EnergyRisk Awards 2025

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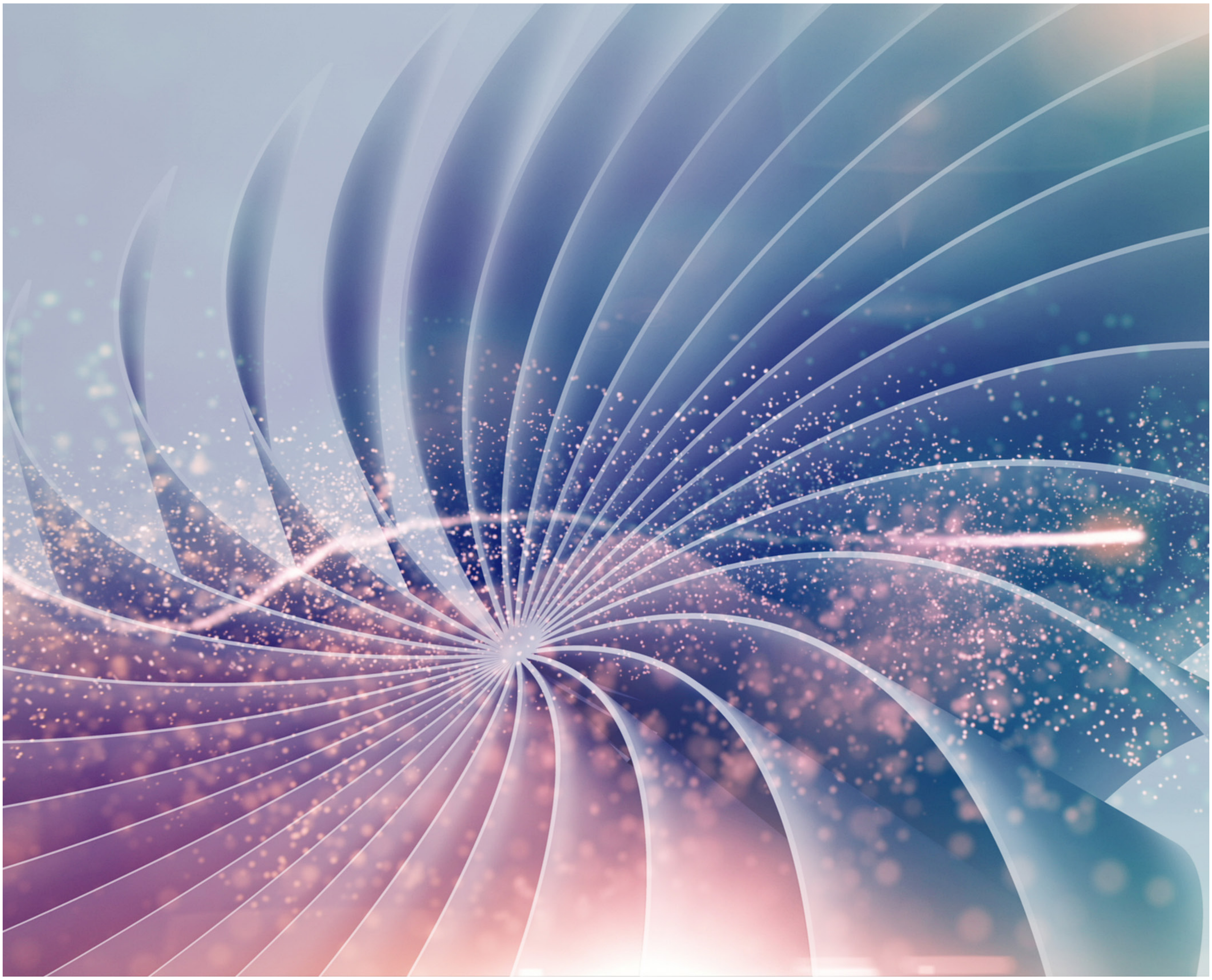

Commodity exchange of the year

Nodal Exchange

Energy Risk Awards 2025 WINNER

Commodity exchange of the year

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Power market participants are locked in a constant battle with price volatility but in recent months, this has intensified, notes Paul Cusenza, chairman and chief executive of Nodal Exchange. Geopolitical tensions, economic uncertainty, weather events, renewable energy and an explosion in demand from the technology sector are all exerting differing but strong price pressures.

For weather extremes, Cusenza gives the example of real-time peak prices in ERCOT West Hub, covering Austin, Texas, which dropped over 80% from $316 per megawatt hour (/MWh) in August 2023 to $52/MWh in August 2024. Meanwhile, he notes, penetration of solar power in California SP15, which covers Los Angeles, sent day-ahead peak prices falling 98% from $46/MWh in April 2023 to $0.08/MWh in April 2024 when temperatures were moderate.

In such conditions the need for risk management is paramount. "It's an interesting dynamic as power markets evolve and the energy transition occurs. Prices can either go extremely high or low, or even negative," Cusenza says. "It reinforces the value we provide."

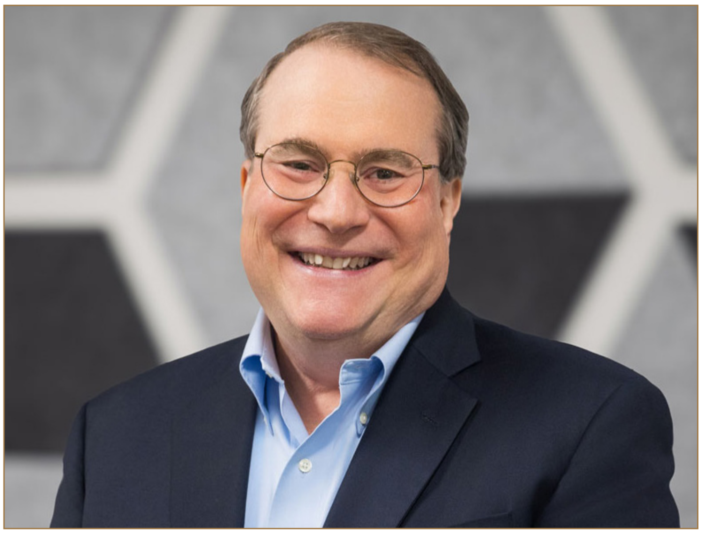
That volatility has been good for business at Nodal Exchange, winner of Energy Risk's Commodity exchange of the year award for the third year in a row. Volumes in its North American power futures, where it is market leader, are up 9% from 2023 to 2024, to 2.98 billion/MWh traded. As of the end of February 2025, Nodal Exchange accounted for 57.3% of open interest in monthly power futures, up from 54% at the end of 2023.

It has also seen growth in volumes across its suite of environmental futures and options. The exchange lists contracts including renewable energy certificates, North American compliance and voluntary carbon markets and renewable fuel credits, with overall volumes up 149% year on year.

One reason for the exchange's success, says Cusenza, is in the number of contracts it offers. Its 1,685 power and 803 environmental contracts allow users to avoid as much basis risk as possible. "We have the widest set of futures and options contracts in the world for both power and environmental markets," he says. "That allows our members to hedge locally, where they need to hedge, and get a clean hedge for their risk." For example, he points to the exchange's launch last year of its Alberta TIER Emission Performance Credits contracts.

Another differentiator is Nodal Exchange's portfolio margining model, which uses an expected shortfall methodology to calculate initial margin. It uses both recent portfolio returns and the portfolio's potential returns during historical stress periods to generate margin calculations that are tailored to the risk across the market participant's portfolio.

"We use expected shortfall because value-at-risk models assume normality and, in reality, there are fat tails, so you have to account for that, and we're very risk-protective," he says. "But because our risk models are good, we hold the right amounts of margin in the right places … We are very capital-efficient."



Paul Cusenza, Nodal Exchange

Portfolio margining becomes more efficient the more diversified portfolios become, which is one reason Nodal Exchange is seeking to make inroads into the US natural gas futures market, which can be portfolio margined with Nodal's power open interest positions. In 2024, the exchange saw growth of more than 200%, but from a low base. "It's where we still have a very small relative volume … but we're working on it," says Cusenza.

A larger slice of the natural gas market would provide a hedge for Nodal Exchange itself, given the Trump administration's fossil fuel boosterism and its opposition to environmental markets. But Cusenza is sanguine about any threat posed by a less climate risk-focused White House.

"There's a lot of factors that come into play with any new administration," he notes. "There might be changes in the type of generation mix they are supporting, or in the approach to regulation, that create price risk issues. Volatility can occur with any administration."

He also adds that, although environmental markets in the US have mostly been introduced at the state level, limiting the ability of the federal government to interfere, the current administration in April issued an order entitled 'Protect American Energy from State Overreach'.

"Any challenge to the state programmes would likely need to be decided in the courts," says Cusenza. "So environmental markets should continue, and I hope they do, but hedging the price risk with futures contracts might be wise, given all the uncertainty." ■