

Column: U.S. gas and electric systems prove resilient in face of polar vortex



LONDON (Reuters) – Freezing temperatures across much of the northern United States have caused barely a ripple in natural gas markets showing how plentiful supplies have become thanks to the shale revolution.

In a sign of improving resilience, the gas and electricity networks have come through the most recent polar vortex with far less stress on gas supplies and electric generators than during the last major vortex in January 2014.

While policymakers in Washington debate whether the increasing interconnectedness of gas and electricity systems poses a risk to reliability, both industries are improving their ability to cope with extreme cold events.

Temperatures across the Midwest fell to multi-decade lows this

week and daily gas consumption is forecast to have hit record levels on Jan. 31 (“U.S. natgas use hits record during freeze”, Reuters, Feb. 1).

Even before the cold snap, gas stocks were 13 percent below the five-year average at the end of last week, according to the U.S. Energy Information Administration (“Weekly natural gas storage report”, EIA, Jan. 31).

But futures prices for gas delivered in March continued to fall and are now close to their lowest levels for the last four years, well below \$3 per million British thermal units.

After surging higher between September and November, amid fears about the low level of inventories going into the winter, futures prices have fallen back as traders have become more confident about the supply situation.

Gas stocks have remained reasonably comfortable as a result of a relatively mild winter so far and plentiful supplies that have ensured stocks have drawn down more slowly than in previous years for any given level of cold.

The winter heating season has now passed the half-way point and, so far, temperatures have been slightly warmer than the long-term average, according to government data.

Cumulative population-weighted heating degree days between July 1 and Jan. 30 were 3 percent lower than the long-term average (“Degree day statistics”, U.S. Climate Prediction Center, Jan. 31).

This winter has been significantly colder than the exceptionally mild winters of 2015/16 and 2016/17 but about the same as winter 2017/18 and is still warmer than average so far.

The current cold snap is expected to be relatively short-lived, with temperatures forecast to rise significantly in the next few days and heating demand expected to fall back below

the seasonal norm.

The impact on gas stocks and prices of generally mild temperatures has been compounded by much smaller draws on stockpiles for any given level of heating demand this year than in either 2017/18 or 2016/17.

The limited drawdown on gas stocks reflects the tremendous surge in production which is easily able to meet growth in domestic demand including from electricity generators.

U.S. gas production hit a record 2.70 trillion cubic feet in October and another near-record 2.65 trillion cubic feet in November, according to the Energy Information Administration.

U.S. gas production has been growing at rates of around 13 percent per year, the fastest rate for at least two decades.

Production is growing so fast that even with some of the coldest weather in decades supplies have remained adequate with no spike in prices and no forced curtailments by generators or significant loss of load.

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