## NYSERDA Heating Fuels Report

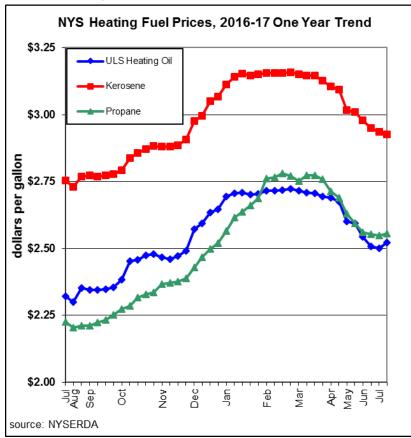
## **Highlights**

- U.S. crude oil inventories decreased by 1.5 million barrels (0.3%) since last week to 481.9 million barrels, the lowest level since December 2016, and are now 10.0 million barrels (2.0%) below the year ago level.
- Mid-Atlantic ultra-low sulfur (ULS) distillate inventories increased by 0.5% since last week but remain 2.9% below the year-ago level.
- New York statewide average retail prices of ultra-low sulfur (ULS) heating oil and propane increased while the average retail price of kerosene decreased since the last survey.

**Retail Petroleum Prices**—On a statewide basis since the last survey on July 17<sup>th</sup>, the price increased \$0.022/gallon (0.9%) to \$2.523/gallon for ULS heating oil, while the price decreased \$0.010/gallon (0.3%) to \$2.925/gallon for kerosene, and increased \$0.006/gallon (0.2%) to \$2.555/gallon for propane. Compared to a year earlier, prices increased \$0.203/gallon (8.8%) for heating oil, \$0.172/gallon (6.2%) for kerosene and \$0.330/gallon (14.8%) for propane.

**Crude Oil Prices**—For the week ending 7/28/17, WTI crude oil spot prices averaged \$48.27/bbl, an increase of \$1.86/bbl (4.0%) from the week-ago average of \$46.41/bbl. WTI prices are now \$6.44/bbl (15.4%) above the year-ago weekly average of \$41.83/bbl. The all-time weekly average high of \$142.52/bbl occurred on 7/04/08.

**Spot Natural Gas Prices**—For the week ending 7/28/17, Henry Hub natural gas spot prices averaged \$2.938 per million Btu (mmBtu), a decrease of \$0.134/mmBtu (4.4%) from the prior week level of \$3.072/mmBtu. Prices are currently \$0.134/mmBtu (4.8%) above the year-earlier weekly average of \$2.804/mmBtu.



**Residential Natural Gas Prices**—The NYS average price in May 2017 was \$1.390/therm, an increase of \$0.323/therm (30.2%) from the prior month of \$1.067/therm, and was \$0.326/therm (30.6%) higher than the year earlier average of \$1.064/therm.

Middle Atlantic Region, Weekly Inventories (million barrels)							
Fuel Type	7/28/2017	7/21/2017	% Change vs. Last Week	Year Ago	% Change vs. Last Year	5-Year Average	% Change vs. 5- Year Avg
ULS Distillate (0-15 ppm)	28.9	28.7	0.5%	29.7	-2.9%	20.2	42.8%
Non-road Diesel (15-500 ppm)	1.1	1.1	-6.8%	2.3	-53.4%	0.9	12.9%
High Sulfur Distillate ( >500 ppm)	2.8	2.5	12.7%	2.6	8.3%	6.1	-53.7%
Total Distillate Oil	32.7	32.3	1.2%	34.6	-5.4%	27.2	20.3%
Propane	3.314	3.463	-4.3%	2.774	19.5%	2.792	18.7%
#6 Residual Oil	5.9	5.8	0.9%	6.6	-11.6%	6.3	-6.5%
US Natural Gas	3,010	2,990	0.7%	3,289	-8.5%	2,923	3.0%
US Crude Oil	481.9	483.4	-0.3%	491.9	-2.0%	385.6	25.0%

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



REGION	7/31/2017	7/17/2017	% Change vs. Prior Survey	Year Ago	% Change vs. Last Year
Long Island	2.753	2.732	0.8%	2.547	8.1%
New York City	2.694	2.655	1.5%	2.440	10.4%
Lower Hudson	2.637	2.598	1.5%	2.400	9.9%
Upper Hudson	2.387	2.369	0.8%	2.239	6.6%
Capital District	2.272	2.256	0.7%	2.177	4.4%
North Country	2.372	2.357	0.6%	2.194	8.1%
Central	2.267	2.258	0.4%	2.062	9.9%
Western	2.575	2.565	0.4%	2.273	13.3%
Statewide	2.523	2.501	0.9%	2.320	8.8%
			- 1,100 gallon usage category		
Long Island	2.895	2.895	0.0%	2.770	4.5%
Mid-Hudson	2.422	2.394	1.2%	2.221	9.0%
Capital District	2.812	2.781	1.1%	2.315	21.5%
North Country	3.351	3.348	0.1%	2.536	32.1%
Central	2.233	2.251	-0.8%	1.966	13.6%
Western	2.199	2.199	0.0%	2.033	8.2%
Statewide	2.555	2.549	0.2%	2.225	14.8%
	New York State	Retail Kerosene Poste	d Credit Prices (dollars per g	allon)	
Mid-Hudson	3.023	3.054	-1.0%	2.890	4.6%
Capital District	2.818	2.809	0.3%	2.696	4.5%
North Country	2.994	2.997	-0.1%	2.864	4.5%
Central	2.768	2.768	0.0%	2.539	9.0%
Western	2.955	2.955	0.0%	2.639	12.0%
Statewide	2.925	2.935	-0.3%	2.753	6.2%
	New York St	ate Average Residenti	al Natural Gas Prices (\$/ther	m)	
REGION	May 2017	April 2017	% Change vs. Prior Month	May 2016	% Change vs. Last Year
Statewide	1.390	1.067	30.2%	1.064	30.6%

\* Revision

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

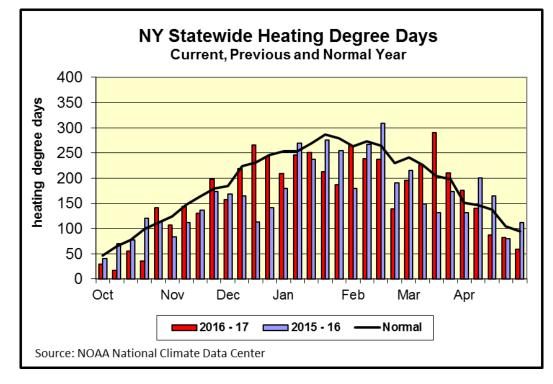
- Heating oil—highest price \$4.778/gallon on 7/14/08, lowest price \$0.876/gallon on 9/08/98.
- Propane—highest price \$3.811/gallon on 2/17/14, lowest price \$1.072/gallon on 9/20/99.
- Kerosene—highest price \$5.068/gallon on 7/14/08, lowest price \$1.309/gallon on 9/09/02.

**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.

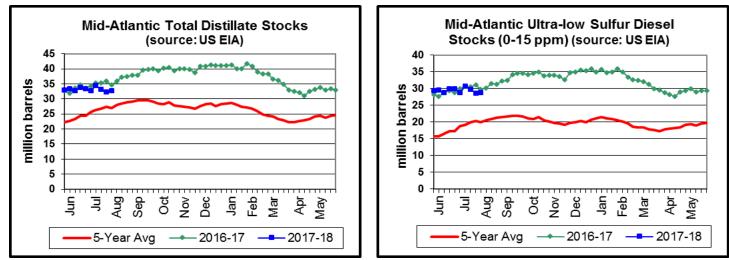
New York State Regions: Long Island: Nassau and Suffolk New York City: Bronx, Kings, New York, Queens, and Richmond Lower Hudson: Dutchess, Putnam, Rockland, and Westchester Upper Hudson: Columbia, Greene, Orange, Sullivan, and Ulster Capital District: Albany, Fulton Montgomery, Rensselaer, Saratoga,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

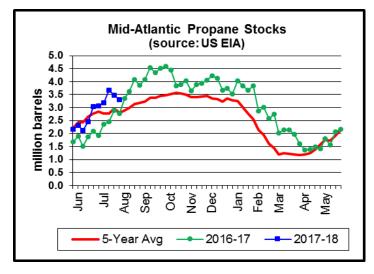
New York State Heating Degree Day Information, Weekly & Cumulative							
Week Ending April 29				Cumulative From October 1			
Region	2017	2016	Normal	2016-17	2015-16	Normal	
Albany	40	104	96	5,520	5,163	6,067	
Binghamton	54	127	115	6,101	5,686	6,634	
Buffalo	65	131	111	5,276	5,295	6,216	
Glens Falls	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	



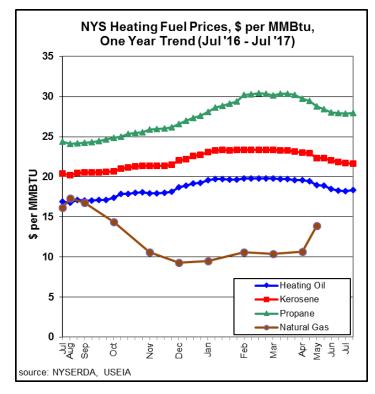
Distillate Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



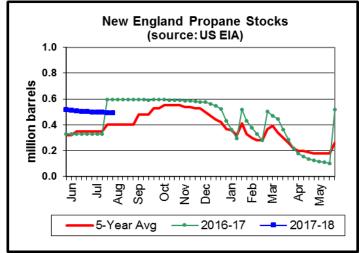
Propane Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



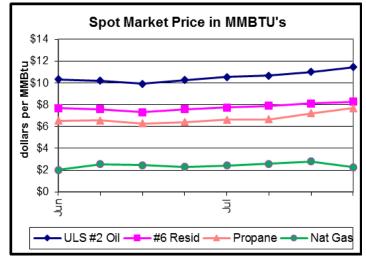
**Retail Btu Price Equivalents**—The New York State Heating Fuel Prices Btu graph equates the retail price for New York Statewide average residential ultra-low sulfur heating oil, kerosene, propane, and natural gas on a dollar per million Btu (MMBtu) basis.



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	7/28/2017	Year Ago	% Change			
Ultra LS Diesel	1.585	1.272	24.6%			
#2 Fuel Oil	1.482	1.195	24.0%			
#6 Residual 0.3%	1.236	1.033	19.7%			
Propane	0.701	0.441	58.9%			
Natural Gas	2.259	2.599	-13.1%			

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>.