NYSERDA Heating Fuels Report

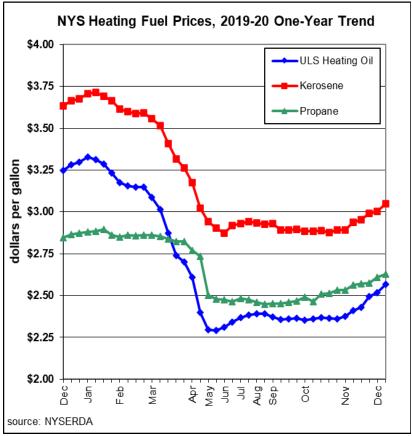
Highlights

- Mid-Atlantic propane inventories increased 260,000 barrels (5.1%) since last week to 5.405 million barrels. Inventories are 29.5% above the year-ago level and 21.9% above the 5-year average.
- Mid-Atlantic ultra-low sulfur (ULS) distillate inventories decreased 0.1 million barrels (0.4%) since last week to 31.6 million barrels. Inventories are 67.9% above the year-ago level and 21.4% 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 December 7th, prices increased 0.048/gallon (1.9%) to 2.566/gallon for ULS heating oil, 0.046/gallon (1.5%) to 3.051/gallon for kerosene and 0.019/gallon (0.7%) to 2.628/gallon for propane. Compared to a year earlier, prices decreased 0.684/gallon (21.0%) for heating oil, 0.582/gallon(16.0%) for kerosene, and 0.219/gallon (7.7%) for propane.

Crude Oil Prices—For the week ending 12/11/2020, WTI crude oil spot prices a veraged \$46.04/bbl, an increase of \$0.67/bbl(1.5%) from the week-ago average of \$45.37/bbl. WTI prices are now \$13.21/bbl (22.3%) below the year-ago weekly average of \$59.25/bbl. The all-time weekly average high of \$142.52/bbl occurred on 7/04/08.

Spot Natural Gas Prices—For the week ending 12/11/2020, Henry Hub natural gas spot prices a veraged \$2.440 per million Btu (mmBtu), a decrease of \$0.222/mmBtu (8.3%) from the prior week level of \$2.662/mmBtu. Prices are currently \$0.224/mmBtu (10.1%) above the year-earlier weekly a verage of \$2.216/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 he	ating fuel inventory	data is presented ir	the table below.

Middle Atlantic Region, Weekly Inventories (million barrels)							
Fuel Type	12/11/2020	12/4/2020	% Change vs. Last Week	Year Ago	% Change vs. Last Year	5-Year Average	% Change vs. 5-Year Avg
ULS Distillate (0-15 ppm)	31.6	31.7	-0.4%	18.8	67.9%	26.0	21.4%
Non-road Diesel (15-500 ppm)	0.8	0.7	28.9%	1.1	-21.7%	1.3	-33.6%
High Sulfur Distillate (>500 ppm)	1.9	1.7	9.0%	2.7	-30.7%	3.5	-45.6%
Total Distillate Oil	34.3	34.1	0.7%	22.6	51.8%	30.8	11.6%
Propane	5.405	5.145	5.1%	4.174	29.5%	4.435	21.9%
#6 Residual Oil	6.4	6.7	-4.3%	6.7	-3.4%	6.1	5.4%
US Natural Gas	3,726	3,848	-3.2%	3,442	8.3%	3,483	7.0%
US Crude Oil	500.1	503.2	-0.6%	446.8	11.9%	454.6	10.0%

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	12/14/2020	12/7/2020	% Change vs. Prior Survey	Year Ago	% Change vs. Last Year
Long Island*	2.775	2.702	2.7%	3.462	-19.8%
New York City*	2.698	2.662	1.4%	3.370	-19.9%
Lower Hudson*	2.621	2.541	3.1%	3.307	-20.7%
Upper Hudson	2.448	2.409	1.6%	3.099	-21.0%
Capital District	2.282	2.232	2.2%	2.954	-22.7%
North Country	2.469	2.425	1.8%	3.241	-23.8%
Central	2.357	2.344	0.6%	2.997	-21.4%
Western	2.696	2.681	0.6%	3.417	-21.1%
Statewide*	2.566	2.518	1.9%	3.250	-21.0%
New York	State Retail Propane Pos	sted Credit Prices -	1,100 gallon usage	category (dollars pe	r gallon)
Long Island	3.142	3.125	0.5%	3.128	0.4%
Mid-Hudson*	2.792	2.785	0.3%	2.793	0.0%
Capital District	2.494	2.461	1.3%	2.691	-7.3%
North Country	2.787	2.745	1.5%	3.671	-24.1%
Central	2.475	2.460	0.6%	2.566	-3.5%
Western*	2.430	2.402	1.2%	2.576	-5.7%
State wide *	2.631	2.609	0.8%	2.847	-7.6%
	New York State Reta	il Kerosene Posted	Credit Prices (dolla	ars per gallon)	2
Mid-Hudson	3.150	3.089	2.0%	3.753	-16.1%
Capital District	2.868	2.806	2.2%	3.379	-15.1%
North Country	3.093	3.048	1.5%	3.716	-16.8%
Central	2.924	2.906	0.6%	3.449	-15.2%
Western	3.187	3.153	1.1%	3.835	-16.9%
Statewide	3.051	3.005	1.5%	3.633	-16.0%
	New York State A	Average Residentia	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

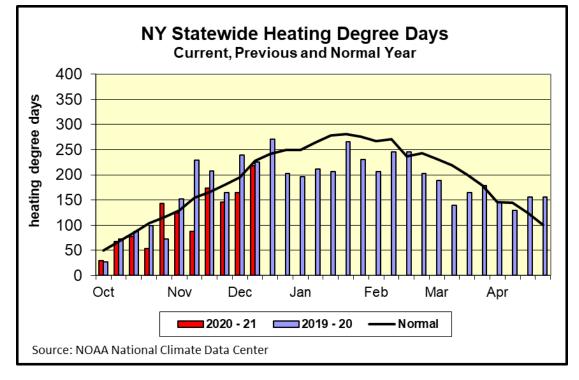
Historic Retail Prices—Statewide average high and low prices since Sept. 1997 for heating oil & propane & Sept. 2000 for kerosene.

- 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.

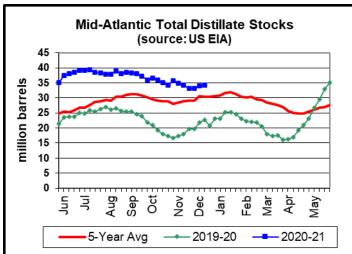
Residential Natural Gas Prices: Statewide average prices are derived from US EIA most currently a vailable data. NYS gas utility specific prices can be found on the NYS DPS website at http://www.dps.ny.gov/TypicalBills.htm#GasRes.

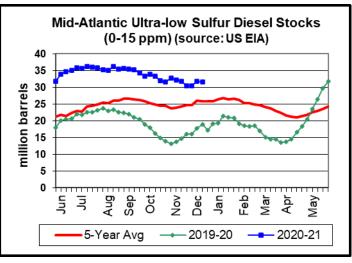
New York State Regions: Long Island: Nassau and Suffolk New York City: Bronx, Kings, New York, Queens, and Richmond Lower Hudson: Dutchess, Putnam, Rockland, and Westchester Upper Hudson: Columbia, Greene, Orange, Sullivan, and Ulster Capital District: Albany, Fulton, Montgomery, Rensselaer, Saratoga, 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 (218) was 3.1% below the year-ago level (225) and 4.4% below the normal trend (228). On a cumulative basis since October 1^{st} , current year heating degree-days (1,284) are behind the year-ago level (1,576) by 18.5% and behind the normal trend (1,475) by 12.9%.

New York State Heating Degree Day Information, Weekly & Cumulative						
Week Ending December 12			Cumulative From October 1			
Region	2020	2019	Normal	2020-21	2019-20	Normal
Albany	248	246	231	1,615	1,650	1,622
Binghamton	234	265	249	1,537	1,889	1,784
Buffalo	199	224	231	1,324	1,672	1,599
Glens Falls	215	266	262	1,066	1,927	1,866
Massena	247	281	285	1,720	2,075	1,968
NYC	162	174	176	750	1,073	1,080
Rochester	208	248	233	1,389	1,701	1,611
Syracuse	208	241	238	1,344	1,666	1,639
Watertown	237	286	263	1,559	1,944	1,848
Statewide	218	225	228	1,284	1,576	1,475

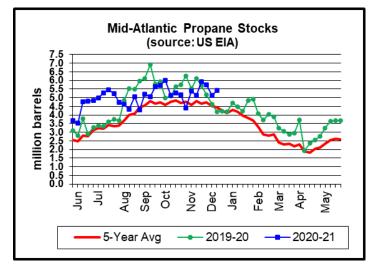


Distillate Stocks-Current and historic heating fuel inventory data is presented in the graphs below.

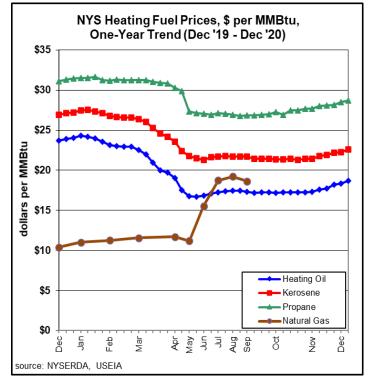




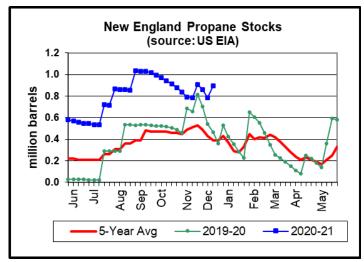
Propane Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



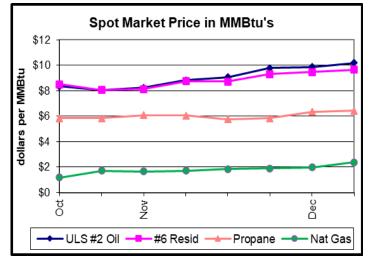
Retail Btu Price Equivalents—The New York State heating fuel prices Btu graph equates the retail price for New York Statewide a verage residential ultra-low sulfur heating oil, kerosene, propane, and natural gas on a dollar per million Btu (MMBtu) basis.



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.



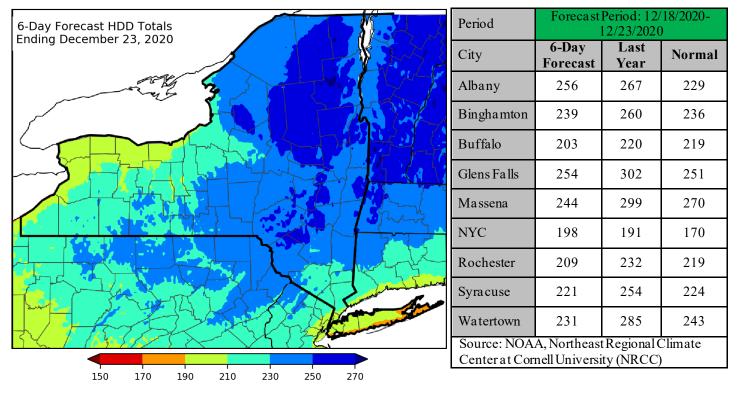
New York Spot Prices, Weekly Average							
Fuel	12/11/2020	Year Ago	% Change				
Ultra LS Diesel	1.413	1.957	-27.8%				
#2 Fuel Oil	1.336	1.933	-30.9%				
#6 Residual 0.3%	1.447	1.987	-27.2%				
Propane	0.588	0.516	14.0%				
Natural Gas	2.393	2.424	-1.3%				

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).

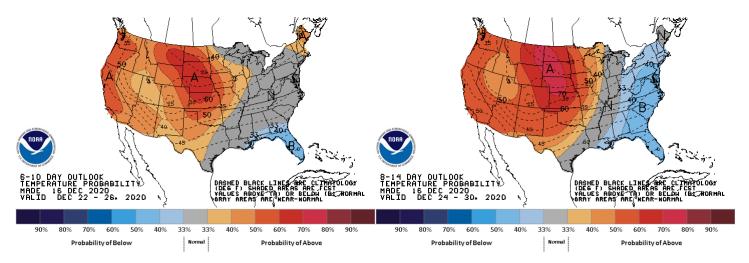
Statewide Forecast HDD: On a statewide basis for the week ending December 19^{th} , the number of forecasted heating degree-days (237) is 0.4% above last year (236) and 2.6% above the normal trend (231). Regional HDD forecasts are provided in the map and table below.

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 December 22, 2020 – December 26, 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 24, 2020 – December 30, 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>