## NYSERDA Heating Fuels Report

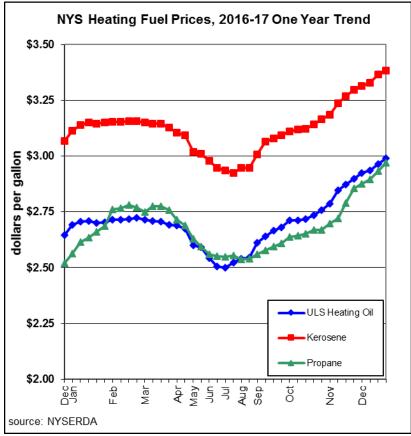
## **Highlights**

- Cumulative New York statewide heating degree-days since October 1<sup>st</sup> (1,698) are ahead of last year (1,689) by 0.5% and behind the 30-year normal (1,828) by 7.1%.
- Mid-Atlantic ultra-low sulfur (ULS) distillate stocks for the current week decreased by 0.4 million barrels (1.6%) since last week and are now 26.8% below last year's level but 30.1% above the 5-year average.
- For the 11<sup>th</sup> week in a row, 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 18<sup>th</sup>, prices increased \$0.028/gallon (0.9%) to \$2.992/gallon for ULS heating oil, \$0.017/gallon (0.5%) to \$3.383/gallon for kerosene, and \$0.037/gallon (1.3%) to \$2.970/gallon for propane. Compared to a year earlier, prices increased \$0.346/gallon (13.1%) for heating oil, \$0.316/gallon (10.3%) for kerosene and \$0.450/gallon (17.9%) for propane.

**Crude Oil Prices**—For the week ending 12/22/17, WTI crude oil spot prices averaged \$57.87/bbl, an increase of \$0.70/bbl (1.2%) from the week-ago average of \$57.17/bbl. WTI prices are now \$5.92/bbl (11.4%) above the year-ago weekly average of \$51.95/bbl. The all-time weekly average high of \$142.52/bbl occurred on 7/04/08.

**Spot Natural Gas Prices**—For the week ending 12/22/17, Henry Hub natural gas spot prices averaged \$2.678 per million Btu (mmBtu), a decrease of \$0.036/mmBtu (1.3%) from the prior week level of \$2.714/mmBtu. Prices are currently \$0.832/mmBtu (23.7%) below the year-earlier weekly average of \$3.510/mmBtu.



**Residential Natural Gas Prices**—The NYS average price in September 2017 was \$1.741/therm, a decrease of \$0.090/therm (4.9%) from the prior month of \$1.831/therm, and was \$0.063/therm (3.8%) higher than the year earlier average of \$1.678/therm.

Middle Atlantic Region, Weekly Inventories (million barrels)							
Fuel Type	12/22/2017	12/15/2017	% Change vs. Last Week	Year Ago	% Change vs. Last Year	5-Year Average	% Change vs. 5- Year Avg
ULS Distillate (0-15 ppm)	26.3	26.7	-1.6%	35.9	-26.8%	20.2	30.1%
Non-road Diesel (15-500 ppm)	0.7	0.7	1.5%	1.9	-60.4%	1.1	-33.8%
High Sulfur Distillate ( >500 ppm)	2.1	2.4	-14.5%	3.4	-38.8%	6.3	-67.4%
Total Distillate Oil	29.1	29.8	-2.5%	41.2	-29.3%	27.7	5.1%
Propane	4.147	4.416	-6.1%	3.747	10.7%	3.342	24.1%
#6 Residual Oil	5.0	5.0	-0.2%	7.0	-29.2%	6.8	-26.5%
US Natural Gas	3,332	3,444	-3.3%	3,394	-1.8%	3,417	-2.5%
US Crude Oil	431.9	436.5	-1.1%	486.1	-11.1%	391.4	10.3%

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



			% Change vs. Prior		% Change vs. Last
REGION	12/25/2017	12/18/2017	Survey	Year Ago	Year
Long Island	3.132	3.097	1.1%	2.801	11.8%
New York City	3.056	3.002	1.8%	2.753	11.0%
Lower Hudson	3.131	3.097	1.1%	2.733	14.6%
Upper Hudson	2.888	2.872	0.6%	2.553	13.1%
Capital District	2.793	2.775	0.6%	2.502	11.6%
North Country	2.867	2.849	0.6%	2.517	13.9%
Central	2.842	2.828	0.5%	2.450	16.0%
Western	3.124	3.098	0.8%	2.714	15.1%
Statewide	2.992	2.964	0.9%	2.646	13.1%
Nev	w York State Retail Propane	Posted Credit Prices	- 1,100 gallon usage catego	ry (dollars per gallon)	·
Long Island	3.308	3.308	0.0%	2.960	11.8%
Mid-Hudson	2.762	2.747	0.5%	2.396	15.3%
Capital District	3.020	2.980	1.3%	2.784	8.5%
North Country	3.819	3.768	1.4%	2.990	27.7%
Central	2.765	2.685	3.0%	2.296	20.4%
Western	2.598	2.589	0.3%	2.225	16.8%
Statewide	2.970	2.933	1.3%	2.520	17.9%
	New York State F	Retail Kerosene Poste	d Credit Prices (dollars per	gallon)	
Mid-Hudson	3.432	3.430	0.1%	3.174	8.1%
Capital District	3.267	3.231	1.1%	2.989	9.3%
North Country	3.390	3.378	0.4%	3.088	9.8%
Central	3.344	3.309	1.1%	2.933	14.0%
Western	3.459	3.448	0.3%	3.067	12.8%
Statewide	3.383	3.366	0.5%	3.067	10.3%
	New York Sta	te Average Residentia	l Natural Gas Prices (\$/the	rm)	
RECION	Sentember 2017	August 2017	% Change vs. Prior	Soutombox 2016	% Change vs. Last
REGION	September 2017	August 2017	Month -4.9%	September 2016	Year

\* Revision

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

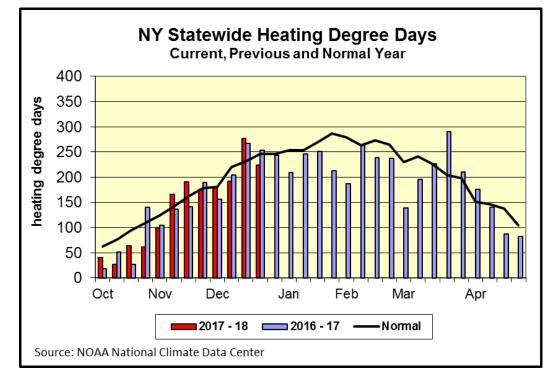
- Heating oil—highest price \$4.778/gallon on 7/14/08, lowest price \$0.876/gallon on 9/08/98.
- Propane—highest price \$3.811/gallon on 2/17/14, lowest price \$1.072/gallon on 9/20/99.
- Kerosene—highest price \$5.068/gallon on 7/14/08, lowest price \$1.309/gallon on 9/09/02.

**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.

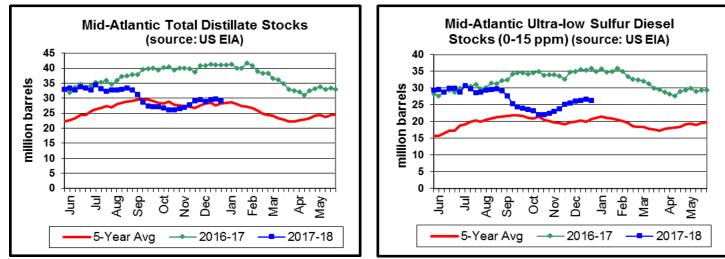
New York State Regions: Long Island: Nassau and Suffolk New York City: Bronx, Kings, New York, Queens, and Richmond Lower Hudson: Dutchess, Putnam, Rockland, and Westchester Upper Hudson: Columbia, Greene, Orange, Sullivan, and Ulster Capital District: Albany, Fulton Montgomery, Rensselaer, Saratoga, 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 (224) was 11.8% below the year-ago level of (254) and 8.9% below the normal trend (246). On a cumulative basis since October  $1^{st}$ , current year heating degree-days (1,698) are ahead of the year-ago level (1,689) by 0.5% and behind the normal trend (1,828) by 7.1%.

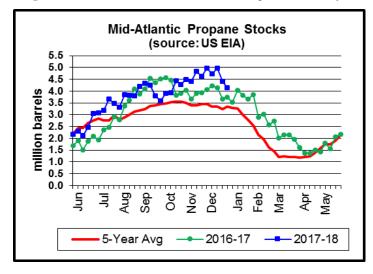
New York State Heating Degree Day Information, Weekly & Cumulative							
Week Ending December 23				Cumulative From October 1			
Region	2017	2016	Normal	2017-18	2016-17	Normal	
Albany	250	288	255	1,828	1,867	1,984	
Binghamton	238	307	272	2,018	2,092	2,163	
Buffalo	239	276	253	1,820	1,679	1,957	
Glens Falls	293	322	289	2,115	1,992	2,269	
Massena	334	340	317	2,187	2,127	2,413	
NYC	155	210	197	1,140	1,105	1,370	
Rochester	239	269	255	1,775	1,689	1,972	
Syracuse	258	293	261	1,899	1,892	2,008	
Watertown	306	305	289	2,058	1,975	2,251	
Statewide	224	254	246	1,698	1,689	1,828	



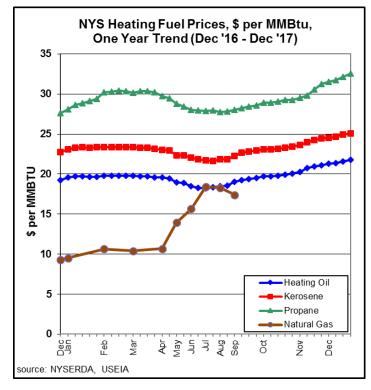
Distillate Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



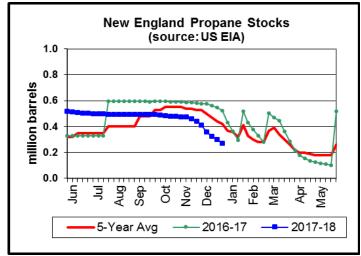
Propane Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



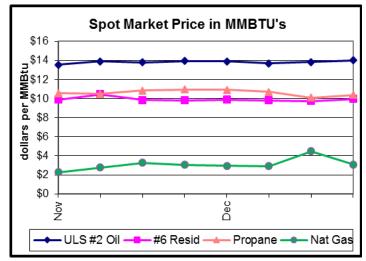
**Retail Btu Price Equivalents**—The New York State Heating Fuel Prices Btu graph equates the retail price for New York Statewide average residential ultra-low sulfur heating oil, kerosene, propane, and natural gas on a dollar per million Btu (MMBtu) basis.



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 City gate natural gas price on a dollar per million Btu (MMBtu) basis.



New York Spot Prices, Weekly Average						
Fuel	12/22/2017	Year Ago	% Change			
Ultra LS Diesel	1.939	1.640	18.3%			
#2 Fuel Oil	1.860	1.548	20.1%			
#6 Residual 0.3%	1.490	1.311	13.7%			
Propane	0.948	0.640	48.0%			
Natural Gas	3.099	4.140	-25.1%			

Note: Fuel in \$/gallon, natural gas (\$/mmBtu)=NYcitygate

Additional historic <u>regional specific prices and supply information</u> is available at NYSERDA's website. For more information please contact Charlie Wesley at (518) 862-1090 ext. 3364, e-mail <u>Charles.Wesley@nyserda.ny.gov</u>.