NYSERDA Heating Fuels Report

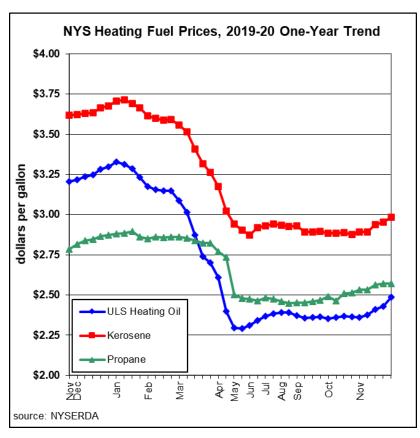
Highlights

- Mid-Atlantic propane inventories decreased 195,000 barrels (3.3%) since last week to 5.729 million barrels. Inventories are 10.9% above the year-ago level and 21.5% above the 5-year average.
- Mid-Atlantic ultra-low sulfur (ULS) distillate inventories increased 0.1 million barrels (0.2%) since last week to 30.5 million barrels. Inventories are 89.5% above the year-ago level and 19.4% above the 5-year average.
- 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 23rd, prices increased \$0.058/gallon (2.4%) to \$2.48/gallon for ULS heating oil, \$0.032/gallon (1.1%) to \$2.98/gallon for kerosene and \$0.001/gallon (0.04%) to \$2.47/gallon for propane. Compared to a year earlier, prices decreased \$0.729/gallon (22.7%) for heating oil, \$0.637/gallon (17.6%) for kerosene, and \$0.245/gallon (8.7%) for propane.

Crude Oil Prices—For the week ending 11/27/2020, WTI crude oil spot prices averaged \$44.44/bbl, an increase of \$2.88/bbl (6.9%) from the week-ago average of \$41.52/bbl. WTI prices are now \$13.67/bbl (23.5%) below the year-ago weekly average of \$58.07/bbl. The all-time weekly average high of \$142.52/bbl occurred on 7/04/08.

Spot Natural Gas Prices—For the week ending 11/27/2020, Henry Hub natural gas spot prices averaged \$2.370 per million Btu (mmBtu), a decrease of \$0.02/mmBtu (0.8%) from the prior week level of \$2.39/mmBtu. Prices are currently equal to the year-earlier weekly average of \$2.37/mmBtu.

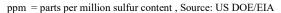


Residential Natural Gas Prices—The NYS average price in September 2020 was \$1.865/therm, a decrease of \$0.057/therm (3.0%) from the August 2020 price of \$1.922/therm, and was \$0.068/therm (3.5%) lower than the year earlier average of \$1.933/therm.

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	11/27/2020	11/20/2020	% Change vs. Last Week	Year Ago	% Change vs. Last Year	5-Year Average	% Change vs. 5-Year Avg
ULS Distillate (0-15 ppm)	30.5	30.4	0.2%	16.1	89.5%	25.6	19.4%
Non-road Diesel (15-500 ppm)	0.6	0.6	5.9%	0.8	-17.8%	1.1	-43.3%
High Sulfur Distillate (>500 ppm)	2.1	2.1	-0.8%	2.9	-27.8%	3.7	-42.2%
Total Distillate Oil	33.3	33.2	0.3%	19.8	68.0%	30.3	9.7%
Propane	5.729	5.924	-3.3%	5.164	10.9%	4.715	21.5%
#6 Residual Oil	6.8	6.8	-0.4%	6.6	3.7%	6.3	7.3%
US Natural Gas	3,939	3,940	0.0%	3,596	9.5%	3,649	7.9%
US Crude Oil	488.0	488.7	-0.1%	447.1	9.2%	457.9	6.6%

Notes: Natural Gas in billion cubic feet (Bcf), Middle Atlantic is DE, DC, MD, NJ, NY, and PA





REGION	11/30/2020	11/23/2020	% Change vs. Prior Survey	Year Ago	% Change vs. Last Year
Long Island	2.684	2.616	2.6%	3.410	-21.3%
New York City	2.638	2.564	2.9%	3.337	-20.9%
Lower Hudson	2.509	2.427	3.4%	3.251	-22.8%
Upper Hudson	2.372	2.311	2.6%	3.093	-23.3%
Capital District*	2.210	2.154	2.6%	2.925	-24.4%
North Country	2.382	2.374	0.3%	3.238	-26.4%
Central	2.284	2.242	1.9%	2.968	-23.0%
Western	2.669	2.652	0.6%	3.365	-20.7%
Statewide*	2.488	2.431	2.3%	3.217	-22.7%
New York S	State Retail Propane Po	sted Credit Prices -	1,100 gallon usage	category (dollars pe	r gallon)
Long Island	3.119	3.114	0.2%	3.128	-0.3%
Mid-Hudson	2.757	2.749	0.3%	2.798	-1.5%
Capital District	2.406	2.401	0.2%	2.685	-10.4%
North Country	2.710	2.725	-0.6%	3.589	-24.5%
Central	2.403	2.401	0.1%	2.531	-5.1%
Western	2.377	2.377	0.0%	2.533	-6.2%
Statewide	2.572	2.571	0.0%	2.817	-8.7%
	New York State Ret	ail Kerosene Posted	Credit Prices (dolla	ars per gallon)	
Mid-Hudson	3.091	3.044	1.5%	3.751	-17.6%
Capital District*	2.808	2.768	1.4%	3.352	-16.2%
North Country*	3.011	3.001	0.3%	3.704	-18.7%
Central*	2.851	2.797	1.9%	3.430	-16.9%
Western	3.131	3.153	-0.7%	3.835	-18.4%
Statewide*	2.986	2.954	1.1%	3.623	-17.6%
	New York State	Average Residentia	l Natural Gas Prices	s (\$/therm)	
REGIO N	September 2020	August 2020	% Change vs. Prior Month	September 2019	% Change vs. Last Year
Statewide	1.865	1.922	-3.0%	1.933	-3.5%

^{*} Revision

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

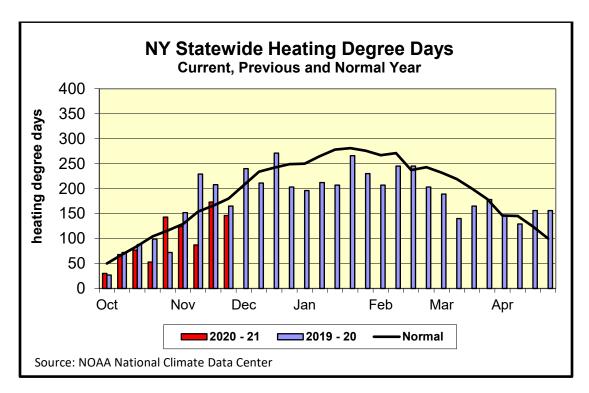
- Heating oil—highest price \$4.778/gallon on 7/14/08, lowest price \$0.876/gallon on 9/08/98.
- Propane—highest price \$3.811/gallon on 2/17/14, lowest price \$1.072/gallon on 9/20/99.
- Kerosene—highest price \$5.068/gallon on 7/14/08, lowest price \$1.309/gallon on 9/09/02.

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.

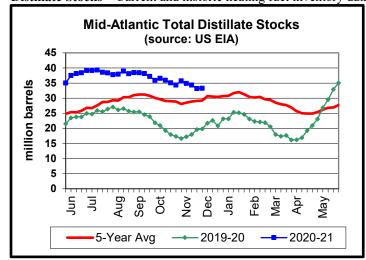
New York State Regions: Long Island: Nassau and Suffolk New York City: Bronx, Kings, New York, Queens, and Richmond Lower Hudson: Dutchess, Putnam, Rockland, and Westchester Upper Hudson: Columbia, Greene, Orange, Sullivan, and Ulster Capital District: Albany, Fulton, Montgomery, Rensselaer, Saratoga, 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.

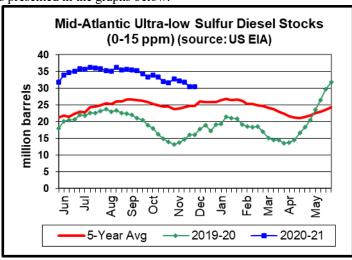
Heating Degree Days— On a statewide basis during the past week, the number of heating degree-days (146) was 11.5% below the year-ago level (165) and 18.9% below the normal trend (180). On a cumulative basis since October 1st, current year heating degree-days (901) are behind the year-ago level (1,112) by 19.0% and behind the normal trend (1,052) by 14.4%.

New York State Heating Degree Day Information, Weekly & Cumulative							
Region	Wed	ek Ending Novembe	r 30	Cumulative From October 1			
	2020	2019	Normal	2020-21	2019-20	Normal	
Albany	194	168	196	1,175	1,149	1,177	
Binghamton	178	193	214	1,111	1,349	1,304	
Buffalo	164	159	196	938	1,209	1,154	
Glens Falls	147	206	219	700	1,402	1,362	
Massena	215	202	236	1,265	1,508	1,422	
NYC	80	125	144	472	704	743	
Rochester	161	166	196	991	1,198	1,162	
Syracuse	156	165	199	957	1,168	1,183	
Watertown	173	196	219	1,136	1,373	1,343	
Statewide	146	165	180	901	1,112	1,052	

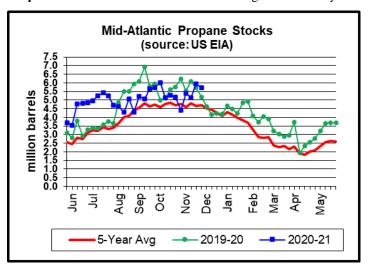


Distillate Stocks—Current and historic heating fuel inventory data is presented in the graphs below.

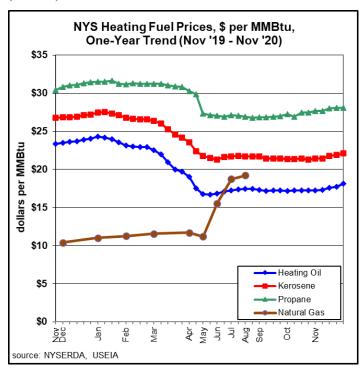




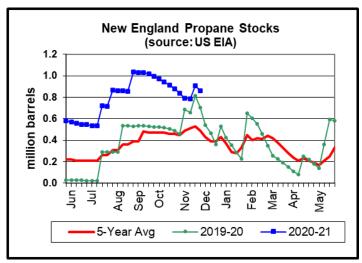
Propane Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



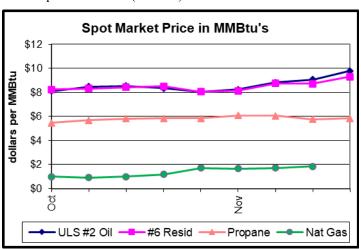
Retail Btu Price Equivalents—The New York State heating fuel prices Btu graph equates the retail price for New York Statewide average residential ultra-low sulfur heating oil, kerosene, propane, and natural gas on a dollar per million Btu (MMBtu) basis.



Note: Natural gas prices are from the U.S. EIA and provided on a monthly basis and delayed by 3 months. The monthly average price of natural gas is higher during the summer months due to low delivery volumes and fixed delivery charges and does not necessarily indicate a higher underlying supply price. Higher average natural gas prices in the summer months are not indicative of higher future prices during the winter 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.



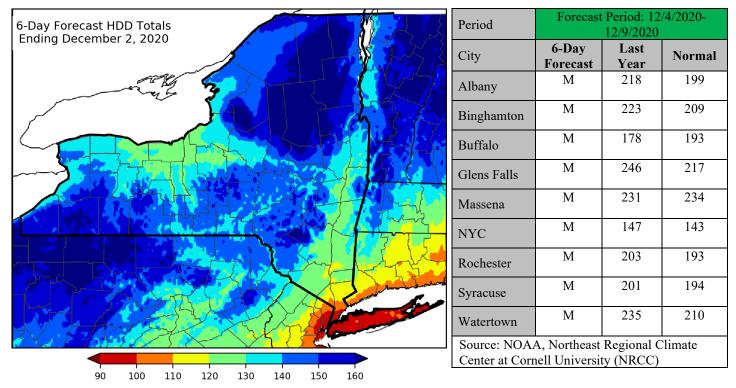
New York Spot Prices, Weekly Average						
Fuel	11/27/2020	Year Ago	% Change			
Ultra LS Diesel	1.359	1.955	-30.5%			
#2 Fuel Oil	1.274	1.937	-34.2%			
#6 Residual 0.3%	1.392	1.832	-24.0%			
Propane	0.535	0.549	-2.5%			
Natural Gas	0.000	2.386	-100.0%			

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).

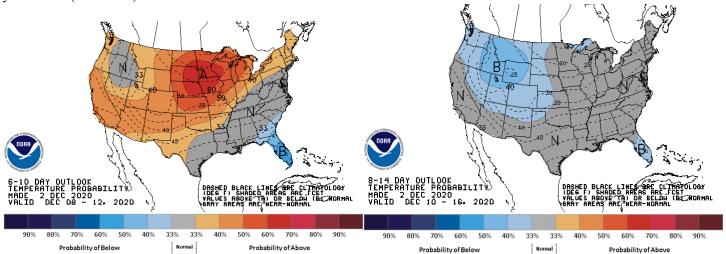
Statewide Forecast HDD: On a statewide basis for the week ending December 4th, the number of forecasted heating degree-days (148) is 35.9% below last year (231) and 25.3% below the normal trend (198). Regional HDD forecasts are provided in the map and table below.

Regional Heating Degree-Day Forecast



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 8, 2020 – December 12, 2020. 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 10, 2020 – December 16, 2020. This is in comparison to the 30-year normal (1981-2010).



Additional historic <u>regional specific prices and supply information</u> is available at NYSERDA's website. For more information please contact Matthew Milford at (518) 862-1090 ext. 3416, e-mail <u>matthew.milford@nyserda.ny.gov</u>.