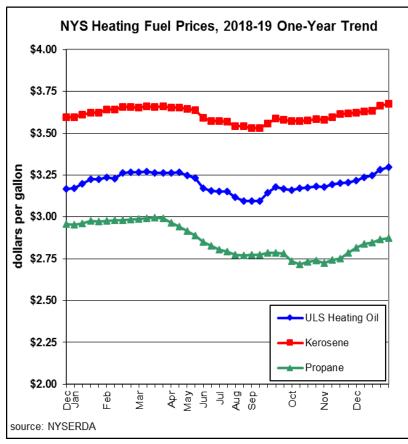
Highlights

- Mid-Atlantic ultra-low sulfur (ULS) distillate inventories increased 2.0 million barrels (11.6%) since last week to 19.1 million barrels. Current inventories are 8.4% ahead of last year's level but 23.1% below the 5-year average.
- For the week ending December 28th, New York statewide heating degree-days (203) were less than last year (209) by 2.9% and less than the 30-year normal (249) by 18.5%.
- 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 23rd, prices increased \$0.016/gallon (0.5%) to \$3.297/gallon for ULS heating oil, \$0.011/gallon (0.3%) to \$3.676/gallon for kerosene, and \$0.007/gallon (0.2%) to \$2.872/gallon for propane. Compared to a year earlier, prices increased \$0.129/gallon (4.1%) for heating oil, \$0.078/gallon (2.2%) for kerosene, and the price decreased \$0.086/gallon (2.9%) for propane.

Crude Oil Prices—For the week ending 12/27/19, WTI crude oil spot prices averaged \$61.26/bbl, an increase of \$0.51/bbl (0.8%) from the week-ago average of \$60.75/bbl. WTI prices are now \$16.04/bbl (35.5%) above the year-ago weekly average of \$45.22/bbl. The all-time weekly average high of \$142.52/bbl occurred on 7/04/08.

Spot Natural Gas Prices—For the week ending 12/27/19, Henry Hub natural gas spot prices averaged \$2.028 per million Btu (mmBtu), a decrease of \$0.240/mmBtu (10.6%) from the prior week level of \$2.268/mmBtu. Prices are currently \$1.113/mmBtu (35.4%) below the year-earlier weekly average of \$3.140/mmBtu.



Residential Natural Gas Prices—The NYS average price in October 2019 was \$1.643/therm, a decrease of \$0.299/therm (15.4%) from the September 2019 price of \$1.942/therm, and was \$0.020/therm (1.2%) lower than the year earlier average of \$1.663/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	12/27/2019	12/20/2019	% Change vs. Last Week	Year Ago	% Change vs. Last Year	5-Year Average	% Change vs. 5- Year Avg
ULS Distillate (0-15 ppm)	19.1	17.1	11.6%	17.6	8.4%	24.9	-23.1%
Non-road Diesel (15-500 ppm)	1.1	1.0	8.7%	1.1	3.2%	1.3	-13.4%
High Sulfur Distillate (>500 ppm)	2.9	2.7	9.3%	3.2	-8.9%	4.1	-28.9%
Total Distillate Oil	23.2	20.8	11.1%	21.9	5.6%	30.3	-23.5%
Propane	4.187	4.232	-1.1%	4.302	-2.7%	3.568	17.3%
#6 Residual Oil	5.8	6.5	-9.8%	4.2	37.4%	5.9	-2.0%
US Natural Gas	3,192	3,250	-1.8%	2,708	17.9%	3,230	-1.2%
US Crude Oil	429.9	441.4	-2.6%	441.4	-2.6%	432.0	-0.5%

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



REGION	12/30/2019	12/23/2019	% Change vs. Prior Survey	Year Ago	% Change vs. Last Year
Long Island	3.503	3.477	0.7%	3.308	5.9%
New York City	3.394	3.390	0.1%	3.160	7.4%
Lower Hudson	3.383	3.365	0.5%	3.185	6.2%
Upper Hudson	3.161	3.142	0.6%	3.103	1.9%
Capital District	2.992	2.984	0.3%	2.894	3.4%
North Country	3.281	3.253	0.9%	3.259	0.7%
Central	3.076	3.060	0.5%	3.010	2.2%
Western	3.423	3.419	0.1%	3.405	0.5%
Statewide	3.297	3.281	0.5%	3.168	4.1%
New Y	ork State Retail Propane	Posted Credit Prices -	1,100 gallon usage catego	ory (dollars per gall	on)
Long Island	3.197	3.191	0.2%	3.247	-1.5%
Mid-Hudson	2.802	2.801	0.0%	2.875	-2.5%
Capital District	2.738	2.736	0.1%	2.870	-4.6%
North Country	3.701	3.689	0.3%	3.754	-1.4%
Central	2.601	2.584	0.7%	2.733	-4.8%
Western	2.570	2.570	0.0%	2.633	-2.4%
Statewide	2.872	2.865	0.2%	2.958	-2.9%
	New York State F	Retail Kerosene Posted	Credit Prices (dollars per	r gallon)	
Mid-Hudson*	3.798	3.790	0.2%	3.674	3.4%
Capital District	3.421	3.411	0.3%	3.319	3.1%
North Country	3.748	3.722	0.7%	3.735	0.3%
Central	3.526	3.527	0.0%	3.479	1.4%
Western	3.835	3.812	0.6%	3.782	1.4%
State wide *	3.676	3.665	0.3%	3.598	2.2%
	New York Sta	te Average Residentia	l Natural Gas Prices (\$/th	erm)	
REGION	October 2019	September 2019	% Change vs. Prior Month	October 2018	% Change vs. Last Year
Statewide	1.643	1.942	-15.4%	1.663	-1.2%

^{*} Revision

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

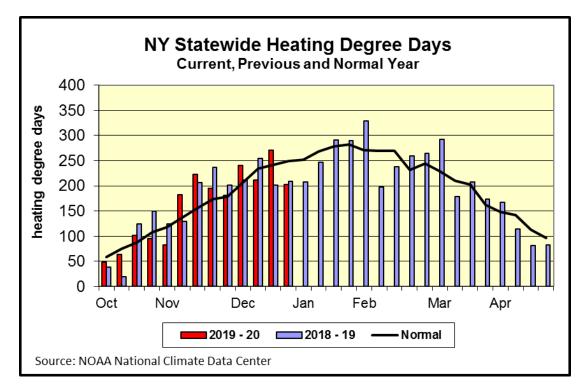
- Heating oil—highest price \$4.778/gallon on 7/14/08, lowest price \$0.876/gallon on 9/08/98.
- Propane—highest price \$3.811/gallon on 2/17/14, lowest price \$1.072/gallon on 9/20/99.
- Kerosene—highest price \$5.068/gallon on 7/14/08, lowest price \$1.309/gallon on 9/09/02.

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.

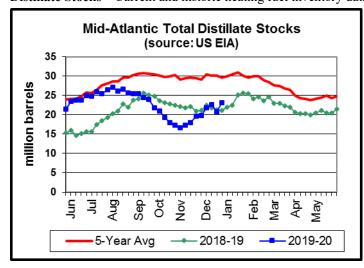
New York State Regions: Long Island: Nassau and Suffolk New York City: Bronx, Kings, New York, Queens, and Richmond Lower Hudson: Dutchess, Putnam, Rockland, and Westchester Upper Hudson: Columbia, Greene, Orange, Sullivan, and Ulster Capital District: Albany, Fulton, Montgomery, Rensselaer, Saratoga,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

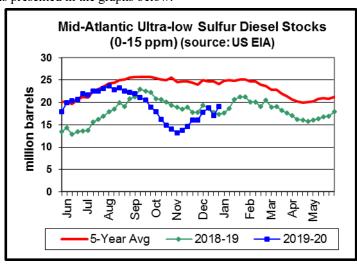
Heating Degree Days— On a statewide basis during the past week, the number of heating degree-days (203) was 2.9% below the year-ago level (209) and 18.5% below the normal trend (249). On a cumulative basis since October 1st, current year heating degree-days (2,098) are behind the year-ago level (2,104) by 0.3% and ahead of the normal trend (2,024) by 3.7%.

New York State Heating Degree Day Information, Weekly & Cumulative							
Week Ending December 28				Cumulative From October 1			
Region	2019	2018	Normal	2019-20	2018-19	Normal	
Albany	221	210	263	2,212	2,228	2,190	
Binghamton	212	239	280	2,471	2,513	2,386	
Buffalo	170	216	262	2,174	2,264	2,163	
Glens Falls	251	244	301	2,566	2,526	2,509	
Massena	239	329	327	2,726	2,807	2,671	
NYC	151	159	206	1,492	1,493	1,526	
Rochester	181	206	263	2,226	2,197	2,179	
Syracuse	201	236	270	2,218	2,377	2,220	
Watertown	207	272	300	2,551	2,585	2,490	
Statewide	203	209	249	2,098	2,104	2,024	

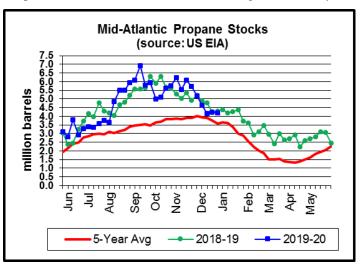


Distillate Stocks—Current and historic heating fuel inventory data is presented in the graphs below.

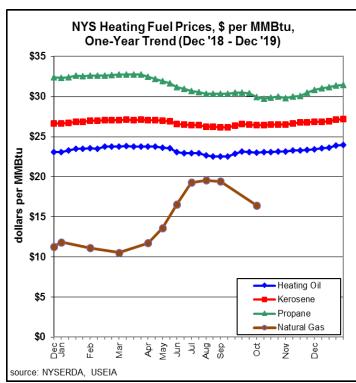




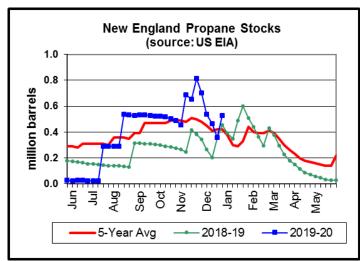
Propane Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



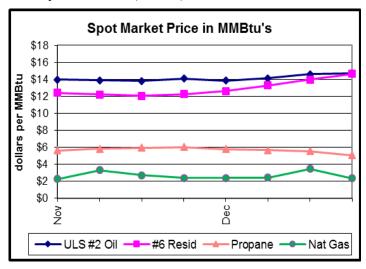
Retail Btu Price Equivalents—The New York State heating fuel prices Btu graph equates the retail price for New York Statewide average residential ultra-low sulfur heating oil, kerosene, propane, and natural gas on a dollar per million Btu (MMBtu) basis.



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.



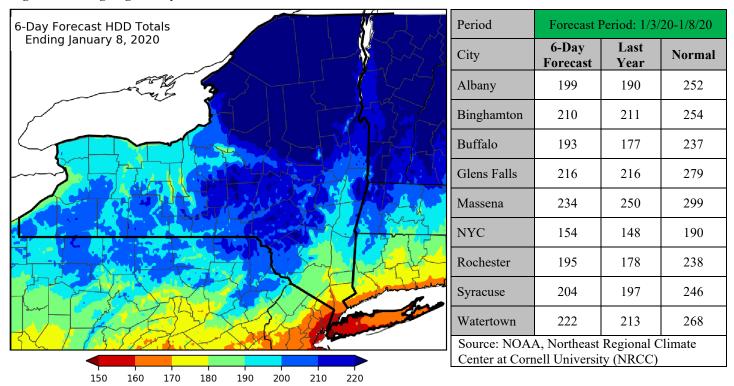
New York Spot Prices, Weekly Average					
Fuel	12/27/2019	Year Ago	% Change		
Ultra LS Diesel	2.037	1.707	19.3%		
#2 Fuel Oil	2.020	1.686	19.8%		
#6 Residual 0.3%	2.193	1.602	36.9%		
Propane	0.462	0.644	-28.3%		
Natural Gas	2.343	3.379	-30.7%		

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).

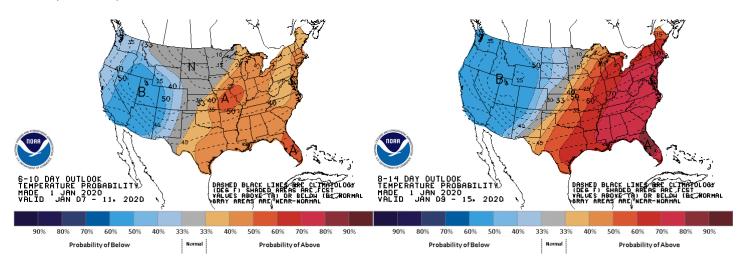
Statewide Forecast HDD: On a statewide basis for the week ending January 4th, the number of forecasted heating degree-days (178) is 8.2% below last year (194) and 31.3% below the normal trend (259). Regional HDD forecasts are provided in the map and table below.

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 January 7, 2020 – January 11, 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 January 9, 2020 – January 15, 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>