NYSERDA Heating Fuels Report

Highlights

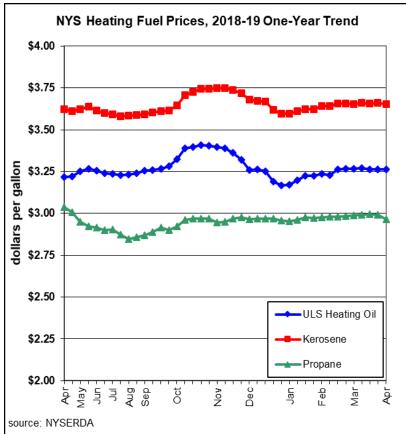
- Mid-Atlantic ultra-low sulfur (ULS) distillate inventories decreased 0.2 million barrels (1.1%) since last week to 16.1 million barrels. Current inventories are 8.2% below last year's level and 16.0% below the 5-year average.
- For the week ending April 13th, New York statewide heating degree-days (114) were less than last year (193) by 40.9% and less than the 30-year normal (142) by 19.7%.
- New York Statewide average retail prices of ultra-low sulfur (ULS) heating oil, kerosene, and propane decreased since the last survey.

Retail Petroleum Prices—On a statewide basis since the last survey on April 15th, prices decreased \$0.001/gallon (0.0%) to \$3.263/gallon for ULS heating oil, \$0.006/gallon (0.2%) to \$3.654/gallon for kerosene, and \$0.025/gallon (2.5%) to \$2.966/gallon for propane. Compared to a year earlier, prices increased \$0.044/gallon (1.4%) for heating oil, \$0.030/gallon (0.8%) for kerosene, and the price decreased \$0.073/gallon (2.4%) for propane.

Crude Oil Prices—For the week ending 4/12/19, WTI crude oil spot prices averaged \$64.10/bbl, an increase of \$1.74/bbl (2.8%) from the week-ago average of \$62.36/bbl. WTI prices are now \$1.92/bbl (2.9%) below the year-ago weekly average of \$66.02/bbl. The all-time weekly average high of \$142.52/bbl occurred on 7/04/08.

Spot Natural Gas Prices—For the week ending 4/12/19, Henry Hub natural gas spot prices averaged \$2.686 per million Btu (mmBtu), an increase of \$0.004/mmBtu (0.1%) from the prior week level of \$2.682/mmBtu. Prices are currently \$0.039/mmBtu (1.5%) above the year-earlier weekly average of \$2.648/mmBtu.

Residential Natural Gas Prices—The NYS average price in January 2019 was \$1.186/therm, an increase of



\$0.056/therm (5.0%) from the December 2018 price of \$1.130/therm, and was \$0.264/therm (28.6%) more than the year earlier average of \$0.922/therm.

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	4/12/2019	4/5/2019	% Change vs. Last Week	Year Ago	% Change vs. Last Year	5-Year Average	% Change vs. 5-Year Avg
ULS Distillate (0-15 ppm)	16.1	16.3	-1.1%	17.5	-8.2%	19.2	-16.0%
Non-road Diesel (15-500 ppm)	0.8	0.9	-9.0%	0.6	30.7%	0.8	4.0%
High Sulfur Distillate (>500 ppm)	3.4	3.1	8.9%	2.4	41.0%	3.0	13.8%
Total Distillate Oil	20.3	20.3	0.1%	20.6	-1.3%	22.9	-11.5%
Propane	2.242	2.924	-23.3%	1.504	49.1%	1.397	60.5%
#6 Residual Oil	5.0	5.1	-1.6%	5.7	-12.0%	6.2	-18.5%
US Natural Gas	1,247	1,155	8.0%	1,304	-4.4%	1,661	-24.9%
US Crude Oil	455.2	456.6	-0.3%	427.6	6.5%	455.7	-0.1%

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	4/15/2019	3/25/2019	% Change vs. Prior Survey	Year Ago	% Change vs. Last Year
Long Island	3.418	3.424	-0.2%	3.385	1.0%
New York City	3.374	3.348	0.8%	3.287	2.6%
Lower Hudson	3.332	3.331	0.0%	3.346	-0.4%
Upper Hudson	3.136	3.151	-0.5%	3.159	-0.7%
Capital District	2.972	2.982	-0.3%	2.996	-0.8%
North Country	3.273	3.269	0.1%	3.101	5.5%
Central	3.071	3.079	-0.3%	2.972	3.3%
Western	3.408	3.408	0.0%	3.362	1.4%
Statewide	3.263	3.264	0.0%	3.219	1.4%
New York St	ate Retail Propane Po	sted Credit Prices -	1,100 gallon usage c	ategory (dollars pe	r gallon)
Long Island	3.195	3.224	-0.9%	3.297	-3.1%
Mid-Hudson	2.869	2.875	-0.2%	2.931	-2.1%
Capital District	2.921	2.936	-0.5%	3.024	-3.4%
North Country	3.811	3.815	-0.1%	3.805	0.2%
Central	2.698	2.750	-1.9%	2.831	-4.7%
Western	2.665	2.695	-1.1%	2.710	-1.7%
Statewide	2.966	2.991	-0.8%	3.039	-2.4%
	New York State Ret	ail Kerosene Posted	Credit Prices (dollar	rs per gallon)	
Mid-Hudson	3.749	3.751	-0.1%	3.763	-0.4%
Capital District	3.422	3.430	-0.2%	3.463	-1.2%
North Country	3.757	3.763	-0.2%	3.618	3.8%
Central	3.528	3.541	-0.4%	3.457	2.1%
Western	3.777	3.777	0.0%	3.738	1.0%
Statewide	3.654	3.660	-0.2%	3.624	0.8%
	New York State	Average Residential	Natural Gas Prices	(\$/therm)	
REGIO N	January 2019	December 2018	% Change vs. Prior Month	January 2018	% Change vs. Last Year
Statewide	1.186	1.130	5.0%	0.922	28.6%

* Revision

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

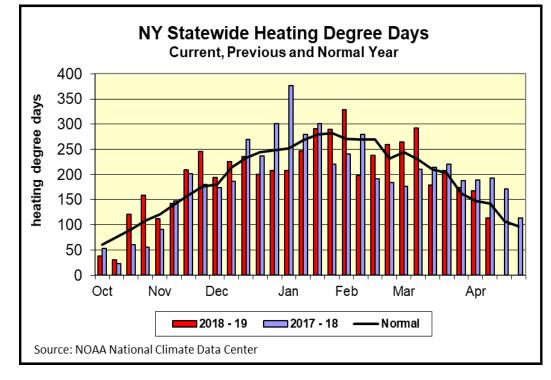
- Heating oil—highest price \$4.778/gallon on 7/14/08, lowest price \$0.876/gallon on 9/08/98.
- Propane—highest price \$3.811/gallon on 2/17/14, lowest price \$1.072/gallon on 9/20/99.
- Kerosene—highest price \$5.068/gallon on 7/14/08, lowest price \$1.309/gallon on 9/09/02.

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.

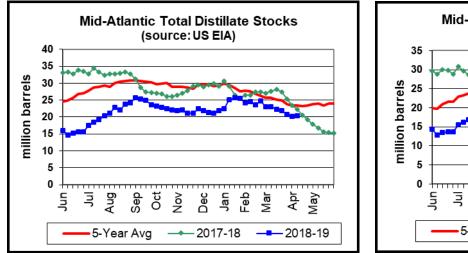
New York State Regions: Long Island: Nassau and Suffolk New York City: Bronx, Kings, New York, Queens, and Richmond Lower Hudson: Dutchess, Putnam, Rockland, and Westchester Upper Hudson: Columbia, Greene, Orange, Sullivan, and Ulster Capital District: Albany, Fulton Montgomery, Rensselaer, Saratoga,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

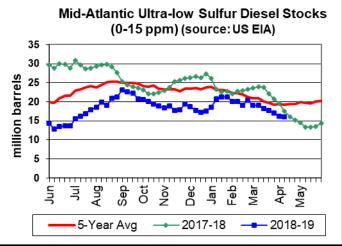
Heating Degree Days— On a statewide basis during the past week, the number of heating degree-days (114) was 40.9% below the year-ago level (193) and 19.7% below the normal trend (142). On a cumulative basis since October 1^{st} , current year heating degree-days (5,577) are ahead of the year-ago level (5,450) by 2.3% and ahead of the normal trend (5,512) by 1.2%.

New York State Heating Degree Day Information, Weekly & Cumulative							
Week Ending April 13				Cumulative From October 1			
Region	2019	2018	Normal	2018-19	2017-18	Normal	
Albany	105	193	138	5,828	5,785	5,784	
Binghamton	108	204	160	6,418	6,282	6,293	
Buffalo	122	205	154	6,011	5,848	5,896	
Glens Falls	143	219	157	6,570	6,576	6,621	
Massena	179	210	171	7,391	6,837	7,153	
NYC	72	124	103	4,271	4,123	4,400	
Rochester	104	199	150	5,795	5,676	5,918	
Syracuse	106	208	150	6,154	6,020	6,009	
Watertown	147	217	168	6,826	6,512	6,681	
Statewide	114	193	142	5,577	5,450	5,512	

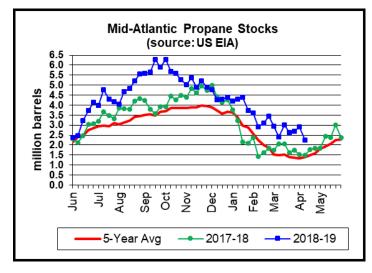


Distillate Stocks—Current and historic heating fuel inventory data is presented in the graphs below.

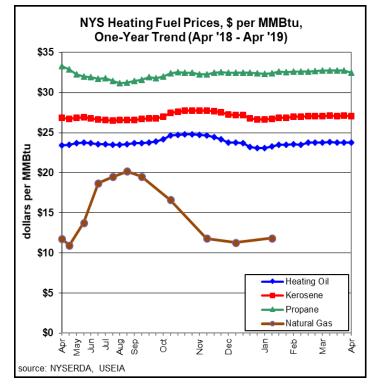




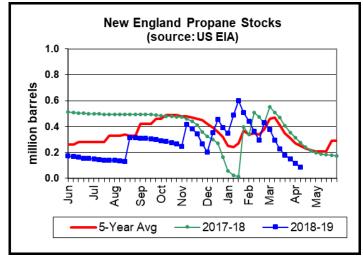
Propane Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



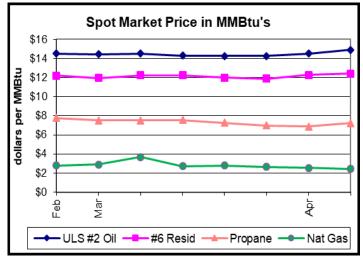
Retail Btu Price Equivalents—The New York State heating fuel prices Btu graph equates the retail price for New York Statewide average residential ultra-low sulfur heating oil, kerosene, propane, and natural gas on a dollar per million Btu (MMBtu) basis.



Note: Natural gas prices are from the U.S. EIA and provided on a monthly basis and delayed by 3 months.



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.



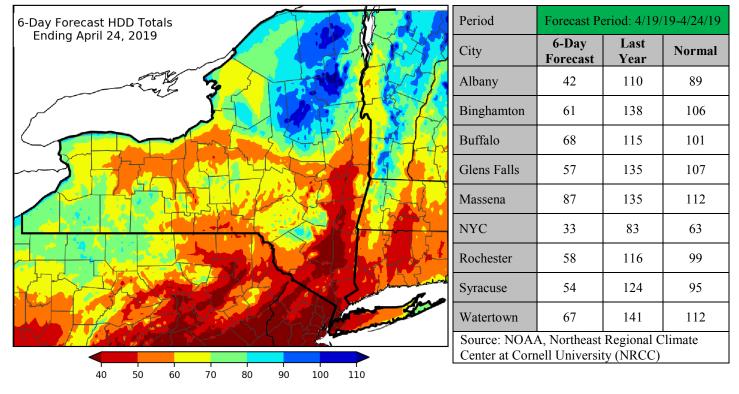
New York Spot Prices, Weekly Average						
Fuel	4/12/2019 Year Ago		% Change			
Ultra LS Diesel	2.065	2.071	-0.3%			
#2 Fuel Oil	2.039	2.032	0.4%			
#6 Residual 0.3%	1.858	1.641	13.2%			
Propane	0.661	0.795	-16.9%			
Natural Gas	2.431	3.004	-19.1%			

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).

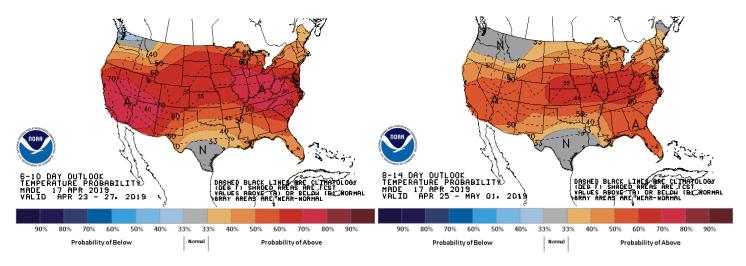
Statewide Forecast HDD: On a statewide basis for the week ending April 20th, the number of forecasted heating degree-days (70) is 58% less than last year (167) and 41% less than the normal trend (119). Regional HDD forecasts are provided in the map and table below.





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 April 2, 2019 – April 6, 2019. 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 April 4, 2019 – April 10, 2019. 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>.