NYSERDA Heating Fuels Report

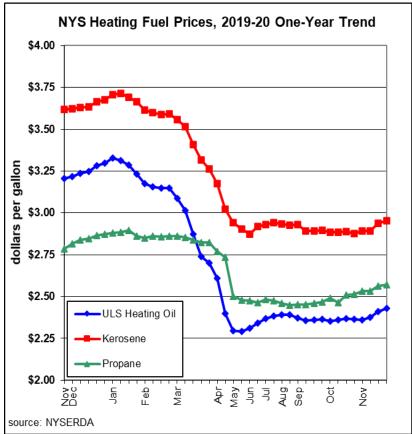
Highlights

- Mid-Atlantic propane inventories increased 799,000 barrels (15.6%) since last week to 5.924 million barrels. Inventories are 3.4% above the year-ago level and 26.8% above the 5-year average.
- Mid-Atlantic ultra-low sulfur (ULS) distillate inventories decreased 1.3 million barrels (4.0%) since last week to 30.4 million barrels. Inventories are 89.2% above the year-ago level and 24.0% 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 16^{th} , prices increased 0.018/gallon (0.7%) to 2.430/gallon for ULS heating oil, 0.014/gallon (0.5%) to 2.954/gallon for kerosene and 0.007/gallon (0.3%) to 2.571/gallon for propane. Compared to a year earlier, prices decreased 0.776/gallon (24.2%) for heating oil, 0.665/gallon(18.4%) for kerosene, and 0.213/gallon (7.7%) for propane.

Crude Oil Prices—For the week ending 11/20/2020, WTI crude oil spot prices a veraged \$41.52/bbl, an increase of \$0.86/bbl(2.1%) from the week-ago average of \$40.66/bbl. WTI prices are now \$15.38/bbl (27.0%) below the year-ago weekly average of \$56.90/bbl. The all-time weekly average high of \$142.52/bbl occurred on 7/04/08.

Spot Natural Gas Prices—For the week ending 11/20/2020, Henry Hub natural gas spot prices a veraged \$2.390 per million Btu (mmBtu), a decrease of \$0.350/mmBtu (12.8%) from the prior week level of \$2.740/mmBtu. Prices are currently \$0.116/mmBtu (4.6%) below the year-earlier week ly a verage of \$2.506/mmBtu.



Middle Atlantic Stocks—Current and historic heating fuel inventory data is presente	d in the table below.
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Middle Atlantic Region, Weekly Inventories (million barrels)							
Fuel Type	11/20/2020	11/13/2020	% Change vs. Last Week	Year Ago	% Change vs. Last Year	5-Year Average	% Change vs. 5-Year Avg
ULS Distillate (0-15 ppm)	30.4	31.7	-4.0%	16.1	89.2%	24.5	24.0%
Non-road Diesel (15-500 ppm)	0.6	0.6	2.1%	0.7	-19.0%	1.2	-48.1%
High Sulfur Distillate (>500 ppm)	2.1	2.0	5.3%	2.8	-23.3%	3.5	-39.1%
Total Distillate Oil	33.2	34.3	-3.4%	19.6	69.2%	29.2	13.6%
Propane	5.924	5.125	15.6%	5.728	3.4%	4.672	26.8%
#6 Residual Oil	6.8	6.4	6.9%	7.0	-2.1%	6.3	8.5%
US Natural Gas	3,940	3,958	-0.5%	3,618	8.9%	3,690	6.8%
US Crude Oil	488.7	489.5	-0.2%	452.0	8.1%	460.9	6.0%

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



REGIO N	11/23/2020	11/16/2020	% Change vs. Prior Survey	Year Ago	% Change vs. Last Year
Long Island	2.616	2.592	0.9%	3.379	-22.6%
New York City	2.564	2.537	1.1%	3.332	-23.0%
Lower Hudson	2.427	2.397	1.3%	3.241	-25.1%
Upper Hudson	2.311	2.302	0.4%	3.086	-25.1%
Capital District*	2.151	2.155	-0.2%	2.912	-26.1%
North Country	2.374	2.360	0.6%	3.227	-26.4%
Central	2.242	2.213	1.3%	2.968	-24.5%
Western*	2.652	2.645	0.3%	3.365	-21.2%
State wide *	2.430	2.412	0.7%	3.206	-24.2%
New York S	tate Retail Propane Po	sted Credit Prices -	1,100 gallon usage c	ategory (dollars p	er gallon)
Long Island	3.114	3.101	0.4%	3.065	1.6%
Mid-Hudson*	2.749	2.737	0.4%	2.746	0.1%
Capital District*	2.401	2.390	0.5%	2.612	-8.1%
North Country	2.725	2.709	0.6%	3.579	-23.9%
Central	2.401	2.386	0.6%	2.506	-4.2%
Western	2.377	2.390	-0.5%	2.529	-6.0%
State wide *	2.571	2.564	0.3%	2.784	-7.7%
	New York State Reta	il Kerosene Posteo	l Credit Prices (dollar	rs per gallon)	
Mid-Hudson	3.044	3.039	0.2%	3.750	-18.8%
Capital District	2.768	2.737	1.1%	3.338	-17.1%
North Country	3.001	2.998	0.1%	3.697	-18.8%
Central	2.797	2.771	0.9%	3.434	-18.5%
Western	3.153	3.141	0.4%	3.835	-17.8%
Statewide	2.954	2.940	0.5%	3.619	-18.4%
	New York State	Average Residentia	l Natural Gas Prices	(\$/therm)	
REGIO N	August 2020	July 2020	% Change vs. Prior Month	August 2019	% Change vs. Last Year
Statewide	1.922	1.874	2.6%	1.950	-1.4%

* Revision

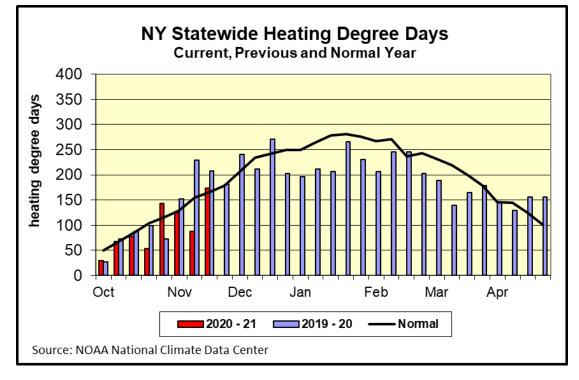
Historic Retail Prices—Statewide average high and low prices since Sept. 1997 for heating oil & propane & Sept. 2000 for kerosene.

- 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.

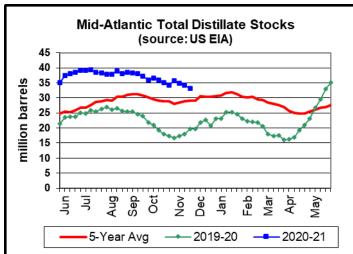
Residential Natural Gas Prices: Statewide average prices are derived from US EIA most currently available data. NYS gas utility specific prices can be found on the NYS DPS website at http://www.dps.ny.gov/TypicalBills.htm#GasRes.

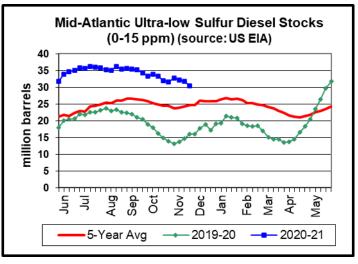
New York State Regions: Long Island: Nassau and Suffolk New York City: Bronx, Kings, New York, Queens, and Richmond Lower Hudson: Dutchess, Putnam, Rockland, and Westchester Upper Hudson: Columbia, Greene, Orange, Sullivan, and Ulster Capital District: Albany, Fulton, Montgomery, Rensselaer, Saratoga, 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, Nia gara, 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 (173) was 16.8% below the year-ago level (208) and 4.2% above the normal trend (166). On a cumulative basis since October 1st, current year heating degree-days (755) are behind the year-ago level (947) by 20.3% and behind the normal trend (872) by 13.4%.

New York State Heating Degree Day Information, Weekly & Cumulative							
Week Ending November 21				Cumulative From October 1			
Region	2020	2019	Normal	2020-21	2019-20	Normal	
Albany	206	211	177	981	981	981	
Binghamton	204	227	196	933	1,156	1,090	
Buffalo	160	216	177	774	1,050	958	
Glens Falls	159	248	200	553	1,196	1,143	
Massena	201	287	212	1,050	1,306	1,186	
NYC	115	157	128	392	579	599	
Rochester	169	222	179	830	1,032	966	
Syracuse	168	215	180	801	1,003	984	
Watertown	182	252	199	963	1,177	1,124	
Statewide	173	208	166	755	947	872	

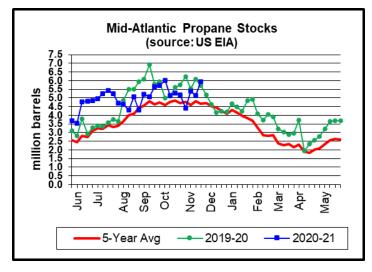


Distillate Stocks-Current and historic heating fuel inventory data is presented in the graphs below.

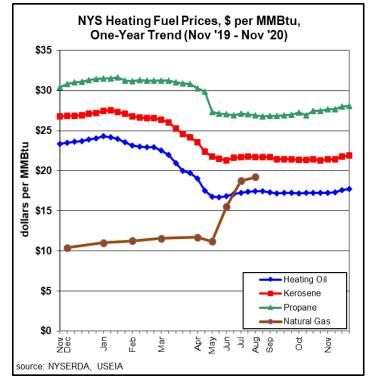




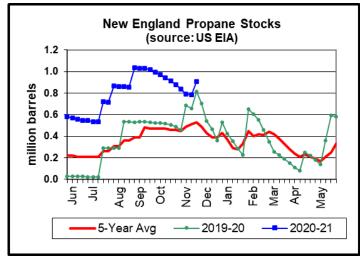
Propane Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



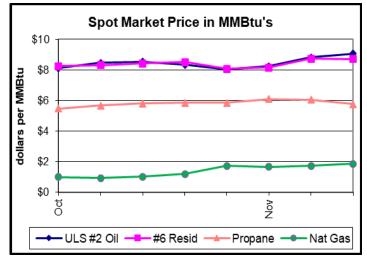
Retail Btu Price Equivalents—The New York State heating fuel prices Btu graph equates the retail price for New York Statewide a verage residential ultra-low sulfur heating oil, kerosene, propane, and natural gas on a dollar per million Btu (MMBtu) basis.



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 a verage 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.



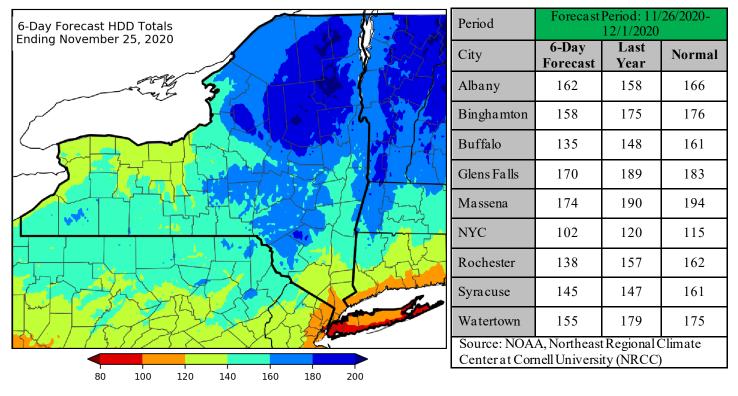
New York Spot Prices, Weekly Average					
Fuel	11/20/2020	Year Ago	% Change		
Ultra LS Diesel	1.258	1.913	-34.2%		
#2 Fuel Oil	1.173	1.892	-38.0%		
#6 Residual 0.3%	1.305	1.806	-27.7%		
Propane	0.527	0.543	-2.9%		
Natural Gas	1.856	2.699	-31.2%		

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

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

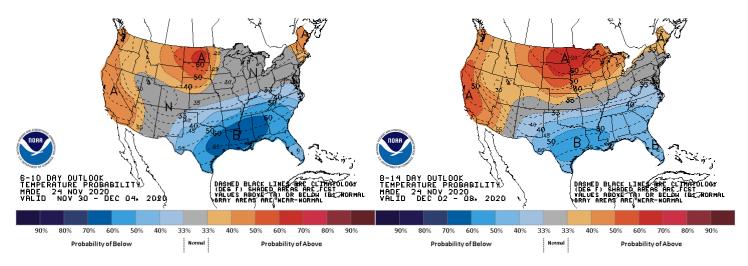
Statewide Forecast HDD: On a statewide basis for the week ending November 28^{th} , the number of forecasted heating degree-days (136) is 13.4% below last year (157) and 24.9% below the normal trend (181). Regional HDD forecasts are provided in the map and table below.

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 30, 2020 – December 4, 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 2, 2020– December 8, 2020. This is in comparison to the 30-year normal (1981-2010).



Additional historic <u>regional specific prices and supply information</u> is a vailable 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>