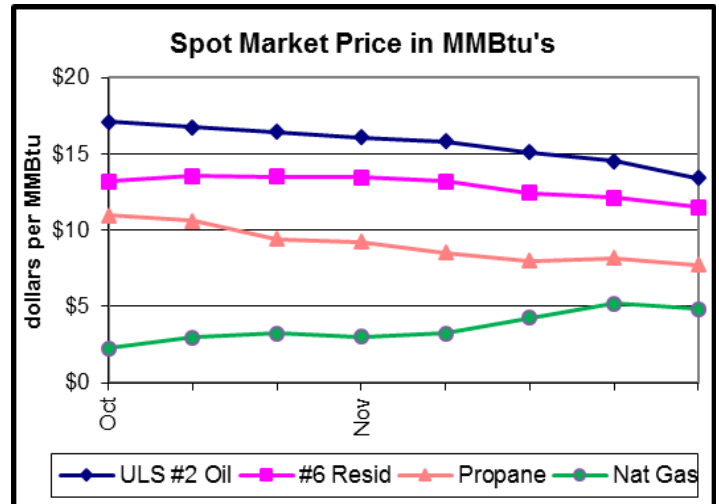


Retail Btu Price Equivalents—The New York State heating fuel prices Btu graph equates the retail price for New York Statewide average residential ultra-low sulfur heating oil, kerosene, propane, and natural gas on a dollar per million Btu (MMBtu) basis.



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.



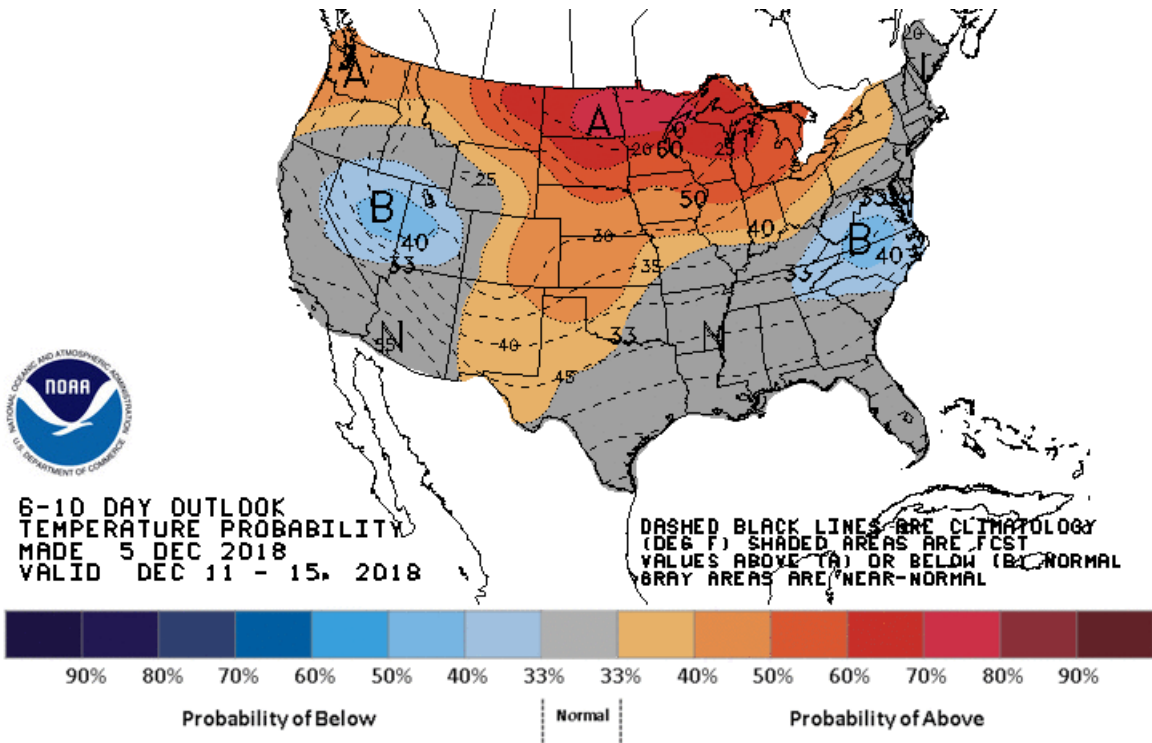
New York Spot Prices, Weekly Average			
Fuel	11/30/2018	Year Ago	% Change
Ultra LS Diesel	1.857	1.927	-3.7%
#2 Fuel Oil	1.844	1.839	0.3%
#6 Residual 0.3%	1.723	1.476	16.7%
Propane	0.704	0.996	-29.3%
Natural Gas	4.834	2.954	63.6%

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

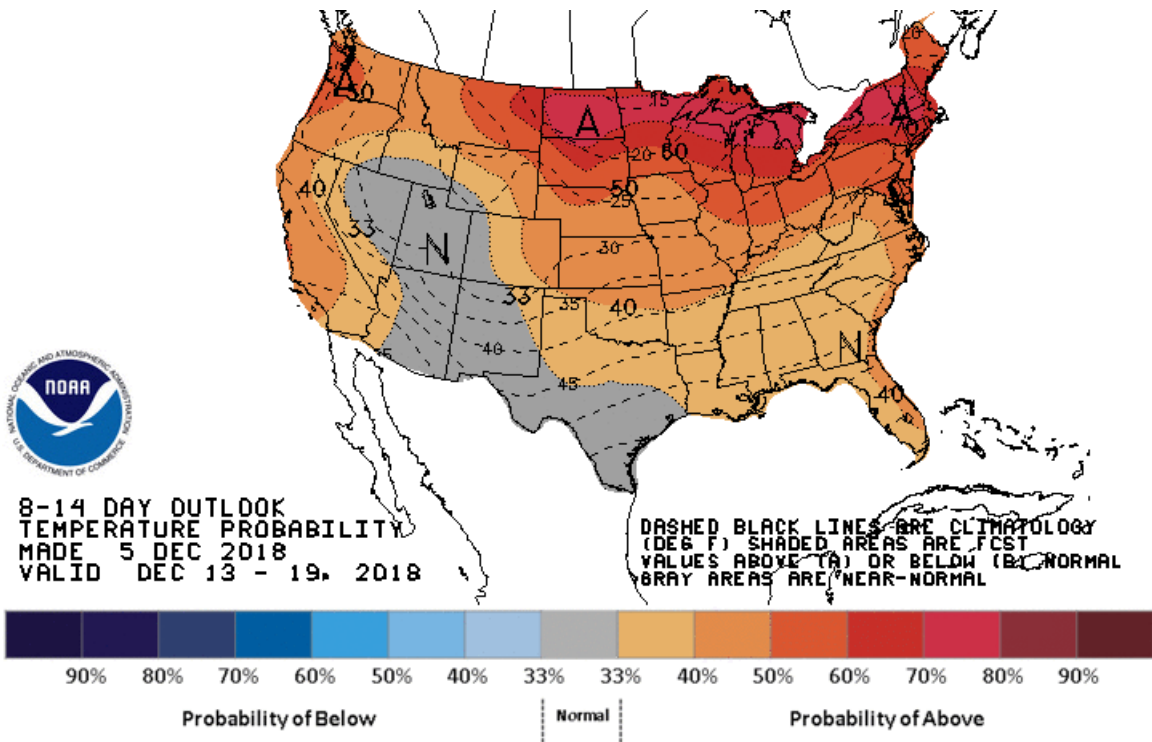
Weather Outlooks – Based on data and maps provided by the National Oceanic and Atmospheric Administration (NOAA)

Forecast HDD: On a statewide basis for the week ending December 8th, the number of forecasted heating degree-days (194) is 11.5% higher than last year (174) and 5.4% lower than the normal trend (205).

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 December 11-15. 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 December 13-19. 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.