NYSERDA Heating Fuels Report

March 27, 2017

Highlights

- New York statewide heating degree-days for the current week were 21.4% above last year's level and 6.1% above the 30-year normal. Cumulative heating degree-days since October 1st (4,648) are behind the 30-year normal (5,142) by 9.6%.
- U.S. crude oil inventories increased by 0.9 million barrels (0.2%) since last week to a record level of 534.0 million barrels, 30.2 million barrels (6.0%) higher than last year's level of 503.8 million barrels.
- New York statewide average retail prices of ultra-low sulfur (ULS) heating oil, kerosene, and propane all decreased since the last survey.

Retail Petroleum Prices—On a statewide basis since the last survey on March 20th, prices decreased \$0.013/gallon (0.5%) to \$2.693/gallon for ULS heating oil, \$0.018/gallon (0.6%) to \$3.127/gallon for kerosene, and \$0.015/gallon (0.5%) to \$2.759/gallon for propane. Compared to a year earlier, prices increased \$0.416/gallon (18.3%) for heating oil, \$0.353/gallon (12.7%) for kerosene and \$0.395/gallon (16.7%) for propane.

Crude Oil Prices—For the week ending 3/24/17, WTI crude oil spot prices averaged \$47.28/bbl, a decrease of \$0.75/bbl (1.6%) from the week-ago average of \$48.03/bbl. WTI prices are now \$7.83/bbl (19.8%) above the year-ago weekly average of \$39.45/bbl. The all-time weekly average high of \$142.52/bbl occurred on 7/04/08.

Spot Natural Gas Prices—For the week ending 3/24/17, Henry Hub natural gas spot prices averaged \$2.972 per million Btu (mmBtu), an increase of \$0.036/mmBtu (1.2%) from the prior week level of \$2.936/mmBtu. Prices are currently \$1.210/mmBtu (68.6%) above the year-earlier weekly average of \$1.763/mmBtu.

NYS Heating Fuel Prices, 2016-17 One Year Trend \$3.25 ULS Heating Oil Kerosene Propane \$3.00 dollars per gallon \$2.75 \$2.50 \$2.25 \$2.00 Apr Jun Jul Sep ö VoV Dec e Le ۷ar a source: NYSERDA

Residential Natural Gas Prices—The NYS average price in December 2016 was \$0.929/therm, a decrease of \$0.128/therm (12.1%) from the prior month of \$1.057/therm, and was \$0.179/therm (16.1%) lower than the year earlier average of \$1.108/therm.

Middle Atlantic Region, Weekly Inventories (million barrels)							
Fuel Type	3/24/2017	3/17/2017	% Change vs. Last Week	Year Ago	% Change vs. Last Year	5-Year Average	% Change vs. 5- Year Avg
ULS Distillate (0-15 ppm)	29.5	30.1	-1.8%	28.0	5.4%	13.4	121.1%
Non-road Diesel (15-500 ppm)	0.8	0.9	-12.5%	1.1	-26.7%	0.9	-10.3%
High Sulfur Distillate (>500 ppm)	2.6	3.8	-31.3%	4.3	-39.3%	6.8	-61.5%
Total Distillate Oil	33.0	34.8	-5.3%	33.4	-1.4%	21.1	56.5%
Propane	1.965	2.132	-7.8%	1.644	19.5%	1.061	85.1%
#6 Residual Oil	6.5	7.0	-7.6%	8.5	-23.3%	6.8	-5.2%
US Natural Gas	2,049	2,092	-2.1%	2,472	-17.1%	1,799	13.9%
US Crude Oil	534.0	533.1	0.2%	503.8	6.0%	397.4	34.4%

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 ws. Prior		% Change vs. Last
REGION	3/27/2017	3/20/2017	Survey	Year Ago	Year
Long Island	2.844	2.854	-0.4%	2.425	17.3%
New York City	2.763	2.768	-0.2%	2.425	13.9%
Lower Hudson	2.780	2.789	-0.3%	2.286	21.6%
Upper Hudson	2.615	2.619	-0.2%	2.191	19.4%
Capital District	2.520	2.545	-1.0%	2.138	17.9%
North Country	2.586	2.605	-0.7%	2.145	20.6%
Central	2.498	2.531	-1.3%	2.102	18.8%
Western	2.823	2.832	-0.3%	2.365	19.4%
Statewide	2.693	2.706	-0.5%	2.277	18.3%
New	w York State Retail Propane	Posted Credit Prices -	1,100 gallon usage catego	ry (dollars per gallon)	
Long Island	3.080	3.087	-0.2%	2.853	8.0%
Mid-Hudson	2.574	2.579	-0.2%	2.265	13.6%
Capital District	3.054	3.110	-1.8%	2.497	22.3%
North Country	3.569	3.573	-0.1%	2.748	29.9%
Central	2.478	2.495	-0.7%	2.189	13.2%
Western	2.380	2.386	-0.3%	2.108	12.9%
Statewide	2.759	2.774	-0.5%	2.364	16.7%
	New York State	Retail Kerosene Posted	Credit Prices (dollars per	gallon)	
Mid-Hudson	3.199	3.202	-0.1%	2.879	11.1%
Capital District	3.014	3.037	-0.8%	2.667	13.0%
North Country	3.174	3.219	-1.4%	2.838	11.8%
Central	3.021	3.044	-0.8%	2.678	12.8%
Western	3.182	3.193	-0.3%	2.705	17.6%
Statewide	3.127	3.145	-0.6%	2.774	12.7%
	New York Sta	ate Average Residentia	Natural Gas Prices (\$/the	rm)	
			% Change vs. Prior		% Change vs. Las
REGION	December 2016	November 2016	Month	December 2015	Year
Statewide	0.929	1.057	-12.1%	1.108	-16.1%

* Revision

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

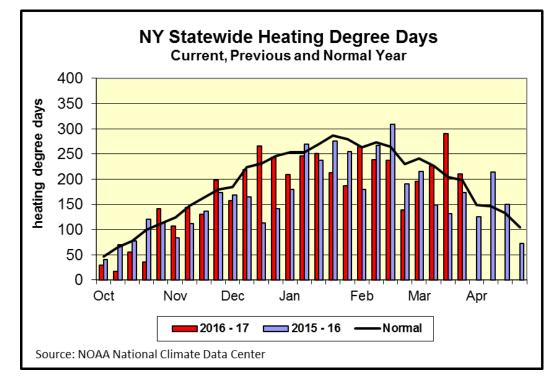
- Heating oil—highest price \$4.778/gallon on 7/14/08, lowest price \$0.876/gallon on 9/08/98.
- Propane—highest price \$3.811/gallon on 2/17/14, lowest price \$1.072/gallon on 9/20/99.
- Kerosene—highest price \$5.068/gallon on 7/14/08, lowest price \$1.309/gallon on 9/09/02.

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.

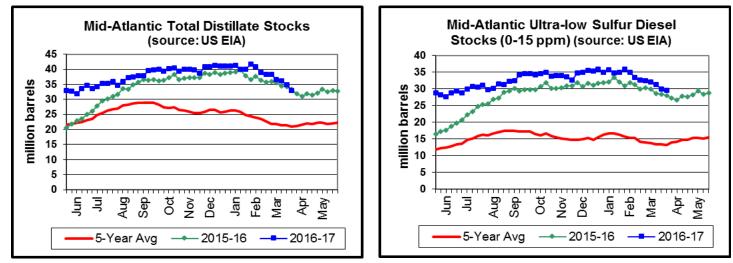
New York State Regions: Long Island: Nassau and Suffolk New York City: Bronx, Kings, New York, Queens, and Richmond Lower Hudson: Dutchess, Putnam, Rockland, and Westchester Upper Hudson: Columbia, Greene, Orange, Sullivan, and Ulster Capital District: Albany, Fulton Montgomery, Rensselaer, Saratoga, 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 (210) was 21.4% above the year-ago level of (173) and 6.1% above the normal trend (198). On a cumulative basis since October 1^{st} , current year heating degree-days (4,648) are ahead of the year-ago level (4,347) by 6.9% and behind the normal trend (5,142) by 9.6%.

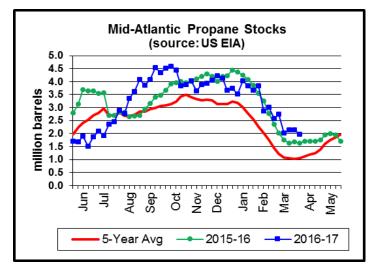
New York State Heating Degree Day Information, Weekly & Cumulative							
Week Ending March 25				Cumulative From October 1			
Region	2017	2016	Normal	2016-17	2015-16	Normal	
Albany	219	179	185	5,003	4,489	5,406	
Binghamton	234	203	210	5,514	4,890	5,867	
Buffalo	204	205	203	4,727	4,546	5,477	
Glens Falls	244	205	211	5,374	5,005	6,202	
Massena	283	252	234	5,899	5,809	6,687	
NYC	140	128	147	3,323	3,081	4,096	
Rochester	214	212	201	4,718	4,515	5,507	
Syracuse	230	200	201	5,130	4,722	5,601	
Watertown	262	243	223	5,495	5,301	6,230	
Statewide	210	173	198	4,648	4,347	5,142	



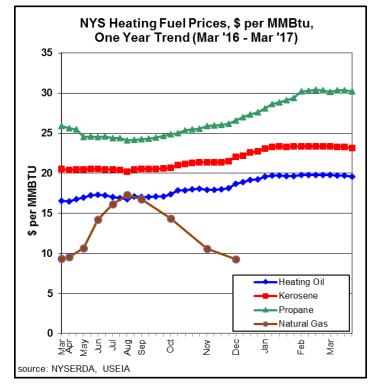
Distillate Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



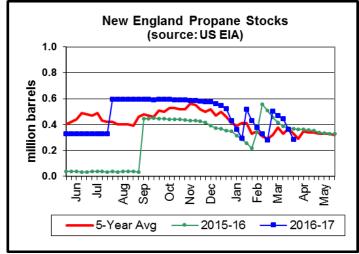
Propane Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



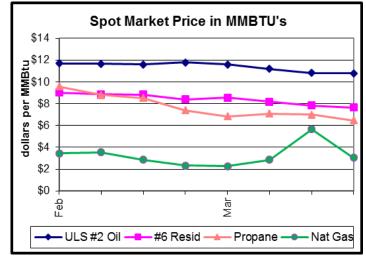
Retail Btu Price Equivalents—The New York State Heating Fuel Prices Btu graph equates the retail price for New York Statewide average residential ultra-low sulfur heating oil, kerosene, propane, and natural gas on a dollar per million Btu (MMBtu) basis.



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	3/24/2017	3/24/2017 Year Ago				
Ultra LS Diesel	1.495	1.224	22.2%			
#2 Fuel Oil	1.456	1.176	23.8%			
#6 Residual 0.3%	1.143	0.764	49.7%			
Propane	0.590	0.453	30.2%			
Natural Gas	3.034	1.544	96.5%			

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>