Northeastern Winter Energy Alert

Sustained cold weather and high natural gas consumption pushing up spot natural gas and electricity prices

Temperature: Northeast temperatures remain up to 26 degrees colder than normal, with the coldest day this week expected to be January 6. Temperatures are projected to be to closer to normal levels on January 8.

Natural gas demand: S&P Global estimates regional demand in New England and New York City will be about 9.1 billion cubic feet (Bcf) on January 5, up from 9 Bcf on January 4 as a result of falling temperatures. New York City's natural gas load could reach 6.3 Bcf on Saturday; loads are typically slightly more than 4 Bcf per day in New York City this time of year, according to S&P Global.

Natural gas constraints and LNG: Major pipelines delivering natural gas into New York and New England are constrained again on January 5, with average pipeline utilization ranging from 90%-100% on key segments. LNG facilities in the Northeastern United States and Eastern Canada are expected to deliver about 2.0 Bcf of LNG on Friday; the Canaport terminal in New Brunswick received a cargo on January 2, and the Everett terminal in Boston may receive a cargo on January 5.

Storage activity: Yesterday, EIA reported that the <u>East Region</u> (including states from Maine to Florida) stocks of working gas were 740 Bcf as of December 29, the same as one year ago at this time and about 5% lower than the five-year average.

Natural gas prices: Prices for January 5 settled at about \$83/million British thermal units (MMBtu) in Boston and about \$140/MMBtu in New York City (NYC), up 128% and 173% from the January 4 prices. The spot natural gas price at the benchmark Henry Hub settled at \$4.645/MMBtu on January 5, down 38% from January 4.

Electricity prices: On-peak electricity prices formed yesterday for today rose to about \$248/megawatthour (MWh) in NYC and \$306/MWh in New England. The spark spreads, or gross margins associated with operating a typical 7,000 British thermal units per kilowatthour (Btu/KWh) heat rate natural gas combined-cycle plant, in both markets are negative today, meaning that the delivered market cost of spot natural gas exceeds the spot settlement price for electricity in those markets.

Pipeline notices: Many natural gas pipelines have issued operational flow orders and critical notices advising their customers to carefully manage the amount of natural gas transportation capacity they use relative to what they requested or scheduled per contractual rights, or they will be subject to possible penalties. Interruptible transportation service is highly restricted throughout the region.

Oil market: Oil-fired generation accounted for more than 30% of the overall fuel mix in the New England Independent System Operator region as of the morning of January 5. Distillate stocks in the Northeast (combined Petroleum Administration for Defense Districts 1A and 1B) totaled 38.7 million barrels on December 29, 2017, 1.5 million barrels (4%) above the five-year average but 14.4 million barrels below year-ago levels.

Average temperature	Wed 1/3	Thu 1/4	Fri 1/5
Boston	23°F	26°F	7°F
New York City	23°F	26°F	11°F
Natural gas demand	Wed 1/3	Thu 1/4	Fri 1/5
Bcf per day			
New England	3.9	3.9	3.8
New York City	4.8	5.1	5.3
Spot natural gas price*	Wed 1/3	Thu 1/4	Fri 1/5
per MMBtu			
New England	\$21.50	\$36.32	\$82.75
New York City	\$17.71	\$51.42	\$140.25
On-peak electricity price*	Wed 1/3	Thu 1/4	Fri 1/5
per MWh			
New England	\$170.00	\$198.50	\$305.50
New York City	\$178.75	\$185.50	\$247.75

^{*}Day-ahead market values set during trading from prior day

Forecasts shown in italics

Sources: NOAA, Bentek Energy, SNL Energy