## NYSERDA Heating Fuels Report

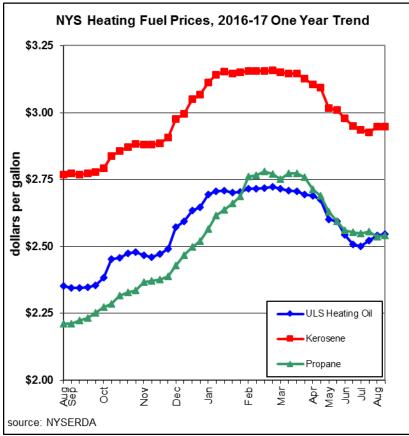
## **Highlights**

- \*\*\*Hurricane Harvey widely impacted the U.S. Gulf Coast refining regions in Texas and Louisiana shuttering up to 5 million barrels per day or 31% of U.S. refining capacity according to trade industry estimates. Damage impact and supply assessments are ongoing. With a reduction of flow of refined products from the Gulf Coast to the Northeast, this event could have ongoing market implications for the NY Harbor market over the next month.
- 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 August 14<sup>th</sup>, prices increased \$0.005/gallon (0.2%) to \$2.546/gallon for ULS heating oil, \$0.001/gallon (0.0%) to \$2.948/gallon for kerosene, and \$0.004/gallon (0.2%) to \$2.540/gallon for propane. Compared to a year earlier, prices increased \$0.195/gallon (8.3%) for heating oil, \$0.181/gallon (6.5%) for kerosene and \$0.330/gallon (14.9%) for propane.

**Crude Oil Prices**—For the week ending 8/25/17, WTI crude oil spot prices averaged \$47.68/bbl, an increase of \$0.16/bbl (0.3%) from the week-ago average of \$47.52/bbl. WTI prices are now \$0.63/bbl (1.3%) above the year-ago weekly average of \$47.05/bbl. The all-time weekly average high of \$142.52/bbl occurred on 7/04/08.

**Spot Natural Gas Prices**—For the week ending 8/25/17, Henry Hub natural gas spot prices averaged \$2.962 per million Btu (mmBtu), an increase of \$0.052/mmBtu (1.8%) from the prior week level of \$2.910/mmBtu. Prices are currently \$0.170/mmBtu (6.1%) above the year-earlier weekly average of \$2.792/mmBtu.



**Residential Natural Gas Prices**—The NYS average price in June 2017 was \$1.561/therm, an increase of \$0.172/therm (12.3%) from the prior month of \$1.390/therm, and was \$0.138/therm (9.7%) higher than the year earlier average of \$1.423/therm.

Middle Atlantic Stocks-Current and historic heating fuel inventory data is pres	ented in the table below.
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Middle Atlantic Region, Weekly Inventories (million barrels)							
Fuel Type	8/25/2017	8/18/2017	% Change vs. Last Week	Year Ago	% Change vs. Last Year	5-Year Average	% Change vs. 5- Year Avg
ULS Distillate (0-15 ppm)	29.1	29.8	-2.3%	32.3	-9.9%	21.7	34.4%
Non-road Diesel (15-500 ppm)	0.9	0.9	-3.1%	2.4	-63.7%	1.1	-19.5%
High Sulfur Distillate ( >500 ppm)	2.7	2.6	4.7%	3.1	-13.8%	6.4	-57.5%
Total Distillate Oil	32.7	33.3	-1.7%	37.9	-13.7%	29.1	12.3%
Propane	4.205	3.804	10.5%	3.871	8.6%	3.172	32.5%
#6 Residual Oil	5.3	5.2	1.4%	7.1	-25.5%	6.4	-16.3%
US Natural Gas	3,155	3,125	1.0%	3,394	-7.0%	3,147	0.3%
US Crude Oil	457.8	463.2	-1.2%	495.2	-7.6%	381.9	19.9%

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	8/28/2017	8/14/2017	% Change vs. Prior Survey	Year Ago	% Change vs. Last Year
Long Island	2.783	2.769	0.5%	2.570	8.3%
New York City	2.702	2.702	0.0%	2.500	8.1%
Lower Hudson	2.633	2.647	-0.5%	2.432	8.3%
Upper Hudson	2.416	2.412	0.2%	2.247	7.5%
Capital District	2.340	2.322	0.8%	2.216	5.6%
North Country	2.389	2.381	0.3%	2.197	8.7%
Central	2.310	2.304	0.3%	2.115	9.2%
Western	2.561	2.560	0.0%	2.303	11.2%
Statewide	2.546	2.541	0.2%	2.351	8.3%
New	v York State Retail Propane	e Posted Credit Prices	- 1,100 gallon usage category	y (dollars per gallon	)
Long Island	2.941	2.924	0.6%	2.735	7.5%
Mid-Hudson	2.452	2.446	0.2%	2.189	12.0%
Capital District	2.714	2.709	0.2%	2.294	18.3%
North Country	3.249	3.249	0.0%	2.578	26.0%
Central	2.244	2.233	0.5%	1.958	14.6%
Western	2.208	2.220	-0.5%	1.998	10.5%
Statewide	2.540	2.536	0.2%	2.210	14.9%
	New York State	Retail Kerosene Poste	d Credit Prices (dollars per g	allon)	
Mid-Hudson	3.042	3.040	0.1%	2.889	5.3%
Capital District	2.858	2.856	0.1%	2.720	5.1%
North Country	2.995	2.999	-0.1%	2.847	5.2%
Central	2.829	2.829	0.0%	2.613	8.3%
Western	2.938	2.932	0.2%	2.633	11.6%
Statewide	2.948	2.947	0.0%	2.767	6.5%
	New York St	ate Average Residenti	al Natural Gas Prices (\$/ther	m)	
REGION	June 2017	May 2017	% Change vs. Prior Month	June 2016	% Change vs. Last Year
Statewide	1.561	1,390	12.3%	1.423	9.7%

\* Revision

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

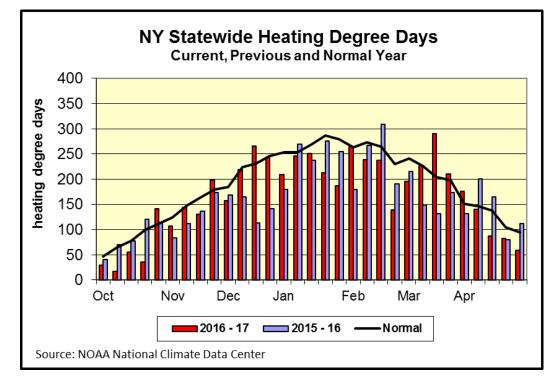
- Heating oil—highest price \$4.778/gallon on 7/14/08, lowest price \$0.876/gallon on 9/08/98.
- Propane—highest price \$3.811/gallon on 2/17/14, lowest price \$1.072/gallon on 9/20/99.
- Kerosene—highest price \$5.068/gallon on 7/14/08, lowest price \$1.309/gallon on 9/09/02.

**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.

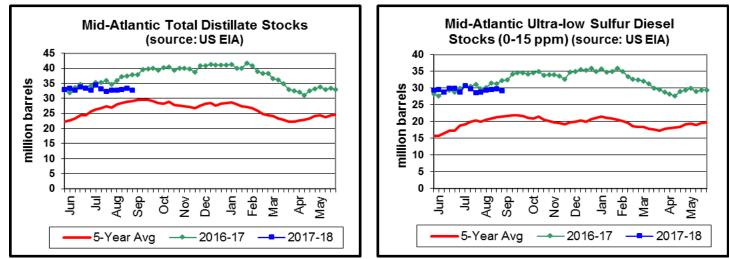
New York State Regions: Long Island: Nassau and Suffolk New York City: Bronx, Kings, New York, Queens, and Richmond Lower Hudson: Dutchess, Putnam, Rockland, and Westchester Upper Hudson: Columbia, Greene, Orange, Sullivan, and Ulster Capital District: Albany, Fulton Montgomery, Rensselaer, Saratoga, 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**— Until the start of the next heating season in October, the heating degree day information below reflects weekly information through April 29, 2017. On a cumulative statewide basis from October  $1^{st}$  through April 29<sup>th</sup> current year heating degree-days (5,192) end the season ahead of the year-ago level (5,036) by 3.1% and behind the normal trend (5,777) by 10.1%.

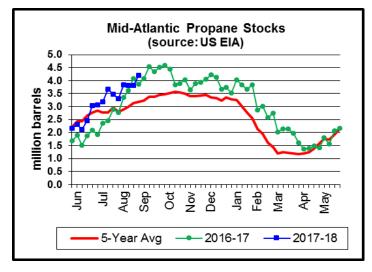
New York State Heating Degree Day Information, Weekly & Cumulative						
Week Ending April 29			Cumulative From October 1			
Region	2017	2016	Normal	2016-17	2015-16	Normal
Albany	40	104	96	5,520	5,163	6,067
Binghamton	54	127	115	6,101	5,686	6,634
Buffalo	65	131	111	5,276	5,295	6,216
Glens Falls	59	126	111	5,985	5,766	6,956
Massena	78	163	117	6,603	6,712	7,510
NYC	39	50	68	3,682	3,513	4,595
Rochester	59	139	108	5,242	5,297	6,232
Syracuse	55	141	106	5,698	5,499	6,323
Watertown	84	166	122	6,161	6,185	7,041
Statewide	59	112	95	5,192	5,036	5,777



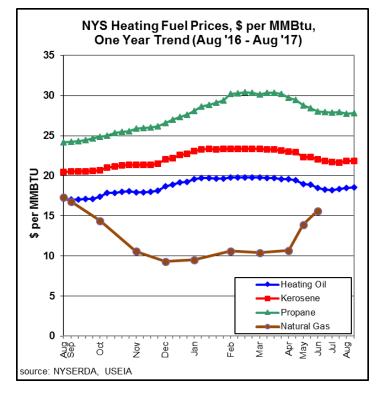
Distillate Stocks-Current and historic heating fuel inventory data is presented in the graphs below.



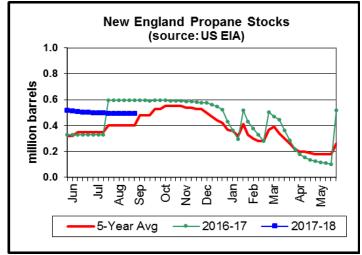
Propane Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



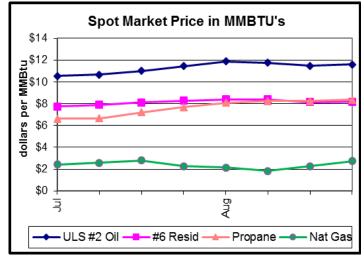
**Retail Btu Price Equivalents**—The New York State Heating Fuel Prices Btu graph equates the retail price for New York Statewide average residential ultra-low sulfur heating oil, kerosene, propane, and natural gas on a dollar per million Btu (MMBtu) basis.



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	8/25/2017	8/25/2017 Year Ago			
Ultra LS Diesel	1.606	1.483	8.3%		
#2 Fuel Oil	1.497	1.425	5.1%		
#6 Residual 0.3%	1.222	1.150	6.2%		
Propane	0.764	0.468	63.2%		
Natural Gas	2.723	1.702	60.0%		

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>.