

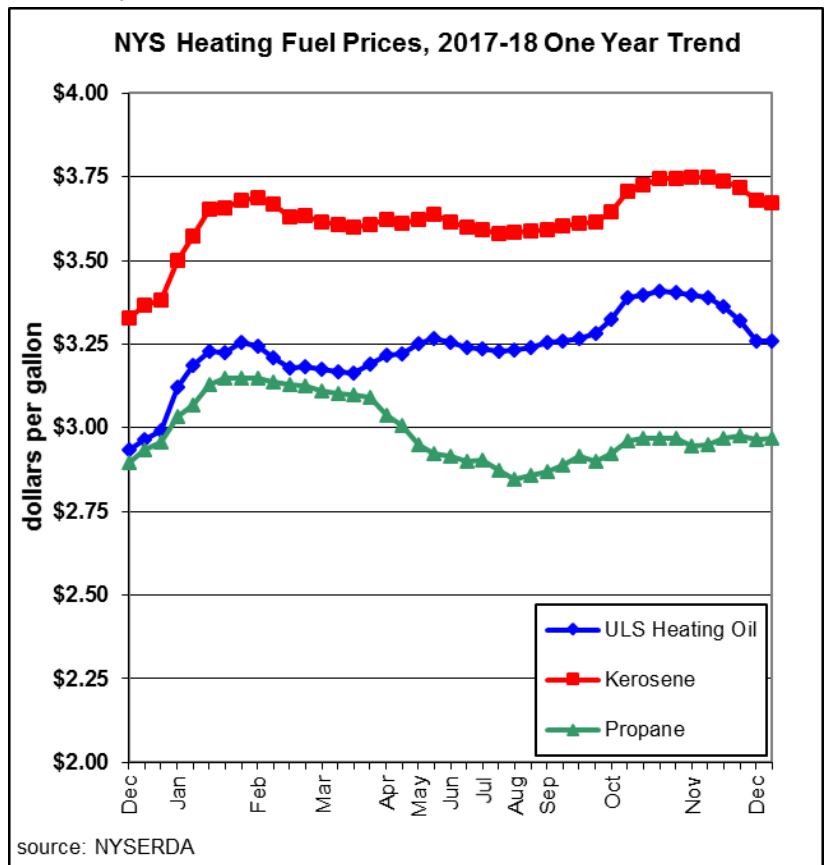
Highlights

- In collaboration with the Northeast Regional Climate Center, NYSERDA is providing a 6-day heating degree-day forecast and comparison to the previous year and the 30-year normal for NY metropolitan regions.
- For the week ending December 8, New York statewide heating degree-days (225) were 20.3% more than last year and 5.1% greater than the 30-year normal.
- 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 December 3rd, prices decreased \$0.001/gallon (0.0%) to \$3.260/gallon for ULS heating oil, \$0.010/gallon (0.3%) to \$3.672/gallon for kerosene, and the price increased \$0.003/gallon (0.1%) to \$2.969/gallon for propane. Compared to a year earlier, prices increased \$0.324/gallon (11.0%) for heating oil, \$0.343/gallon (10.3%) for kerosene and \$0.072/gallon (2.5%) for propane.

Crude Oil Prices—For the week ending 12/7/18, WTI crude oil spot prices averaged \$52.63/bbl, an increase of \$1.62/bbl (3.2%) from the week-ago average of \$51.01/bbl. WTI prices are now \$4.29/bbl (7.5%) below the year-ago weekly average of \$56.92/bbl. The all-time weekly average high of \$142.52/bbl occurred on 7/04/08.

Spot Natural Gas Prices—For the week ending 12/7/18, Henry Hub natural gas spot prices averaged \$4.506 per million Btu (mmBtu), an increase of \$0.096/mmBtu (2.2%) from the prior week level of \$4.410/mmBtu. Prices are currently \$1.662/mmBtu (58.4%) above the year-earlier weekly average of \$2.844/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	12/7/2018	11/30/2018	% Change vs. Last Week	Year Ago	% Change vs. Last Year	5-Year Average	% Change vs. 5-Year Avg
ULS Distillate (0-15 ppm)	18.7	19.4	-3.6%	26.4	-29.2%	23.5	-20.6%
Non-road Diesel (15-500 ppm)	0.4	0.4	-13.2%	0.9	-58.5%	1.3	-71.1%
High Sulfur Distillate (>500 ppm)	2.8	2.7	4.4%	2.3	23.9%	4.9	-42.7%
Total Distillate Oil	21.9	22.5	-2.9%	29.6	-26.1%	29.8	-26.5%
Propane	4.776	4.894	-2.4%	4.731	1.0%	3.836	24.5%
#6 Residual Oil	4.6	4.4	5.2%	5.0	-8.6%	6.2	-26.2%
US Natural Gas	2,914	2,991	-2.6%	3,636	-19.9%	3,637	-19.9%
US Crude Oil	442.0	443.2	-0.3%	443.0	-0.2%	414.9	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	12/10/2018	12/3/2018	% Change vs. Prior Survey	Year Ago	% Change vs. Last Year
Long Island	3.396	3.380	0.5%	3.080	10.3%
New York City	3.286	3.265	0.6%	3.003	9.4%
Lower Hudson	3.319	3.318	0.0%	3.052	8.7%
Upper Hudson	3.184	3.196	-0.4%	2.837	12.2%
Capital District	2.982	3.009	-0.9%	2.741	8.8%
North Country	3.301	3.301	0.0%	2.821	17.0%
Central	3.110	3.126	-0.5%	2.778	12.0%
Western	3.433	3.446	-0.4%	3.065	12.0%
Statewide	3.260	3.261	0.0%	2.936	11.0%
New York State Retail Propane Posted Credit Prices - 1,100 gallon usage category (dollars per gallon)					
Long Island	3.247	3.247	0.0%	3.294	-1.4%
Mid-Hudson	2.887	2.887	0.0%	2.774	4.1%
Capital District	2.880	2.875	0.2%	2.994	-3.8%
North Country	3.773	3.751	0.6%	3.610	4.5%
Central	2.739	2.744	-0.2%	2.651	3.3%
Western	2.645	2.645	0.0%	2.546	3.9%
Statewide	2.969	2.966	0.1%	2.897	2.5%
New York State Retail Kerosene Posted Credit Prices (dollars per gallon)					
Mid-Hudson	3.760	3.746	0.4%	3.379	11.3%
Capital District	3.411	3.444	-1.0%	3.208	6.3%
North Country	3.775	3.794	-0.5%	3.340	13.0%
Central	3.570	3.584	-0.4%	3.272	9.1%
Western	3.821	3.843	-0.6%	3.433	11.3%
Statewide	3.672	3.682	-0.3%	3.329	10.3%
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.

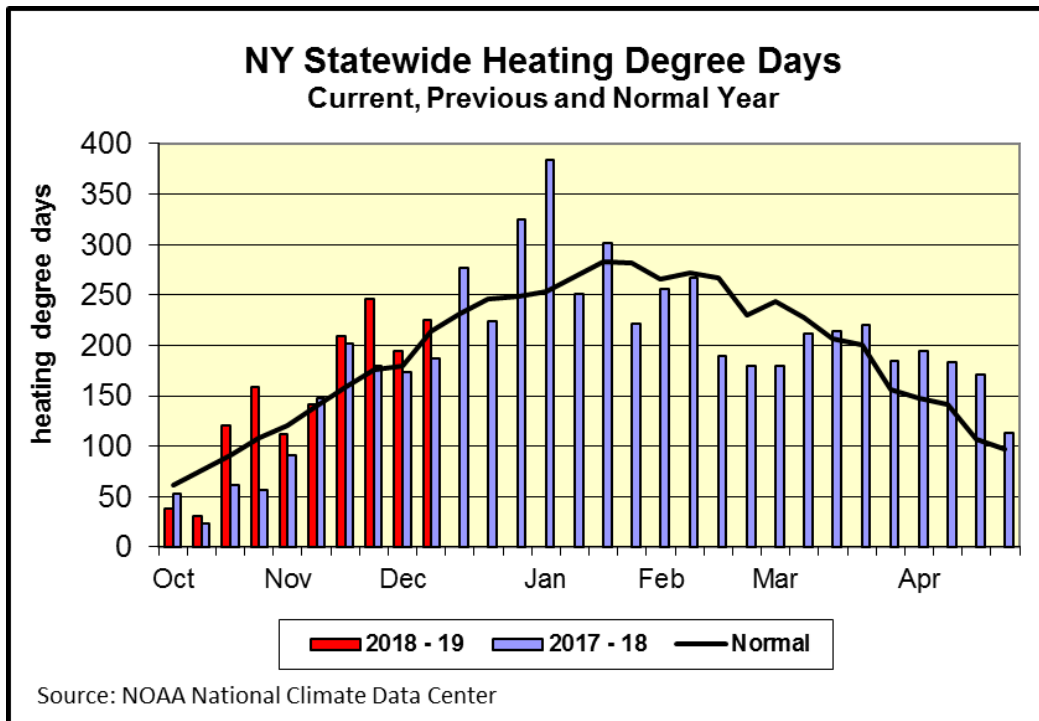
- Heating oil—highest price \$4.778/gallon on 7/14/08, lowest price \$0.876/gallon on 9/08/98.
- Propane—highest price \$3.811/gallon on 2/17/14, lowest price \$1.072/gallon on 9/20/99.
- Kerosene—highest price \$5.068/gallon on 7/14/08, lowest price \$1.309/gallon on 9/09/02.

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>.

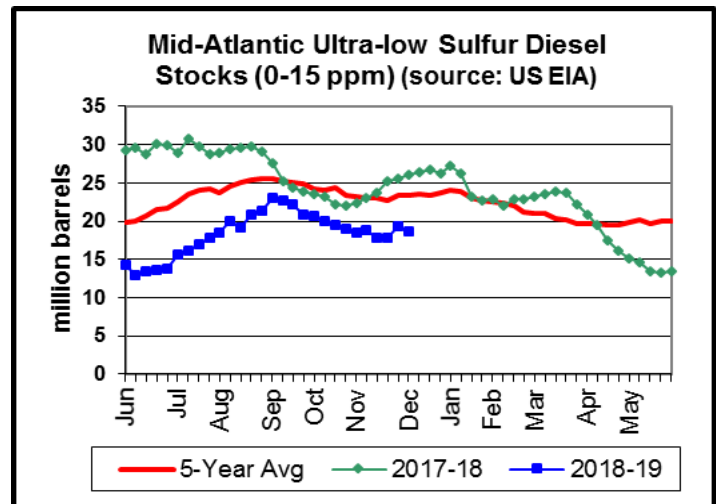
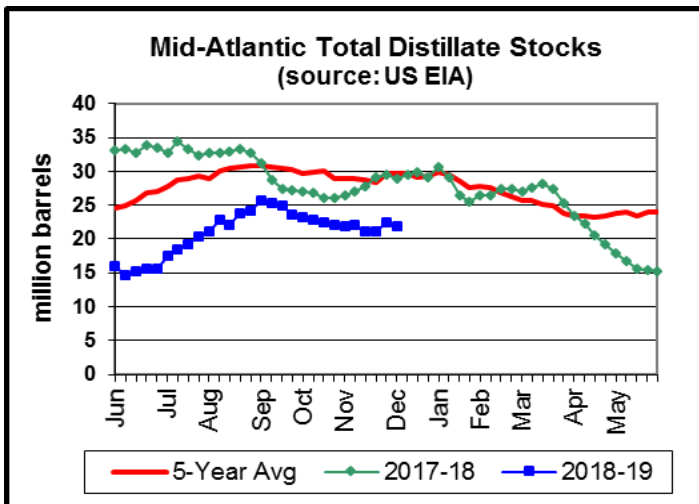
New York State Regions: *Long Island:* Nassau and Suffolk *New York City:* Bronx, Kings, New York, Queens, and Richmond *Lower Hudson:* Dutchess, Putnam, Rockland, and Westchester *Upper Hudson:* Columbia, Greene, Orange, Sullivan, and Ulster *Capital District:* Albany, Fulton Montgomery, Rensselaer, 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 (225) was 20.3% above the year-ago level (187) and 5.1% above the normal trend (214). On a cumulative basis since October 1st, current year heating degree-days (1,476) are ahead of the year-ago level (1,175) by 25.6% and ahead of the normal trend (1,326) by 11.3%.

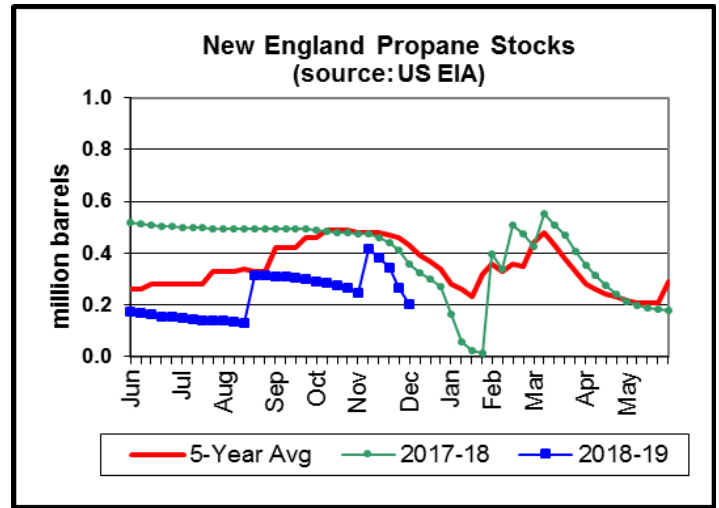
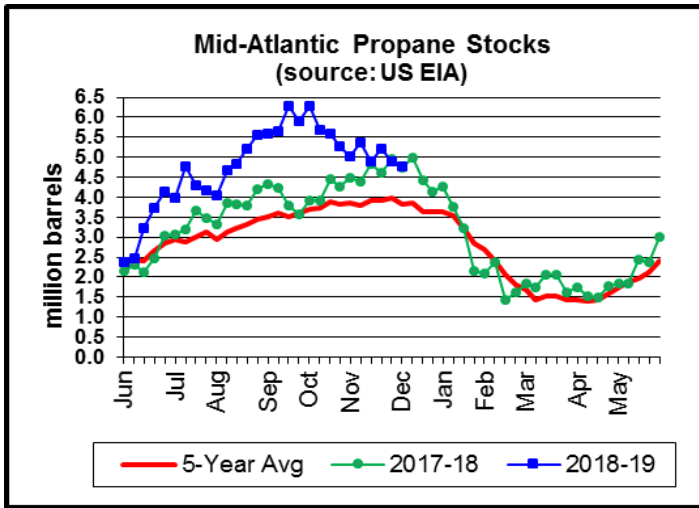
New York State Heating Degree Day Information, Weekly & Cumulative						
Region	Week Ending December 08			Cumulative From October 1		
	2018	2017	Normal	2018-19	2017-18	Normal
Albany	240	204	222	1,575	1,260	1,465
Binghamton	269	217	239	1,810	1,437	1,609
Buffalo	239	197	222	1,632	1,249	1,440
Glens Falls	253	213	251	1,789	1,476	1,682
Massena	278	202	271	1,939	1,470	1,769
NYC	179	133	168	1,015	735	968
Rochester	227	196	224	1,580	1,211	1,451
Syracuse	250	198	227	1,694	1,308	1,475
Watertown	262	198	251	1,829	1,390	1,663
Statewide	225	187	214	1,476	1,175	1,326



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

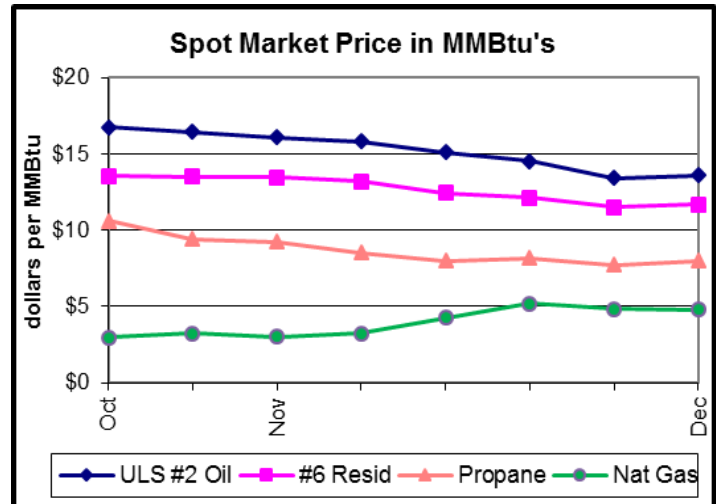
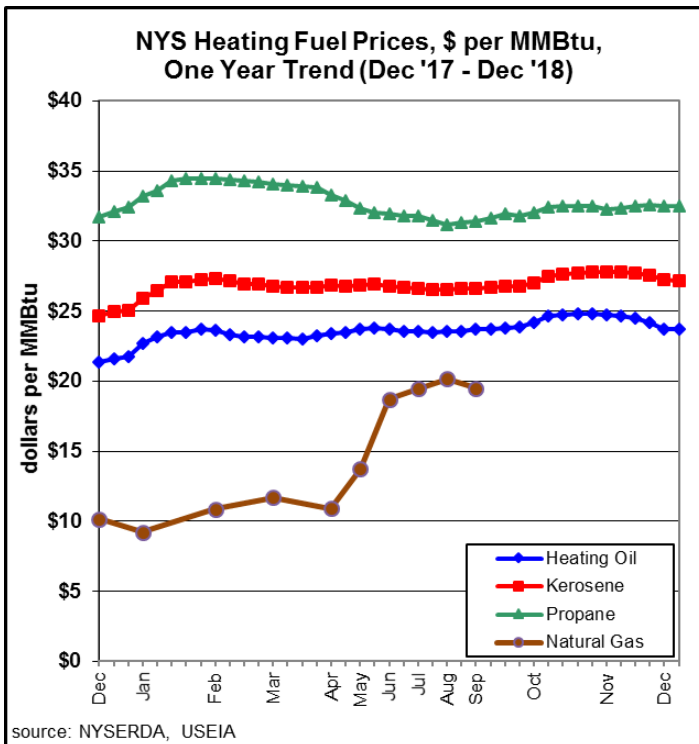


Propane Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



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.

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	12/7/2018	Year Ago	% Change
Ultra LS Diesel	1.885	1.894	-0.5%
#2 Fuel Oil	1.869	1.807	3.5%
#6 Residual 0.3%	1.746	1.468	19.0%
Propane	0.729	0.977	-25.4%
Natural Gas	4.786	2.927	63.5%

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

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

Weather Outlooks – Based on data and maps provided by the Northeast Regional Climate Center (NRCC) and the National Oceanic and Atmospheric Administration (NOAA)

Forecast HDD: On a statewide basis for the week ending December 15th, the number of forecasted heating degree-days (214) is 18.3% lower than last year (262) and 3.6% lower than the normal trend (222). Regional HDD forecasts are provided in the table below.

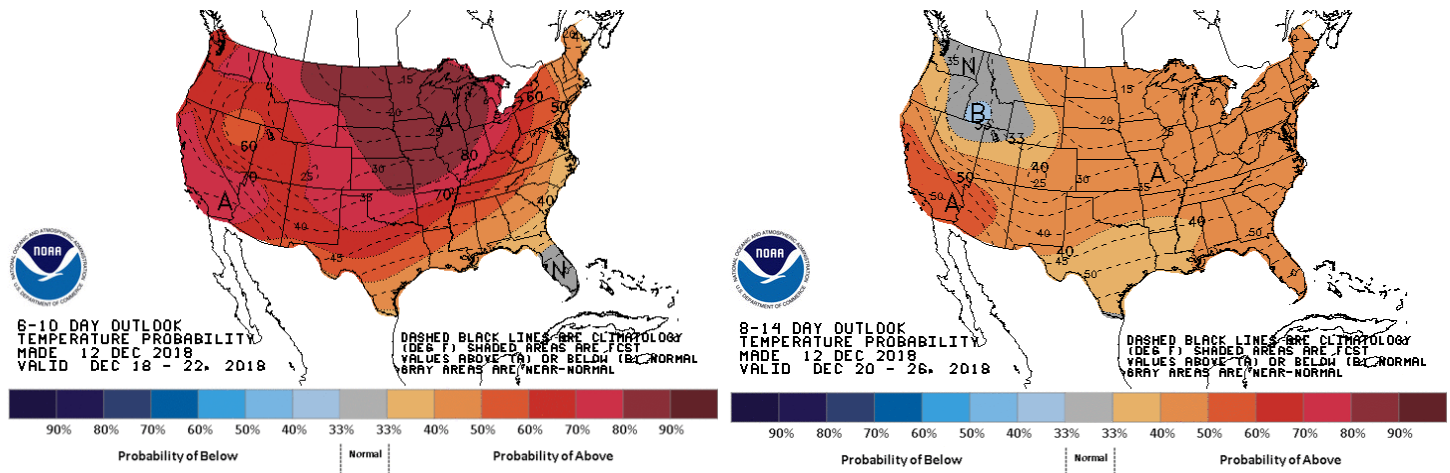
Regional Heating Degree-Day Forecast

Period	Forecast Period: 12/14-12/19			Actual HDD Week Ending 12/12					
	6-Day Forecast	Last Year	Normal	Weekly	Last Year	Normal	Cumulative	Last Year	Normal
Albany	195	247	221	270	236	238	1709	1379	1636
Binghamton	196	248	229	288	269	250	1951	1570	1735
Buffalo	185	237	212	260	257	231	1759	1384	1556
Glens Falls	203	301	242	295	235	261	1937	1595	1847
Massena	213	333	260	332	260	280	2103	1614	1938
NYC	143	174	163	209	172	173	1126	840	1029
Rochester	187	241	213	249	247	231	1702	1341	1573
Syracuse	193	256	217	272	249	233	1825	1437	1572
Watertown	206	296	234	318	251	253	1985	1522	1746

Source: Northeast Regional Climate Center (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 December 18-22. 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 20-26. 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.