## NYSERDA Heating Fuels Report

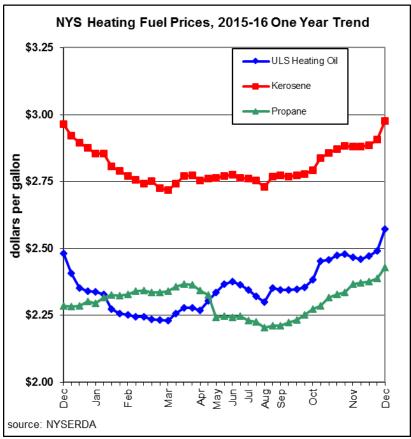
## **Highlights**

- On a cumulative basis since October 1st, current year heating degree-days (1,013) are behind the year-ago level (1,097) by 7.7% and the normal trend (1,198) by 15.4%.
- The weekly average WTI crude oil spot price averaged \$48.63 per barrel, 3.2% higher than last week's price of \$47.14 per barrel and 20.4% higher than last year's price of \$40.40 per barrel.
- New York statewide average retail prices for 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 November 28<sup>th</sup>, prices increased \$0.082/gallon (3.3%) to \$2.572/gallon for ULS heating oil, \$0.070/gallon (2.4%) to \$2.977/gallon for kerosene, and \$0.042/gallon (1.8%) to \$2.429/gallon for propane. Compared to a year earlier, prices increased \$0.091/gallon (3.7%) for heating oil, \$0.012/gallon (0.4%) for kerosene and \$0.143/gallon (6.3%) for propane.

**Crude Oil Prices**—For the week ending 12/2/16, WTI crude oil spot prices averaged \$48.63/bbl, an increase of \$1.49/bbl (3.2%) from the week-ago average of \$47.14/bbl. WTI prices are now \$8.23/bbl (20.4%) above the year-ago weekly average of \$40.40/bbl. The all-time weekly average high of \$142.52/bbl occurred on 7/04/08.

**Spot Natural Gas Prices**—For the week ending 12/2/16, Henry Hub natural gas spot prices averaged \$3.224 per million Btu (mmBtu), an increase of \$0.424/mmBtu (15.1%) from the prior week level of \$2.800/mmBtu. Prices are currently \$1.098/mmBtu (51.6%) above the year-earlier weekly average of \$2.126/mmBtu.



**Residential Natural Gas Prices**—The NYS average price in September 2016 was \$1.678/therm, a decrease of \$0.053/therm (3.0%) from the prior month of \$1.731/therm, and was \$0.018/therm (1.0%) lower than the year earlier average of \$1.696/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	12/2/2016	11/25/2016	% Change vs. Last Week	Year Ago	% Change vs. Last Year	5-Year Average	% Change vs. 5- Year Avg
ULS Distillate (0-15 ppm)	35.0	34.8	0.4%	30.8	13.6%	14.5	141.2%
Non-road Diesel (15-500 ppm)	2.2	1.9	14.9%	1.5	42.8%	1.3	62.4%
High Sulfur Distillate ( >500 ppm)	3.7	4.3	-11.9%	5.9	-36.8%	10.1	-62.8%
Total Distillate Oil	40.9	41.0	-0.2%	38.3	6.9%	25.9	57.8%
Propane	4.230	4.050	4.4%	4.012	5.4%	3.136	34.9%
#6 Residual Oil	7.4	7.9	-6.7%	7.4	-0.7%	6.8	9.2%
US Natural Gas	n/a	3,995	n/a	3,902	n/a	3,699	n/a
US Crude Oil	485.8	488.1	-0.5%	453.6	7.1%	360.8	34.6%

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



	New York State Retail			- <b>F</b> 9	1
REGION	12/5/2016	11/28/2016	% Change vs. Prior Survey	Year Ago	% Change vs. Last Year
Long Island	2.731	2.647	3.2%	2.606	4.8%
New York City	2.663	2.579	3.3%	2.627	1.4%
Lower Hudson	2.678	2.576	4.0%	2.503	7.0%
Upper Hudson	2.470	2.408	2.6%	2.373	4.1%
Capital District	2.388	2.309	3.4%	2.368	0.8%
North Country	2.458	2.374	3.5%	2.401	2.4%
Central	2.410	2.350	2.6%	2.310	4.3%
Western	2.634	2.521	4.5%	2.545	3.5%
Statewide	2.572	2.490	3.3%	2.481	3.7%
Nev	w York State Retail Propane	Posted Credit Prices	- 1,100 gallon usage catego	ry (dollars per gallon)	
Long Island	2.935	2.893	1.5%	2.817	4.2%
Mid-Hudson	2.354	2.324	1.3%	2.285	3.0%
Capital District	2.634	2.589	1.7%	2.422	8.8%
North Country	2.854	2.788	2.4%	2.448	16.6%
Central	2.195	2.142	2.5%	2.079	5.6%
Western	2.139	2.117	1.0%	2.110	1.4%
Statewide	2.429	2.387	1.8%	2.286	6.3%
	New York State F	Retail Kerosene Poste	d Credit Prices (dollars per	gallon)	
Mid-Hudson	3.057	3.008	1.6%	3.069	-0.4%
Capital District	2.888	2.809	2.8%	2.879	0.3%
North Country	3.009	2.946	2.1%	2.940	2.3%
Central	2.889	2.820	2.4%	2.883	0.2%
Western	2.972	2.852	4.2%	2.965	0.2%
Statewide	2.977	2.907	2.4%	2.965	0.4%
	New York Sta	te Average Residentia	l Natural Gas Prices (\$/the	rm)	
REGION	September 2016	August 2016	% Change vs. Prior Month	September 2015	% Change vs. Las Year
Statewide	1.678	1.731	-3.0%	1.696	-1.0%

\* Revision

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

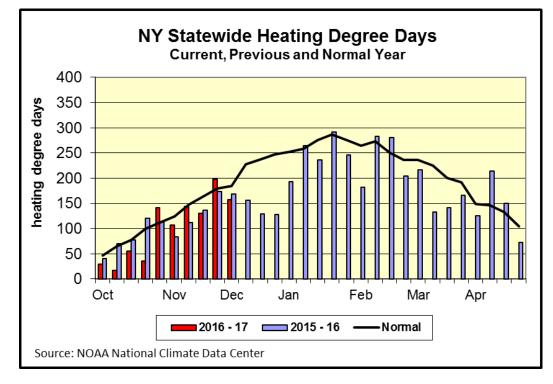
- Heating oil—highest price \$4.778/gallon on 7/14/08, lowest price \$0.876/gallon on 9/08/98.
- Propane—highest price \$3.811/gallon on 2/17/14, lowest price \$1.072/gallon on 9/20/99.
- Kerosene—highest price \$5.068/gallon on 7/14/08, lowest price \$1.309/gallon on 9/09/02.

**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.

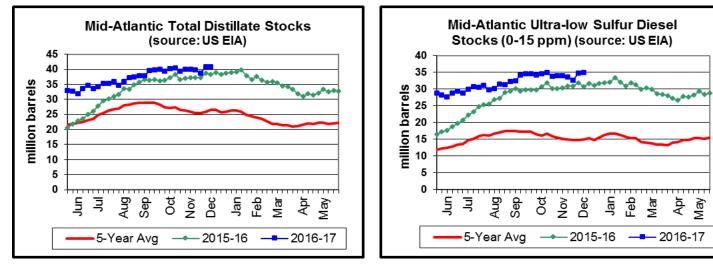
New York State Regions: Long Island: Nassau and Suffolk New York City: Bronx, Kings, New York, Queens, and Richmond Lower Hudson: Dutchess, Putnam, Rockland, and Westchester Upper Hudson: Columbia, Greene, Orange, Sullivan, and Ulster Capital District: Albany, Fulton Montgomery, Rensselaer, Saratoga, 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 (157) was 7.1% below the year-ago level of (169) and 14.7% below the normal trend (184). On a cumulative basis since October  $1^{st}$ , current year heating degree-days (1,013) are behind the year-ago level (1,097) by 7.7% and the normal trend (1,198) by 15.4%.

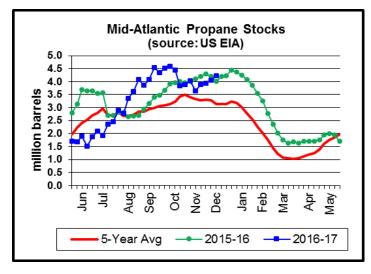
	New York State Heating Degree Day Information, Weekly & Cumulative						
Week Ending December 03				Cumulative From October 1			
Region	2016	2015	Normal	2016-17	2015-16	Normal	
Albany	173	162	209	1,193	1,144	1,342	
Binghamton	185	184	226	1,372	1,248	1,486	
Buffalo	149	175	209	1,011	1,066	1,320	
Glens Falls	183	195	236	1,286	1,332	1,553	
Massena	192	225	254	1,367	1,493	1,626	
NYC	100	111	156	598	616	862	
Rochester	147	164	210	1,023	1,062	1,329	
Syracuse	168	174	213	1,206	1,123	1,353	
Watertown	172	200	236	1,270	1,331	1,534	
Statewide	157	169	184	1,013	1,097	1,198	



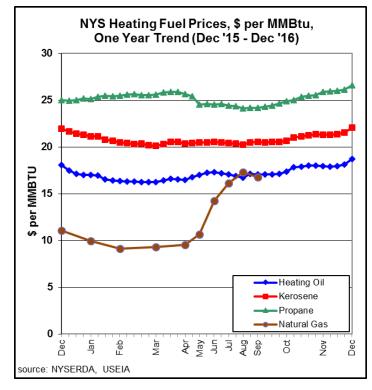
Distillate Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



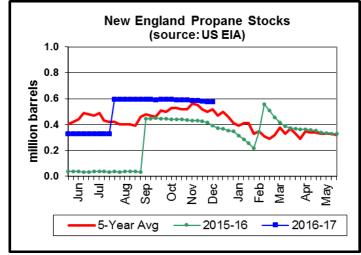
Propane Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



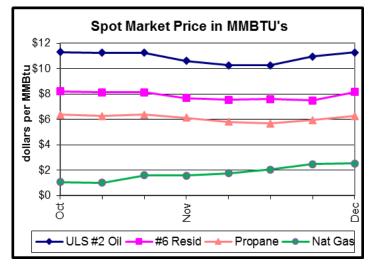
**Retail Btu Price Equivalents**—The New York State Heating Fuel Prices Btu graph equates the retail price for New York Statewide average residential ultra-low sulfur heating oil, kerosene, propane, and natural gas on a dollar per million Btu (MMBtu) basis.



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	12/2/2016	Year Ago	% Change		
Ultra LS Diesel	1.561	1.314	18.8%		
#2 Fuel Oil	1.477	1.199	23.2%		
#6 Residual 0.3%	1.220	0.968	26.0%		
Propane	0.571	0.426	34.0%		
Natural Gas	2.529	1.955	29.4%		

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>