

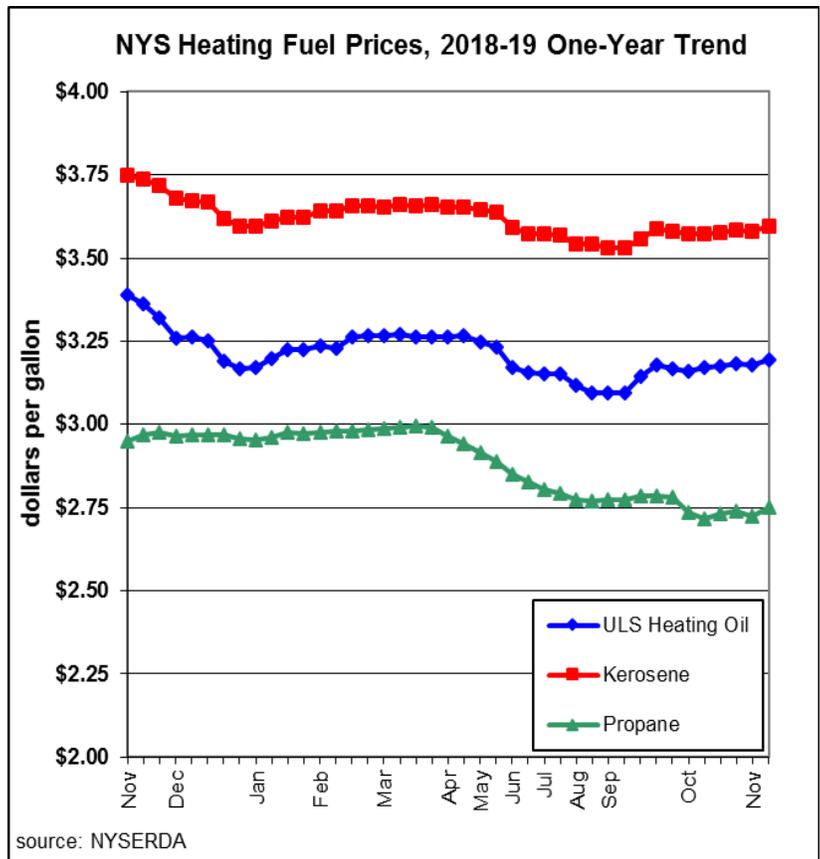
Highlights

- After 11 consecutive weeks of declines, Mid-Atlantic ultra-low sulfur (ULS) distillate inventories increased 0.6 million barrels (4.8%) since last week to 13.8 million barrels. Current inventories are 26.9% below last year’s level and 44.1% below the 5-year average.
- Weekly average U.S. WTI crude oil prices increased \$1.52 per barrel (2.8%) since last week to \$56.69/barrel, 7.9% below the year-ago weekly average of \$61.57 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 November 4th, prices increased \$0.014/gallon (0.4%) to \$3.195/gallon for ULS heating oil, \$0.015/gallon (0.4%) to \$3.595/gallon for kerosene, and \$0.027/gallon (1.0%) to \$2.751/gallon for propane. Compared to a year earlier, prices decreased \$0.193/gallon (5.7%) for heating oil, \$0.155/gallon (4.1%) for kerosene, and \$0.200/gallon (6.8%) for propane.

Crude Oil Prices—For the week ending 11/8/19, WTI crude oil spot prices averaged \$56.69/bbl, an increase of \$1.52/bbl (2.8%) from the week-ago average of \$55.17/bbl. WTI prices are now \$4.88/bbl (7.9%) below the year-ago weekly average of \$61.57/bbl. The all-time weekly average high of \$142.52/bbl occurred on 7/04/08.

Spot Natural Gas Prices—For the week ending 11/8/19, Henry Hub natural gas spot prices averaged \$2.790 per million Btu (mmBtu), an increase of \$0.230/mmBtu (9.0%) from the prior week level of \$2.560/mmBtu. Prices are currently \$0.780/mmBtu (21.8%) below the year-earlier weekly average of \$3.570/mmBtu.



Residential Natural Gas Prices—The NYS average price in August 2019 was \$1.957/therm, an increase of \$0.027/therm (1.4%) from the July 2019 price of \$1.930/therm, and was \$0.061/therm (3.0%) lower than the year earlier average of \$2.018/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	11/8/2019	11/1/2019	% Change vs. Last Week	Year Ago	% Change vs. Last Year	5-Year Average	% Change vs. 5-Year Avg
ULS Distillate (0-15 ppm)	13.8	13.2	4.8%	18.9	-26.9%	24.7	-44.1%
Non-road Diesel (15-500 ppm)	0.8	0.7	1.7%	0.6	19.8%	1.2	-37.9%
High Sulfur Distillate (>500 ppm)	2.7	2.7	-1.8%	2.6	1.6%	4.0	-32.7%
Total Distillate Oil	17.2	16.6	3.6%	22.2	-22.2%	29.9	-42.3%
Propane	5.524	6.239	-11.5%	5.029	9.8%	3.843	43.7%
#6 Residual Oil	7.0	6.4	8.5%	4.3	60.9%	6.0	16.8%
US Natural Gas	3,732	3,729	0.1%	3,241	15.1%	3,730	0.1%
US Crude Oil	449.0	446.8	0.5%	442.1	1.6%	437.4	2.7%

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	11/11/2019	11/4/2019	% Change vs. Prior Survey	Year Ago	% Change vs. Last Year
Long Island	3.400	3.366	1.0%	3.574	-4.9%
New York City	3.317	3.324	-0.2%	3.468	-4.4%
Lower Hudson	3.220	3.211	0.3%	3.500	-8.0%
Upper Hudson	3.044	3.034	0.3%	3.290	-7.5%
Capital District	2.912	2.896	0.6%	3.128	-6.9%
North Country	3.200	3.206	-0.2%	3.304	-3.1%
Central	2.963	2.940	0.8%	3.219	-8.0%
Western	3.361	3.326	1.1%	3.449	-2.6%
Statewide	3.195	3.181	0.4%	3.388	-5.7%
New York State Retail Propane Posted Credit Prices - 1,100 gallon usage category (dollars per gallon)					
Long Island	2.978	2.978	0.0%	3.214	-7.3%
Mid-Hudson	2.718	2.702	0.6%	2.924	-7.0%
Capital District	2.558	2.548	0.4%	2.850	-10.2%
North Country	3.528	3.520	0.2%	3.685	-4.3%
Central	2.479	2.450	1.2%	2.721	-8.9%
Western	2.530	2.456	3.0%	2.636	-4.0%
Statewide	2.751	2.724	1.0%	2.951	-6.8%
New York State Retail Kerosene Posted Credit Prices (dollars per gallon)					
Mid-Hudson	3.692	3.676	0.4%	3.847	-4.0%
Capital District	3.338	3.329	0.3%	3.557	-6.2%
North Country	3.677	3.688	-0.3%	3.796	-3.1%
Central	3.428	3.409	0.6%	3.670	-6.6%
Western	3.835	3.779	1.5%	3.821	0.4%
Statewide	3.595	3.580	0.4%	3.750	-4.1%
New York State Average Residential Natural Gas Prices (\$/therm)					
REGION	August 2019	July 2019	% Change vs. Prior Month	August 2018	% Change vs. Last Year
Statewide	1.957	1.930	1.4%	2.018	-3.0%

* Revision

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

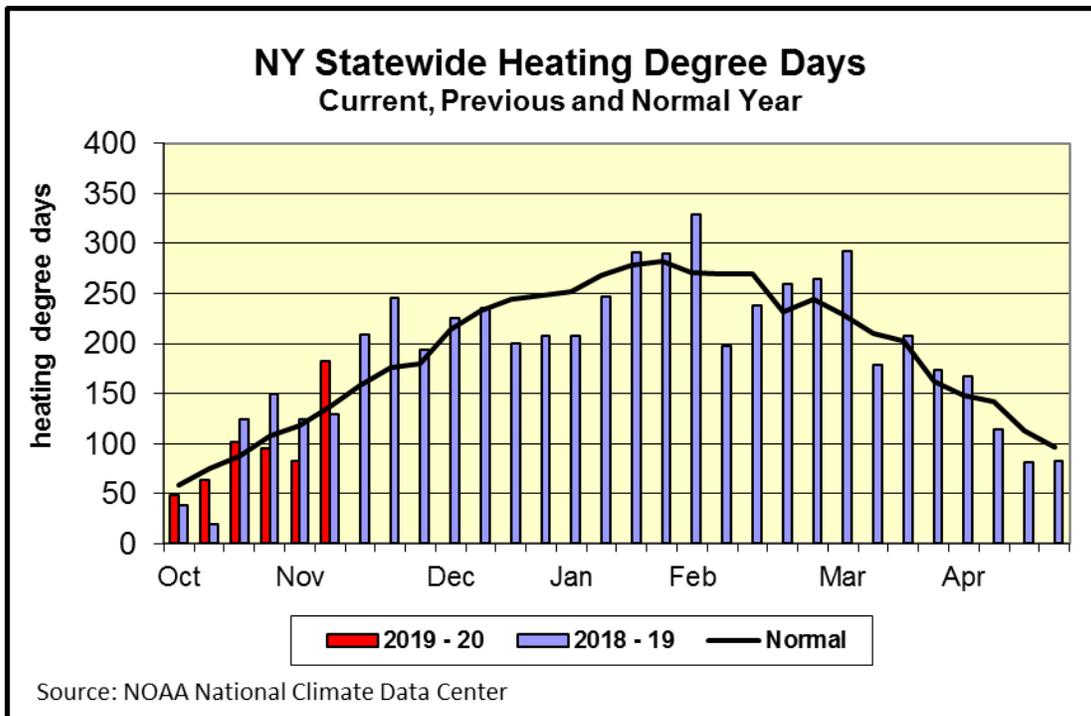
- Heating oil—highest price \$4.778/gallon on 7/14/08, lowest price \$0.876/gallon on 9/08/98.
- Propane—highest price \$3.811/gallon on 2/17/14, lowest price \$1.072/gallon on 9/20/99.
- Kerosene—highest price \$5.068/gallon on 7/14/08, lowest price \$1.309/gallon on 9/09/02.

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>.

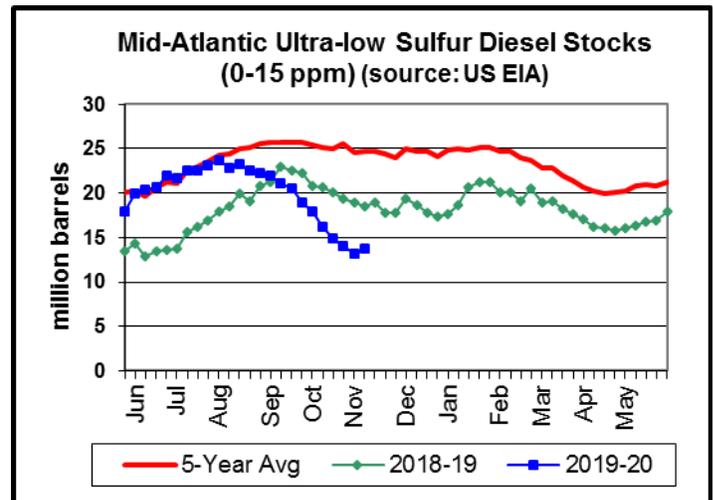
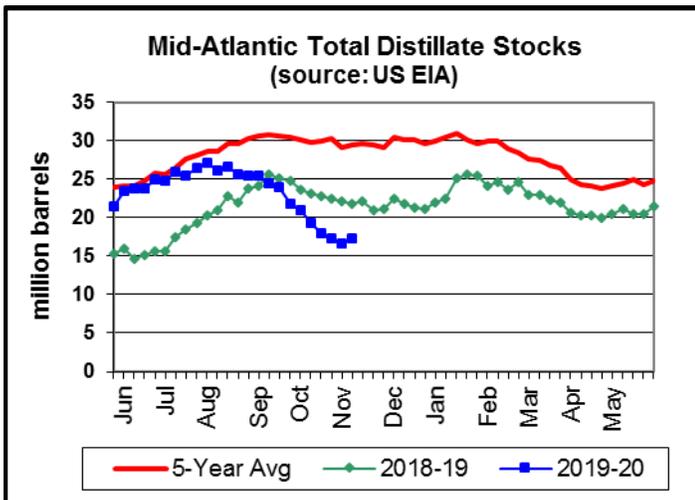
New York State Regions: *Long Island:* Nassau and Suffolk *New York City:* Bronx, Kings, New York, Queens, and Richmond *Lower Hudson:* Dutchess, Putnam, Rockland, and Westchester *Upper Hudson:* Columbia, Greene, Orange, Sullivan, and Ulster *Capital District:* Albany, Fulton, Montgomery, Rensselaer, 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. B5 heating oil is required for Downstate New York including Nassau, Suffolk, NYC, and Westchester counties.

Heating Degree Days— On a statewide basis during the past week, the number of heating degree-days (182) was 41.1% above the year-ago level (129) and 32.8% above the normal trend (137). On a cumulative basis since October 1st, current year heating degree-days (574) are behind the year-ago level (583) by 1.5% and behind the normal trend (583) by 1.5%.

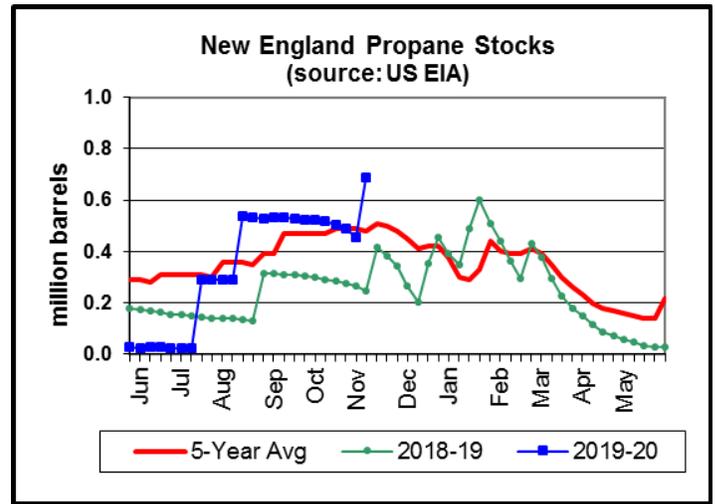
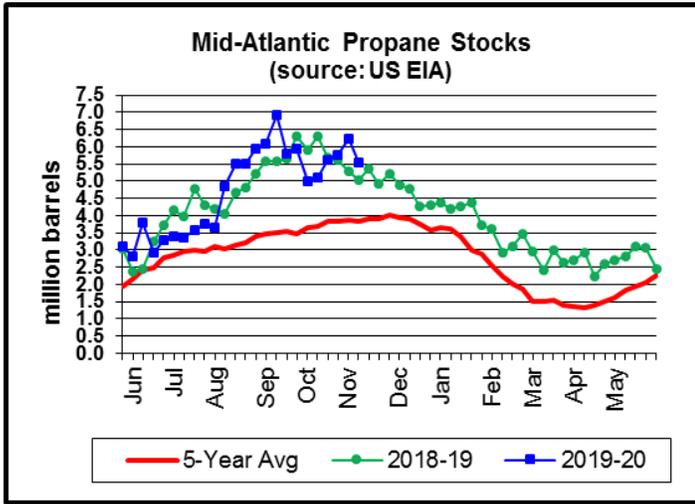
New York State Heating Degree Day Information, Weekly & Cumulative						
Region	Week Ending November 09			Cumulative From October 1		
	2019	2018	Normal	2019-20	2018-19	Normal
Albany	190	150	152	591	643	672
Binghamton	223	168	166	731	747	746
Buffalo	191	147	148	650	683	648
Glens Falls	210	165	171	741	775	790
Massena	214	171	179	796	852	813
NYC	126	77	100	308	311	383
Rochester	202	140	149	622	654	654
Syracuse	189	148	151	604	688	669
Watertown	197	164	168	708	795	773
Statewide	182	129	137	574	583	583



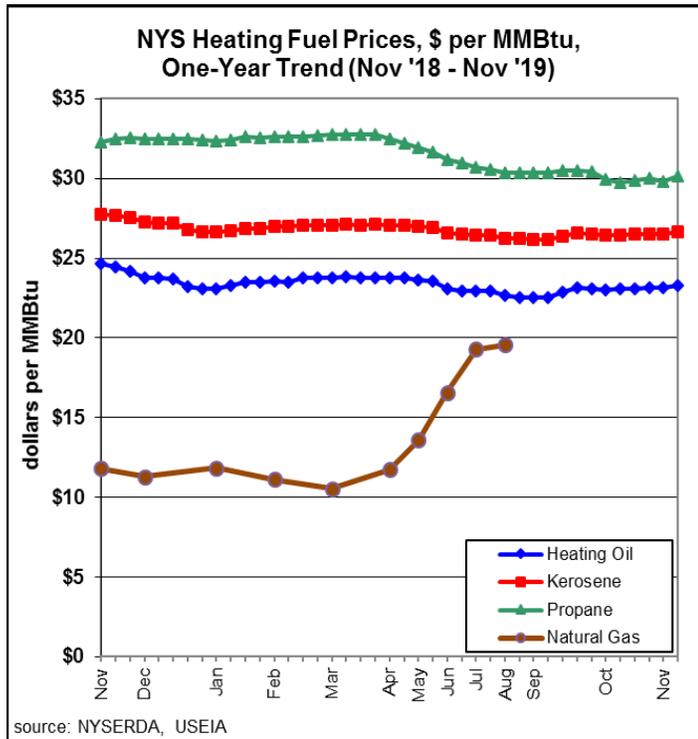
Distillate Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



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

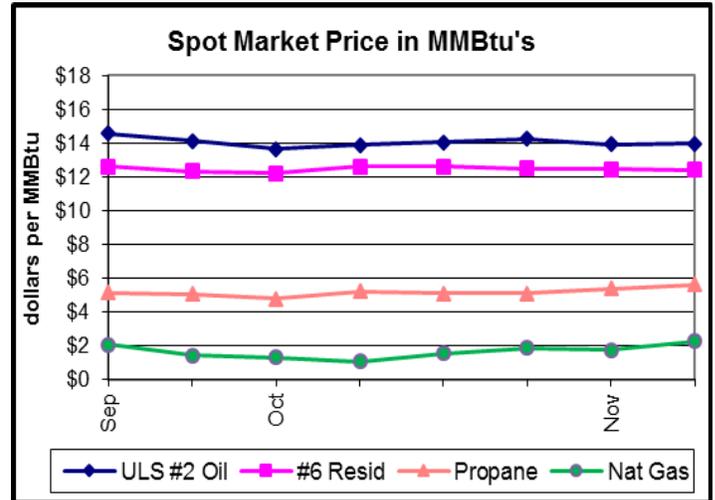


Retail Btu Price Equivalents—The New York State heating fuel prices Btu graph equates the retail price for New York Statewide average residential ultra-low sulfur heating oil, kerosene, propane, and natural gas on a dollar per million Btu (MMBtu) basis.



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.



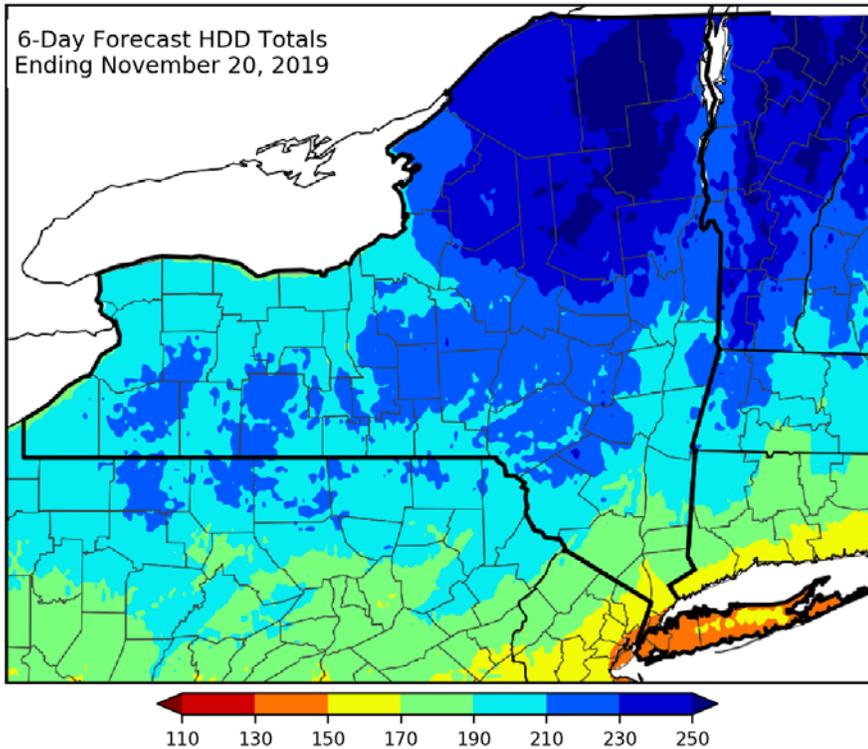
New York Spot Prices, Weekly Average			
Fuel	11/8/2019	Year Ago	% Change
Ultra LS Diesel	1.940	2.189	-11.4%
#2 Fuel Oil	1.926	2.173	-11.4%
#6 Residual 0.3%	1.859	1.974	-5.8%
Propane	0.514	0.777	-33.9%
Natural Gas	2.253	3.250	-30.7%

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

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 16th, the number of forecasted heating degree-days (208) is 3.5% above last year (201) and 37.7% above the normal trend (151). Regional HDD forecasts are provided in the map and table below.

Regional Heating Degree-Day Forecast

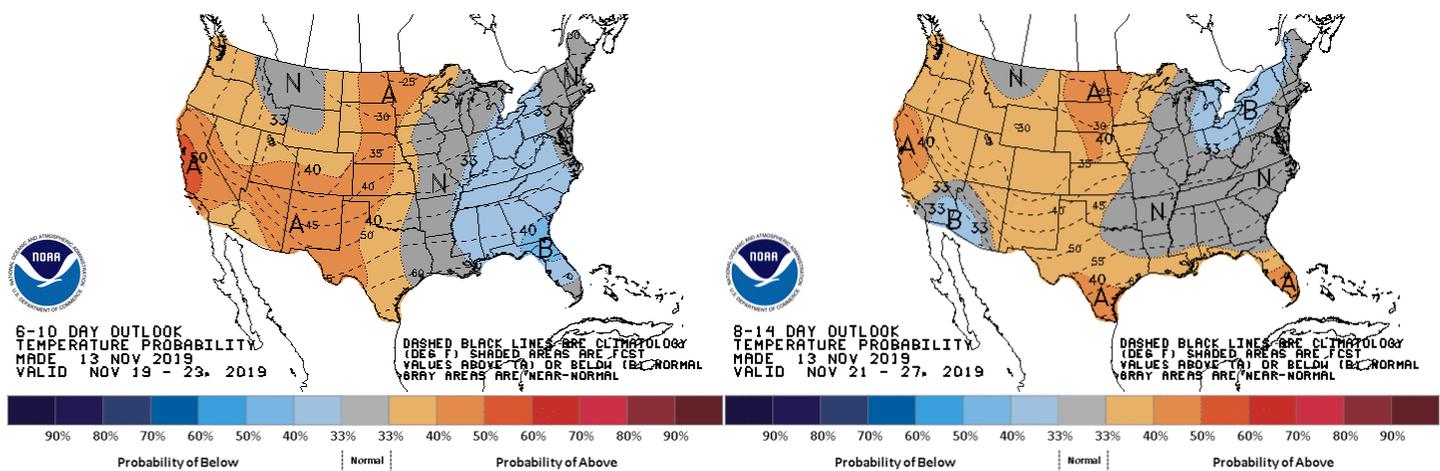


Period	Forecast Period: 11/15/19-11/20/19		
City	6-Day Forecast	Last Year	Normal
Albany	203	185	155
Binghamton	210	213	164
Buffalo	197	194	149
Glens Falls	218	207	172
Massena	248	237	181
NYC	142	137	105
Rochester	201	194	151
Syracuse	211	207	150
Watertown	222	212	163

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 19, 2019 – November 23, 2019. 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 21, 2019 – November 27, 2019. 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.