Energy Traders and Utilities to See Demand and Price Volatility in Fall 2025, According to New Report from Climavision

New Fall 2025 Report Reveals How Late-Season Warmth, Low Precipitation and Below-Normal Wind Speeds Will Affect the U.S. Energy Sector

LOUISVILLE, KY, UNITED STATES, August 14, 2025 /EINPresswire.com/ -- Climavision, the weather technology company powering energy traders and utilities with precision AI forecasting, has released its Fall 2025 Predictive Seasonal Outlook for energy traders and grid operators. The report offers a detailed outlook, by region, of the larger weather trends that will dictate energy production and demand between September 1 to November 30 of this year. Among these are weather patterns that deviate from the norm–including temperatures, precipitation levels and wind speeds–which will impact energy usage across all 50 US states. The complete report is available for download here.

For energy traders, understanding how both big-picture regional trends and in-the-moment, hyper-local, weather events will impact oil, gas and electricity demand can mean the difference between making optimal trading decisions and losing out to market competitors. For grid operators, having advanced seasonal outlooks enables them to plan ahead for resiliency measures and avoid price volatility when energy demand fluctuates. In its new report, Climavision offers an advanced three-month look at the macro-trends that will influence energy demand across all zones: SPP, MISO North, PJM, NYISO, CAISO and ERCOT. These insights, informed by the company's Horizon AI Seasonal to Subseasonal (S2S) model, go beyond what can be deduced from NOAA forecasts, offering visibility into difficult-to-measure observability gaps.

Four key takeaways from the Predictive Seasonal Outlook include:

1. Late-season warmth will lead to demand volatility and gas market sensitivity.
(Affected Zones: SPP, MISO North, PJM, NYISO, CAISO, ERCOT)

With average temperatures predicted to be 1-2 standard deviations above normal, many regions across the United States will see lingering above-normal heat in September and early October. This late-season warmth will lead to extended cooling during a time that utilities typically expect lower loads, leading to demand volatility. It also usually signals delayed heating.

Energy traders should prepare for weather that leads to mispriced opportunities in forward contracts, basis spreads, and options. All of this could drive higher power prices in September, followed by weaker gas prices in October and November in the affected zones.

2. Drier than normal fall will reduce hydropower potential and influence trading in ethanol and gas blends.
(Affected Zones: SPP, MISO South, ERCOT)

There are strong signals indicating that Central U.S. markets will experience below-normal levels of precipitation. This will result in significantly drier conditions, with as much as 1 standard deviation below normal expected rainfall. This relative dry spell will impact crops in biofuel-producing regions.

As a result, energy traders should not only prepare for reduced hydropower potential, but also expect a tightening ethanol supply, an impact on blend economics and fuel price volatility. Additionally, the lower levels of precipitation will likely result in drier conditions that increase wildfire risks, posing a potential threat to energy grids.

3. Lower wind speeds will increase reliance on natural gas and day-ahead price volatility.
(Affected Zones: PJM, CAISO, Parts of ERCOT)

Parts of the Eastern US, California and Texas are expected to experience below normal wind speeds. For energy traders, the lower wind speeds will lead to a drop in wind generation and power, leading to an increase in day-ahead price volatility. They should also anticipate a higher-than-average reliance on natural gas-peakers to make up for the loss in wind energy this fall.

Meanwhile, utilities could experience grid stability challenges, including the need to make rapid readjustments to curtail demand or tap into reserves, which can also lead to cost volatility. One such adjustment might include relying on backup generation. In this case, they would face higher operational costs and a potential increase in emissions from fossil fuel sources.

4. Stronger than usual solar irradiance will help offset wind generation shortfalls.
(Affected Zones: MISO North, SPP, ISO-NE)

An increase in solar irradiance across the United States is anticipated from September to November, with Northern and Central parts of the country expected to see the greatest anomalies. This increase in solar signals will likely lead to an increase in average daytime solar output reliability this fall, but only if cloud cover and temperatures remain favorable. Traders should anticipate that this shift will partially, but not fully, offset the wind-generation shortfalls.

Since solar energy can't cover the overnight hours like wind, utilities may experience stable supply during peak sunlight hours but may still face tight supply windows in the early morning or after sunset.

“With a changing climate causing significant shifts in weather across the United States, it’s more imperative than ever that energy traders have access to data that will help them confidently reduce risk and seize opportunities,” said Chris Goode, CEO of Climavision. “The seasonal outlooks that our Horizon AI S2S model creates are designed to help traders to get ahead of abnormal weather events and build out strategies based on the most precise data available.”

Climavision produced its Fall 2025 Predictive Seasonal Outlook using its Horizon AI S2S weather model. Utilizing global data from the ERA5 dataset, the Horizon AI model processed a range of climate simulations based on real-world fluctuations. The model then created a 3-month outlook tailored to the fall 2025 season based on these simulations.

###

About Climavision

Climavision brings together the power of a proprietary, high resolution supplemental weather radar network with its cutting-edge Horizon AI forecasting technology suite to close significant weather observation gaps and drastically improve forecast speed and accuracy. Climavision’s revolutionary approach to climate technology is poised to help reduce the economic risks of volatile weather on companies, governments, and communities alike. Climavision is backed by The Rise Fund, the world’s largest global impact platform committed to achieving measurable, positive social and environmental outcomes alongside competitive financial returns. The company is headquartered in Louisville, KY, with research and development in Raleigh, NC and AI forecasting operations in Ft. Collins, CO. To learn more, visit www.Climavision.com.

Kieran Powell
Climavision
kieran.powell@channelvmedia.com
