FTR Clearing

Summary of Costs and Benefits

June 2, 2021

nodalclear

part of eex group

Agenda

- **Costs**
- **Benefits**
- **Summary**

Nodal will charge reduced fees for FTR Clearing participants, with rates depending on optional v. mandatory model

$/MWh	EFTR Fees	Settlement Fees
Optional	$0.0050	$0.0025
Mandatory	**$0.0000**	$0.0025

- EFTR fees are assessed per path MWh, while settlement fees apply to expiry-level positions (MWh) that are held to final settlement
- Trading activity beyond EFTR will incur standard fee rates
- PJM will not be charged transaction or settlement fees, and will not be party to transactions other than EFTRs
- Based on average annual FTR volume from 2017-2019, mandatory clearing fees would be $16 million; optional clearing fees would also be $16 million assuming 33% of the market is cleared

Nodal reached out to all clearing members to update them on the FTR clearing proposal and survey them on FCM costs

- Multiple discussions have been held with both risk and commercial teams, including senior executives, resulting in a very positive response.
- The following key changes to the original proposal have recently been presented to FCMs:
  - Mandatory clearing as the preferred route in order to truly solve the credit risk challenges facing the ISOs
  - The clearing of "load nodes" to allow the full, current universe of FTRs to be cleared, and the appropriate risk treatment that will accompany this new node type
  - A potential alternative to the "Reverse EFTR feature," whereby liquidity challenges from PJM are managed at Nodal rather than having the FTRs temporarily return to PJM
- ➢ **All the key changes were well received, and enthusiasm remains high among the clearing members for this initiative**

Definitions:

- ➢ **Clearing members** comprise one tier in the multi-tier credit risk protection structure afforded by Nodal Clear (the tiers include twice-daily variation margin, initial margin, the clearing member guaranty of customer performance, and the clearing house default waterfall). In addition to managing their own risk, clearing members form key supports to the marketplace by contributing to Nodal Clear's guaranty fund.

- ➢ **FCMs** (futures commissions merchants) are US-based, registered, and regulated entities that all customer business in US futures exchanges must flow through. 14 of Nodal Clear's 15 clearing members are FCMs accepting customer business (additional clearing member applications continue to come in).

CMs are empathetic to cost concerns and want to dispel inaccurate cost assertions

- Clearing members fully understand the cost considerations raised and have extensive experience in working with high transaction volume markets
- Moreover, the clearing members want to dispel inaccurate claims on their behalf of the potential cost of FTR clearing reaching into the hundreds of millions of dollars for PJM
- However, several practical considerations require a high-level range for presenting the costs of clearing members:
  - Unlike the exchange and clearing house, FCM costs are tailored to the particular trading behavior and clearing member balance sheet considerations of the trading participant they are guaranteeing
  - Any attempt to formally harmonize these costs in support of this initiative across the clearing membership runs directly into anti-trust concerns (clearing members are competitive businesses), even when the objective is to provide price caps (customer protection) rather than price floors
  - Capital requirements for FCMs, especially those that are banking affiliates, continue to evolve, and could differ by the time this market is launched
- Key principles guide FCM considerations:
  - Clearing members have significant flexibility in designing costs. They can range from transaction based, open interest based, fixed annual fees, or some combination of the above
  - High volume activity is generally recognized with lower unit cost structures
  - As intimated in prior presentations to the PJM stakeholder community, Nodal confirmed that FCM costs are roughly in line with exchange and clearing costs, and are sometimes directly tied to those fees (with potential discounts for high volume participants)
  - Due to specific KYC/customized risk management of individual traders, FCMs generally target a minimum amount of revenue for each customer
- **$25MM is a reasonable FCM cost estimate for the entire market based on feedback from these discussions**
  - There will be a wide range of pricing based on the nature of a participant's total trading activity and the diversity of pricing that will be provided from the competitive clearing members (e.g., some entities will receive pricing below the rate implied by the overall estimate, and some will receive pricing higher than that rate)

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Twice-daily Variation Margin (VM) reduces systemic risk and realizes gains sooner

- Regularly updating portfolio value and collecting/paying VM reduces systemic risk by minimizing the likelihood of a sudden value shift and magnitude of a potential default
- Proposal reduces cash strain of futures VM calls against delayed settlement from FTRs for participants with exchange-traded hedges: VM on cleared FTR positions offsets corresponding VM on hedges
- VM offsets IM requirements: could receive VM > IM requirement
  - For illustration, an FTR with $100 IM requirement could generate $200 profits as soon as the market reflects increased expectation of settlement value, which participants would receive in real-time
- Time value of money: based on average historical simulated ISO VM resource utilization ($163MM), participants would have benefitted from early cash delivery potentially worth $8.2MM to $24.5MM per year depending on cost of capital (e.g., 5% to 15%)

Nodal Clear’s established Initial Margin (IM) calculation methodology would apply to cleared FTRs

- Replaces ISO collateral requirements for holding FTRs with efficient Nodal Clear portfolio margining

- Enables netting and cross margining of FTR originated positions:
  - With other power positions (e.g., cleared transactions)
  - With other non-power positions (e.g., natural gas)
  - With futures positions held at multiple ISOs

Cleared FTR margin requirements, when combined with existing Nodal positions, represent >$400MM savings

January 29, 2020 Margin Snapshot[1] by participant category[2] ($MM)	Separate Nodal and ISO margining[3]	Nodal margining of combined Nodal and EFTR positions[4]	Margin Savings from FTR Clearing
Financial participants, existing Nodal account	$670	$341	$328
Physical participants, existing Nodal account	$367	$304	$64
Financial participants, FTR only	$162	$173	-$11
Physical participants, FTR only	$177	$155	$22
TOTAL	$1,376	$973	$403

1. 1/29/2020 is a conservative snapshot as winter is a peak season for Nodal margining, and the snapshot includes new positions from latest BOPP auction before January positions settle
2. Nodal established each participant categorization based on company research
3. PJM FTR collateral requirements were calculated using Credit Requirements Calculator and public data posted by PJM; does not include ARR credits, any additional credit requirements for participants with undiversified portfolios or any additional Mark-to-Auction credit requirements. Nodal would like to work with PJM to verify assumptions and calculations, and consider the impact of proposed changes to the PJM margin methodology
4. Assumes all EFTRs go to largest current FCM; optimizing diversification of larger portfolios across multiple FCMs would result in more efficient margin allocation

Additional benefits of the exchange and clearing house model

- Opportunities for secondary market trading, providing much greater liquidity to adjust positions and improve hedges
- Improves transparency: Nodal Exchange provides market participants with additional market intelligence on pricing expectations with twice daily marks (i.e., mark to market)
- Defaults handled in cleared environment rather than losses shared by surviving ISO members
  - Improved default protection for all ISO FTR participants: credit risk management solution through guaranteed delivery of FTR payment obligations
  - Established default management process avoids extended stakeholder and/or regulatory process that has historically followed a default

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Summary of costs and benefits of Mandatory Clearing and Status Quo

	Mandatory Clearing ($MM)	Status Quo ($MM)	Net ($MM)
Costs			
Nodal Transaction Fees	$0	$0	$0
Nodal Settlement Fees (average annual settling FTR volume, 2017-2019)	$16	$0	$16
Estimated FCM Fees	$25	$0	$25
Average annual PJM VM Liquidity Resource Fees	$10	$0	$10
TOTAL	**$51**	**$0**	**$51**
Benefits			
VM Paid Early to Participants	$163	$0	$163
Estimated Collateral Requirement	$973	$1,376	$403
Episodic Socialized Losses	$0	$0-180+	$0-180+

Note: Nodal estimates approximately 75% of Nodal and estimated FCM fees will be allocated to financial participants, based on historical calculations

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Thank you!

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