# **Nodal Creates** New Clearinghouse for Power Futures

By Joanne Morrison

Nestled in a non-descript office building in the Northern Virginia suburbs of Washington, D.C. is a trading platform, Nodal Exchange, that handles nearly 14% of all U.S. power futures trading.

he exchange, which is owned by DC Energy, NextEra Energy Resources, Macquarie and a private equity concern, began operating roughly six years ago, catering to wholesale power producers and consumers who buy and sell energy on a broad scale in the bilateral and spot markets.

Over time the exchange has grown, and today it provides market participants with the ability to hedge the price of electricity at hundreds of specific locations around the country. The exchange estimates that roughly half of its volume comes from physical hedgers, 20% from financial entities and 30% from banks.

In 2013 Nodal changed its business model to comply with Dodd-Frank rules, shifting trading from an auction style format to a traditional central limit order book approach, and registered with the Commodity Futures Trading Commission as a designated contract market.

Now, sitting in the number two spot in terms of U.S. power market futures volume, Nodal is moving ahead with the next stage of its evolution—building its own clearinghouse.

## Why Build a Clearinghouse?

Since trading began in 2009, Nodal has been offering clearing through LCH.Clearnet Ltd., but in November, the exchange announced plans to transition away from LCH.Clearnet in the latter half of this year. An application to become a derivatives clearing organization was submitted in December and is now pending at the CFTC.

Paul Cusenza, chairman and chief executive officer of Nodal, explained that relying

on the London-based clearinghouse was a good strategy when the exchange started, but now bringing clearing in-house makes more sense. "It's part of a natural transition that allows us to continue to expand," said Cusenza.

Cusenza cited several reasons for the move. For one thing, LCH.Clearnet is a London-based clearinghouse, and therefore activity and participation on Nodal Exchange involves oversight from three





We expect that our \$20 million of equity that sits in front of the guaranty fund will be about 20% of the total guaranty fund size.

PAUL CUSENZA, Nodal CEO

## **NODAL CLEAR** WATERFALL

Defaulter's Initial Margin

**Defaulter's Guaranty Fund Contribution** 

**Nodal Clear Contribution** \$20 million

**Guaranty Fund** 

**Unfunded Contributions** Assessment

Service Continuity Phase

Closure

different regulators: the CFTC in the U.S., the Bank of England in the U.K., and the European Securities and Markets Authority in the EU.

"It certainly simplifies things to have a single regulator rather than three," Cusenza said. "That's a plus for us and the clearing members themselves."

Clearing firms agree. "We had a challenge being an active member and trying to adhere to multiple masters," said Patrick Bobay, managing director in the futures division at Mizuho Securities U.S.A., one of a dozen firms that clear Nodal trades through LCH.Clearnet.

## **Faster Approvals**

David Sotelo, who runs the energy team at ADM Investor Services, another firm that clears Nodal trades, is optimistic that bringing clearing in-house will allow the exchange to list new products more easily. That is particularly important in the U.S. power market as pricing within very specific regions of a transmission system can change daily.

"As they developed new products, it was quite cumbersome to get things approved," said Sotelo, whose firm has been clearing Nodal's contracts since the platform went live in 2009. "I think bringing things onshore will allow them to move quicker for new products."

Another complication has been the differences in U.S. and U.K. bank holidays and settlement times. "Cutting down all that lag time is going to make it a better exchange overall," Sotelo added.

Power market participants also underscored the volatility of power prices and the need for frequent adjustments to margin requirements. "During the Polar vortex, margins were bouncing all over the place," explained Mizuho's Bobay. LCH. Clearnet added a "buffer" to its margin requirements, but the size of the extra margin was not communicated clearly. That caused difficulties for Mizuho's customers, Bobay said. "Most of our customers are large sophisticated organizations that have treasury teams that try to track and forecast what their margins are going to be," he explained.

#### Sizable Market Share

In the overall power market, Nodal estimates that it has roughly 13.6% of the volume in terms of total megawatt hours, versus 83% for ICE and 3.4% for CME. In terms of open interest, Nodal held 24.4% of open interest measured in megawatt hours versus 65.1% at ICE and 10.5% at CME.

The bulk of Nodal's volume is in basis trades, whereas the other two exchanges' contracts are primarily based on prices for a hub. The fact that Nodal offers contracts based on nodes allows power producers to hedge price risk at very specific locations. That is especially important in the power market, because prices can vary significantly from one location to another.

Some of the heaviest trading at Nodal is in contracts based on nodes in PJM, the regional transmission operator covering the movement of wholesale electricity across a 12-state region stretching from the midwest to the mid-Atlantic. Nodal's contracts also cover power prices in other markets such as MISO, ISO-NE, ERCOT, NY-ISO and CAISO.

## Skin in the Game

As part of the clearinghouse structure, Nodal is putting up \$20 million of its own capital. In the case of a default, this capital would be used to cover any losses before the clearinghouse taps its guaranty fund, which will be funded by members.

"We expect that our \$20 million of equity that sits in front of the guaranty fund will be about 20% of the total guaranty fund size," said Cusenza. Nodal estimates that the \$20 million amount will be larger than any single clearing member's contribution. "We think we are putting more at risk than our largest clearing member," Cusenza said.

Nodal's clearinghouse will have the ability to ask clearing members to contribute additional amounts to replenish the guaranty fund in case of losses from a default. However this amount will be capped at 200% of the clearing member's required deposit in case of a single default and 550% in case of multiple defaults within a six month period.

# **Position Limits and Exchange Fees Data Solutions**

Obtaining accurate position limits and exchange fees data on a daily basis typically is an arduous and time-consuming task. To ease the burden, IFM offers three unique, industry utilities — the Position Limits Databank (PLD), Equity Options Position Limits Databank (EOPLD) and Exchange Fees Databank (EFD).

Ask us how we can simplify your informational needs and lower your costs.

## **Data Subscription Features**

- · Global data coverage updated and validated to eliminate inconsistencies and omissions
- Supplementary email notices and alerts to stay informed of proposed and immediate changes and new product introductions
- IFM Data Center Help Desk to answer questions or research concerns

The IFM is a nonprofit foundation and an independent affiliate of the FIA. The IFM provides unbiased education and information. See our website for details, or contact us for an online demonstration.

www.thelFM.org

202.223.1528

**EMAIL** info@thelFM.org



## **VaR Margining**

The new clearinghouse will use a valueat-risk methodology to calculate margins, aligning with the approach used in the bilateral power markets. Nodal's contracts have been margined that way since inception, and the benefit is that it has allowed power market participants, who traditionally engage in a wide range of bilateral deals as well, to calculate margins on a portfolio basis across similar, but not necessarily identical futures, forwards and swaps. In contrast, ICE and CME have relied on SPAN (standardized portfolio analysis of risk) margining for their power contracts, although both exchanges are now in the process of developing a VaRlike margining methodology for their commodity contracts.

"The right amount [of margin] means being able to understand what you need to do from a risk and margining perspective and we think we at Nodal Exchange really understand the risk of the power market extremely well, which is why we can make a transition to a clearinghouse role," said Cusenza.

#### What's Next?

Nodal's application with the Commodity Futures Trading Commission to become a derivatives clearing organization was submitted in December. Once approved, the exchange operator expects to transition clearing from LCH.Clearnet in the latter half of this year.

In addition to clearing its own listed products, Cusenza said Nodal will also be positioned to offer third party clearing for certain market transactions in the power market such as financial transmission rights awarded by independent system operators and regional transmission organizations. These contracts, auctioned monthly, are currently bilateral.

"What we focus on is the power markets. They are their own unique space," said Cusenza.

Joanne Morrison is deputy editor of Futures Industry.

## **Current Nodal Clearing Members**

- ADM Investor Services, Inc.
- **BNP Paribas Prime Brokerage**
- Citigroup Global Markets Inc.
- \*Deutsche Bank A.G.
- Goldman Sachs & Co.
- Jefferies, LLC.
- Macquarie Futures USA, LLC
- \*Merrill Lynch International
- Mizuho Securities USA Inc.
- Morgan Stanley & Co, LLC
- RBC Capital Markets, LLC
- SG Americas Securities, LLC

Note: These are clearing members who are currently clearing through LCH. Clearnet Ltd.

\* Deutsche Bank and Merrill Lynch International have non-FCM membership.