NYSERDA Heating Fuels Report

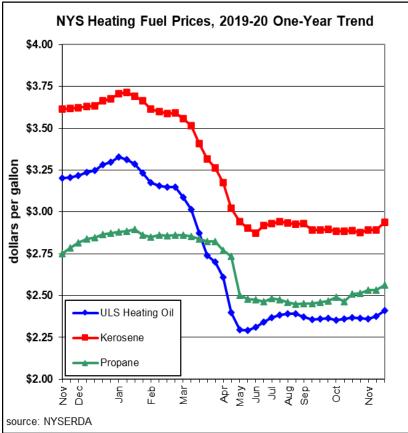
Highlights

- Mid-Atlantic propane inventories decreased 267,000 barrels (5.0%) since last week to 5.125 million barrels. Inventories are 16.0% below the year-ago level but remain 6.5% above the 5-year average.
- Mid-Atlantic ultra-low sulfur (ULS) distillate inventories decreased 0.6 million barrels (1.6%) since last week to 31.7 million barrels. Inventories are 116.9% above the year-ago level and 31.4% 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 9th, prices increased 0.036/gallon (1.5%) to 2.411/gallon for ULS heating oil, 0.046/gallon (1.6%) to 2.940/gallon for kerosene and 0.029/gallon (1.1%) to 2.563/gallon for propane. Compared to a year earlier, prices decreased 0.792/gallon (24.7%) for heating oil, 0.676/gallon(18.7%) for kerosene, and 0.187/gallon (6.8%) for propane.

Crude Oil Prices—For the week ending 11/13/2020, WTI crude oil spot prices a veraged \$40.66/bbl, an increase of \$2.95/bbl (7.8%) from the week-ago a verage of \$37.71/bbl. WTI prices are now \$16.19/bbl (28.5%) below the year-ago weekly average of \$56.85/bbl. The all-time weekly average high of \$142.52/bbl occurred on 7/04/08.

Spot Natural Gas Prices—For the week ending 11/13/2020, Henry Hub natural gas spot prices averaged \$2.740 per million Btu (mmBtu), an increase of \$0.004/mmBtu (0.1%) from the prior week level of \$2.736/mmBtu. Prices are currently \$0.064/mmBtu (2.4%) above the year-earlier weekly average of \$2.676/mmBtu.



Middle Atlantic Stocks—Current and historic heating fuel inventory data is presented in the table below.
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Middle Atlantic Region, Weekly Inventories (million barrels)							
Fuel Type	11/13/2020	11/6/2020	% Change vs. Last Week	Year Ago	% Change vs. Last Year	5-Year Average	% Change vs. 5-Year Avg
ULS Distillate (0-15 ppm)	31.7	32.3	-1.6%	14.6	116.9%	24.1	31.4%
Non-road Diesel (15-500 ppm)	0.6	0.8	-26.4%	0.7	-14.6%	1.2	-50.2%
High Sulfur Distillate (>500 ppm)	2.0	1.8	12.4%	2.7	-23.7%	3.4	-41.3%
Total Distillate Oil	34.3	34.9	-1.5%	18.0	91.1%	28.8	19.4%
Propane	5.125	5.392	-5.0%	6.101	-16.0%	4.812	6.5%
#6 Residual Oil	6.4	6.7	-4.6%	6.5	-1.9%	6.5	-1.3%
US Natural Gas	3,958	3,927	0.8%	3,665	8.0%	3,727	6.2%
US Crude Oil	489.5	488.7	0.2%	450.4	8.7%	460.3	6.3%

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	11/16/2020	11/9/2020	% Change vs. Prior Survey	Year Ago	% Change vs. Last Year
Long Island	2.592	2.560	1.3%	3.382	-23.4%
New York City	2.537	2.517	0.8%	3.326	-23.7%
Lower Hudson	2.397	2.335	2.7%	3.239	-26.0%
Upper Hudson	2.302	2.213	4.0%	3.080	-25.3%
Capital District	2.151	2.130	1.0%	2.912	-26.1%
North Country*	2.360	2.367	-0.3%	3.219	-26.7%
Central	2.213	2.195	0.8%	2.968	-25.4%
Western	2.638	2.622	0.6%	3.363	-21.6%
Statewide	2.411	2.375	1.5%	3.203	-24.7%
New York S	tate Retail Propane Pos	sted Credit Prices	- 1,100 gallon usage c	ategory (dollars p	er gallon)
Long Island	3.101	3.091	0.3%	2.997	3.5%
Mid-Hudson	2.736	2.719	0.6%	2.720	0.6%
Capital District	2.387	2.382	0.2%	2.576	-7.3%
North Country*	2.709	2.626	3.2%	3.539	-23.5%
Central	2.386	2.360	1.1%	2.486	-4.0%
Western	2.390	2.365	1.1%	2.487	-3.9%
State wide *	2.563	2.534	1.1%	2.750	-6.8%
	New York State Reta	il Kerosene Poste	d Credit Prices (dollar	rs per gallon)	*
Mid-Hudson	3.039	2.922	4.0%	3.745	-18.9%
Capital District	2.737	2.742	-0.2%	3.338	-18.0%
North Country	2.998	2.975	0.8%	3.688	-18.7%
Central	2.771	2.758	0.5%	3.430	-19.2%
Western	3.141	3.130	0.4%	3.835	-18.1%
Statewide	2.940	2.894	1.6%	3.616	-18.7%
	New York State	Average Residentia	al 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

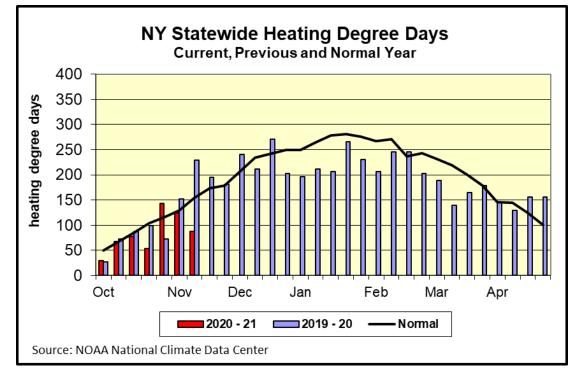
Historic Retail Prices—Statewide average high and low prices since Sept. 1997 for heating oil & propane & Sept. 2000 for kerosene.

- 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.

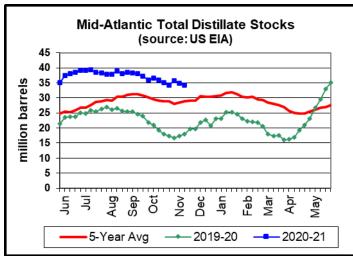
Residential Natural Gas Prices: Statewide average prices are derived from US EIA most currently a vailable data. NYS gas utility specific prices can be found on the NYS DPS website at http://www.dps.ny.gov/TypicalBills.htm#GasRes.

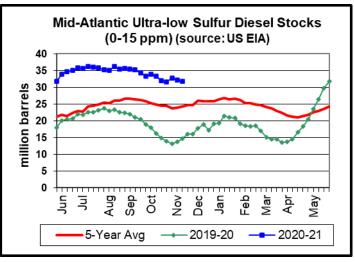
New York State Regions: Long Island: Nassau and Suffolk New York City: Bronx, Kings, New York, Queens, and Richmond Lower Hudson: Dutchess, Putnam, Rockland, and Westchester Upper Hudson: Columbia, Greene, Orange, Sullivan, and Ulster Capital District: Albany, Fulton, Montgomery, Rensselaer, Saratoga, 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 (87) was 62.0% below the year-ago level (229) and 43.5% below the normal trend (154). On a cumulative basis since October 1st, current year heating degree-days (582) are behind the year-ago level (739) by 21.2% and behind the normal trend (706) by 17.6%.

New York State Heating Degree Day Information, Weekly & Cumulative							
Week Ending November 14				Cumulative From October 1			
Region	2020	2019	Normal	2020-21	2019-20	Normal	
Albany	127	244	162	775	770	804	
Binghamton	108	274	177	729	929	894	
Buffalo	90	250	161	614	834	781	
Glens Falls	79	275	182	394	948	943	
Massena	135	294	192	849	1,019	974	
NYC	37	171	112	277	422	471	
Rochester	100	259	161	661	810	787	
Syracuse	110	254	162	633	788	804	
Watertown	127	283	181	781	925	925	
Statewide	87	229	154	582	739	706	

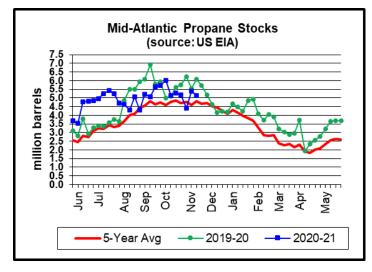


Distillate Stocks-Current and historic heating fuel inventory data is presented in the graphs below.

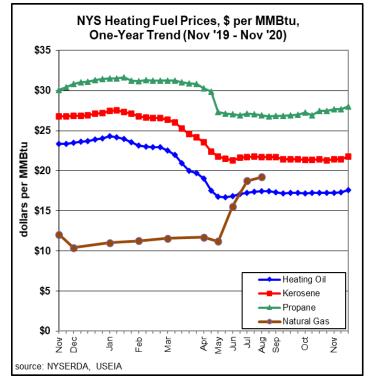




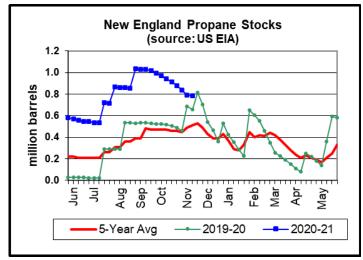
Propane Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



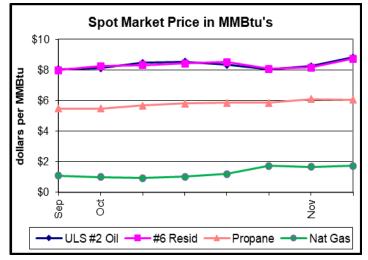
Retail Btu Price Equivalents—The New York State heating fuel prices Btu graph equates the retail price for New York Statewide a verage residential ultra-low sulfur heating oil, kerosene, propane, and natural gas on a dollar per million Btu (MMBtu) basis.



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.



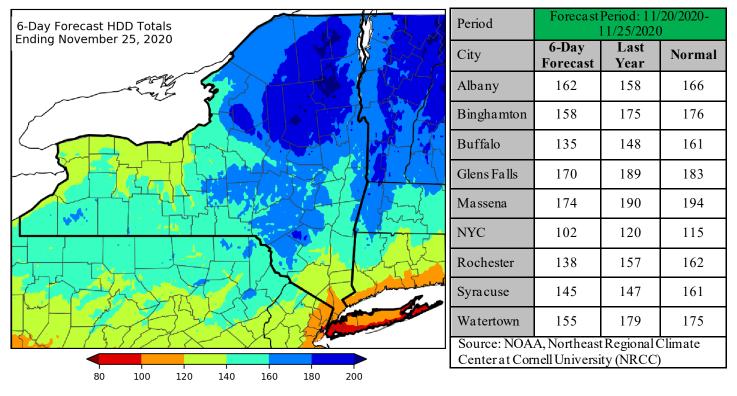
New York Spot Prices, Weekly Average						
Fuel	11/13/2020	Year Ago	% Change			
Ultra LS Diesel	1.226	1.930	-36.5%			
#2 Fuel Oil	1.138	1.909	-40.4%			
#6 Residual 0.3%	1.309	1.824	-28.2%			
Propane	0.553	0.533	3.8%			
Natural Gas	1.716	3.300	-48.0%			

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).

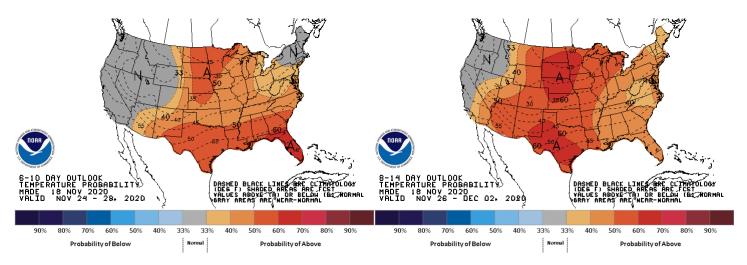
Statewide Forecast HDD: On a statewide basis for the week ending November 21^{st} , the number of forecasted heating degree-days (159) is 18.9% below last year (196) and 2.5% below the normal trend (163). Regional HDD forecasts are provided in the map and table below.

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 24, 2020 - November 28, 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 November 26,2020 - December 2,2020. 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>.