



Response to the Nov 7, 2019 PJM Consultants’ Memorandum (the “Memo”) Concerning the Sep 24, 2019 Nodal FTR Clearing Presentation

Nodal appreciates the efforts by Neal Wolkoff and Robert Anderson (the “Consultants”), at PJM’s request, to review Nodal Exchange’s (“Nodal”) PowerPoint presented at the Financial Risk Mitigation Senior Task Force meeting on September 24, 2019 (“Nodal Presentation”) outlining Nodal’s FTR clearing proposal. As the Consultants’ have noted, the services Nodal has offered would “greatly enhance the safety and integrity of the PJM FTR auctions.” Nodal appreciates that the Consultants acknowledge that FTR clearing could lead to an increase in liquidity and activity in the FTR markets, as greater confidence in the risk protections and the traditional features of futures exchange-based trading and clearing (continuous trading, daily marks, daily margining, etc.) enhance participation by existing FTR traders and attract new participants that are otherwise reluctant to participate in FTR markets without these features.

Unfortunately, there are also misunderstandings and inaccuracies in the Memo and therefore to ensure a better understanding (consistent with the Consultants comments that further evaluation is needed) Nodal is providing this response with the goal of ensuring PJM stakeholders have an accurate and informed understanding of the issues raised in the Memo. As we have offered throughout this process, Nodal is available to answer any questions or address any concerns that are brought to our attention by either PJM, its Consultants, or any other stakeholders to avoid any potential misunderstandings regarding the Nodal Presentation or our services.

1. Regulatory Issues

The Consultants are correct to note that regulatory uncertainty exists until the necessary tariff changes are approved by FERC and Nodal rulebook changes are approved by the CFTC. However, the Memo’s discussion on the historical NYMEX “contingent” swap issue is a misplaced and inaccurate analogy to the FTR clearing model provided in the Nodal Presentation.

It is true that NYMEX (CME) ran into serious issues with the CFTC with regard to their operation of the Clearport™ platform. However, the misuse of a legal regulated transaction has no bearing on the future legal use of that transaction. Nodal would like to provide more background so exchange for related positions (“EFRPs”) are better understood by PJM and the PJM stakeholders. EFRPs are CFTC regulated products that have been legally used for many decades in the futures market, and by futures exchanges like Nodal, as long as they meet certain conditions under CFTC Regulation 1.38 (which regulates “Execution of Transactions” including EFRPs). As an example of the common and prevalent use of EFRPs, the CFTC noted in a standard Rule Review of the CME Group in 2013 that more than 484,000 EFRP transactions occurred on that exchange in a twelve-month period. More recently, in a twelve-month period ending June 2018, CME’s equity index futures contracts traded via EFRP over ten thousand times and in the S&P 500 equity index futures contract EFRP transactions represented 46% of traded volume. EFRPs can be done in different types, such as exchange for physicals (“EFPs”), or exchange of options for options (“EOOs”), or exchange for risk (“EFRs”) which are exchanges for over-the-counter (“OTC”) swaps or other OTC derivatives for futures positions on an exchange market. Hence, Nodal decided to refer to its proposed clearing of FTRs as EFTRs in line with the industry vocabulary regarding these transactions.

The Memo appears to misunderstand the key underlying regulatory issues relating to the NYMEX start of the Clearport platform, and why the CFTC made note of the lack of oversight of the EFRPs during the CFTC's Division of Market Oversight's July 26, 2013 Rule Enforcement Review of CME/NYMEX.¹ To be clear, at the time the CFTC was not focused on the "transitory" nature of the swaps involved in the exchange for related positions ("EFRPs"), per se, but rather the lack of documentation demonstrating that the underlying swaps being exchanged for futures were bona fide and not "contingent" on clearing. The EFRP would be considered "transitory" and illegal, when the parties agree in the same negotiation to both the underlying transaction (i.e. a swap or spot contract) and to the EFRP, such that the very existence of the underlying contract is "contingent" on the subsequent EFRP. For example, as what may have been the NYMEX situation, if the underlying swaps were negotiated and executed off-exchange for the purpose to present them for clearing through the Clearport™ platform, and if the transactions were not accepted as futures by NYMEX (e.g., due to credit issues), then the trades simply vanished—the purported swaps were undone and never consummated in any contract. Thus, there was no reasoned purpose or documentation associated with the underlying off-exchange transaction as they were always intended for clearing and would not exist otherwise. These are non-bona fide transactions. From the CFTC perspective, this would be an end-run around any meaningful supervision of the futures market.²

Nodal's EFRP design outlined in the Presentation is fundamentally different and would not create illegal transitory EFRPs. As presented, FTRs that are created from the PJM auction that are exchanged for futures via the EFTR process (Nodal's proposed new EFRP) would not be contingent on clearing. Unlike the swaps in the NYMEX example, FTRs are real transactions that satisfy regulatory requirements by FERC. The FTRs are not created contingent on the FTR being cleared on an exchange.

Though Nodal has not yet discussed the mandatory model with the CFTC as we have the optional model described in the Nodal Presentation, we likewise believe mandatory FTR clearing presents a significantly different execution platform and market integrity/oversight environment than the opacity of the contingent swap EFRP transactions that the CFTC addressed in the NYMEX situation.

Nodal believes that the PJM membership understands that Nodal Exchange would never have proposed this mechanism without considering and discussing with the CFTC the legal issues and arguments necessary to request and receive approval from the CFTC.

2. Cost Issues

This section of the Memo contains a number of materially inaccurate statements:

- In the beginning of the section, PJM's role is mischaracterized. The Nodal Presentation does not contemplate PJM being the "sole counterparty of Nodal Exchange" or PJM "clearing the trades before the trades are cleared". In fact, it is just the opposite. After exchanging FTRs for futures (the EFTRs), Nodal will be the sole counterparty of PJM and, therefore, PJM will no longer need to worry about the credit quality of its FTR counterparties because those counterparties would be guaranteed by Nodal and its CFTC regulated clearing members.
- PJM will not be "on the hook for each member's financial obligations to the futures market" as stated by the Consultants. As noted in the Nodal Presentation, PJM members that participate on Nodal Exchange will be guaranteed by their respective clearing members, thus providing the very reduction of credit risk that Nodal is

¹ It should be noted that the data reviewed in this 2013 Rule Review was from 2010, prior to the implementation of the Dodd-Frank Act changes to the Commodity Exchange Act and new implementation rules, and the data showed an increase in the number of EFRP transactions based on swaps prior to the new regulatory regime.

² Not only did Nodal discuss the EFRP language at length with the CFTC during our DCM registration process, but Nodal is also fortunate to have three former CFTC attorneys in its legal department, with multiple years of experience in both the CFTC's Division of Market Oversight and Division of Enforcement during the time regarding issues with transitory EFRPs.

proposing by FTR clearing. PJM is only responsible for its own obligations to the futures market and it can meet those obligations with available cash from the necessary line of credit.

- There are two clarifications needed to the Memo's reference to Nodal's proposed fee of \$0.005. First, because it's highly unusual to present the costs of trading participants (on Nodal Exchange) as the total combination of costs to those participants and to their counterparties, Nodal presented the costs in the standard manner per participant. Second, in FTR clearing PJM would be the counterparty to every transaction and Nodal has clearly stated that PJM would pay no fees to Nodal Exchange or to its clearing members, so the example here is incorrect.
- Finally, in any appropriate discussion of fees, it is fair to ask how much it will actually cost PJM to create, build, and implement its new Know-Your-Customer (KYC), credit monitoring, and credit model.³ The services offered by Nodal Exchange and proposed by the creation of Nodal Data Services could, if appropriately compared to PJM's costs, provide significant savings. Note, this is not the same as asking how much PJM's fees or tariffs would increase. If expenses can be avoided by relying on 1) CFTC regulated clearing members to provide KYC services on Nodal Exchange, and 2) Nodal Data services to provide consulting services regarding daily margining, price marks, initial margin calculations and other risk data analytics, then it would be reasonable for members to see those savings realized (PJM resources could be deployed to other activities – there is an opportunity cost for PJM resources assigned to the credit function).

3. Risk Mitigation Issues

The Memo raises a number of questions regarding the Reverse EFTR mechanism Nodal proposed to make any potential default by PJM impossible. Nodal's proposed reversal of EFTRs is a failsafe procedure in the highly unlikely event that 1) PJM's generous line of credit may need to be increased, and 2) that PJM's bank would need additional time to approve such a measure:

- To be clear, Nodal, not PJM, would decide which EFTRs to reverse should it become necessary.
- The EFTR reversal mechanism is not about mitigating FTR risks. The reversal would only be required to deal with a temporary lack of liquidity on PJM's part, in the unlikely event its line of credit would require an extension and it required additional time to do so. Should the reversal ever occur, PJM would simply resort to the same cash market settlement of collected Day-Ahead congestion revenues that it operates today. In addition, PJM could also choose to utilize the daily marks from Nodal if it wanted to collect (but not pay) variation margin during this short reversal period. Once the line of credit is extended, the entire portfolio could return to Nodal via EFTR.
- In this scenario, the risk environment confronting PJM would be largely benign. For a Reverse EFTR event to even be triggered if PJM's proposed \$1.5 billion line of credit becomes insufficient, the vast majority of FTR participants would be sitting on significant variation margin gains—collectively \$1.5 billion of gains. Furthermore, these same participants would have been risk vetted by the CFTC regulated clearing members utilizing the KYC, position limit, and other standards employed in the futures market. In other words, this mechanism and the methods utilized by the regulated clearing members would prevent a “GreenHat problem” for PJM.
- It is true that the EFTR model would not completely relieve PJM of all of its duties and risks with FTRs. However, Nodal believes that FTR clearing would greatly diminish those risks, and for whatever residual risks remaining with PJM, the services envisioned to be provided by Nodal Data Services would sharply reduce the effort involved in managing those risks.

4. Guaranty Fund Issues

³ Nodal assumes that any cost analysis provided by PJM would consider the legal issues that any ISO/RTO would encounter should it create services that could require it to become a CFTC registered clearing house or futures commission merchant (FCM), as noted in PJM's presentation on September 25, 2019, as the Commodity Exchange Act specifically addresses the regulatory requirements associated with these types of activities and the possibility of an ISO/RTO owned exchange or clearing house.

The Memo's criticism that a guaranty fund under 200 million dollars against a default "seems thin" denotes a misunderstanding of all the actual safeguards employed in the exchange cleared model. The first and most important safeguard is the clearing member layer. It is the clearing members who guarantee the performance of the FTR traders. In the event of an FTR trader's default, the clearing member (a list that includes, for example, Citibank, Goldman Sachs, Morgan Stanley), would protect PJM and its members from any financial repercussions. If a clearing member were to default, Nodal Clear's default management resources would be made available as follows:

- Defaulting clearing member's initial margin (not just the FTR trader's)
- Defaulting clearing member's contribution to the guaranty fund
- Nodal Clear's \$20 MM of "skin in the game"
- The guaranty fund (minus the defaulting clearing member's contribution) currently sized at \$165 MM
- Surviving clearing member assessments of 200% of the guaranty fund requirements

Again, it is critical to note that if an FTR trader were to default the first line of defense is its FCM, which would guarantee its position. Nodal Clear only needs to utilize its default waterfall if the FCM itself is in default. So, in the highly unlikely event that an FTR participant somehow caused the default of its clearing member (e.g., Goldman Sachs, Morgan Stanley), the resources available could look something like the following:

- Defaulting clearing member's initial margin: \$30 MM
- Defaulting clearing member's contribution to the guaranty fund: \$15MM
- Nodal Clear's contribution: \$20 MM
- Remaining Guaranty Fund (\$165 MM - \$15MM): \$150 MM
- Assessments: \$300 MM

Thus, there would be over \$500 MM available to manage a clearing member default at Nodal today, a default which would likely only be triggered in the first place by the loss of hundreds of millions or billions of dollars of clearing member resources protecting against customer defaults. Moreover, FTR clearing would greatly increase the open interest at Nodal, which would lead to a significant increase in the total initial margin and the total amount of guaranty funds protecting the market, thereby pushing that \$500MM default protection likely to close to \$1 billion in resources available to protect the market in the case of a clearing member default (again, clearing members guarantee the positions of trading participants).

5. Role and Risk of PJM

Apparently, the Consultants did not have the benefit of being apprised of the discussion that took place during Nodal's presentation. The sizing of the line of credit was proposed to be \$1.5 billion. The sizing was based on modeling of what short term liquidity PJM would have needed, hypothetically, to navigate the polar vortex in 2014 (up to \$925 million assuming all FTRs were cleared at Nodal), plus an additional amount as a buffer. The line of credit would be used to balance variation margin obligations, Day-Ahead congestion collections, and ARR payment obligations for the FTR positions that would transfer to Nodal Exchange, and nothing else. The costs for establishing the line of credit would need to be allocated by PJM to all FTR participants, which based on 2018 transacted FTR volumes, would equate to a cost of \$0.00069 per MWh on a path level.

Again, our goal is to provide greater clarity, consistent with the Consultant's recommendation. We appreciate the opportunity to provide this document and hope it has been useful in clarifying Nodal's September 24, 2019 presentation. Nodal welcomes the opportunity to discuss the presentation in greater detail to achieve our common goal of having the most appropriate and robust credit protections in the future.