UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

PJM Interconnection, L.L.C.

)))

Docket Nos. EL14-37-001 and ER17-1433-000

ANSWER AND MOTION FOR LEAVE TO ANSWER OF THE INDEPENDENT MARKET MONITOR FOR PJM

Pursuant to Rules 212 and 213 of the Commission's Rules and Regulations,¹ Monitoring Analytics, LLC, acting in its capacity as the Independent Market Monitor ("Market Monitor") for PJM Interconnection, L.L.C. ("PJM"), submits this answer to the answer submitted on August 2, 2019, by Exelon Corporation and NextEra Energy Marketing, LLC ("Exelon/NextEra").²

I. ANSWER

A. Measurement of Impact on an FTR's Value Was Ordered by FERC and Is Not a Zero Tolerance Standard.

Exelon/NextEra assert (at 2) that the Market Monitor's position "is based on a misreading of the January 19 Order as directing PJM to implement a zero tolerance standard that triggers forfeiture when a market participant's virtual portfolio influences

¹ 18 CFR §§ 385.212 & 385.213 (2018).

² Capitalized terms used herein and not otherwise defined have the meaning used in the PJM Open Access Transmission Tariff ("OATT"), the PJM Operating Agreement ("OA") or the PJM Reliability Assurance Agreement ("RAA").

prices on a participant's FTR path by a \$0.01 or more."³ Exelon/NextEra argue (at 2) that the \$0.01 test is zero tolerance and that was not in the FERC order: "The January 19 Order did not require PJM to adopt the Penny Test or any other specific revenue trigger."

Contrary to Exelon/NextEra's argument, the new FTR forfeiture rule created a 10 percent standard and not a zero tolerance rule. If the combined effect of the participants' virtual portfolio on a constraint is greater than or equal to 10 percent, the profits for that hour are forfeited if the result is to increase the value of the FTR, and the remaining conditions are met. The significance screen is the ten percent portfolio impact. Only if the significance screen is failed are the profits forfeited and then only if there is a positive impact on the value of the FTR and the remaining conditions are met. The positive impact on the value of the FTR is logically defined as greater than or equal to \$.01. The rule could have used \$0.00 as the definition of positive impact, but for practical reasons \$.01 was used. Contrary to Exelon/NextEra, the meaning of positive value impact is unambiguous.

B. The January 19th Order Required a Defined Standard and a Value Trigger.

Exelon/NextEra assert (at 2) that "[t]he January 19 Order did not require PJM to adopt the Penny Test or any other specific revenue trigger." Exelon/NextEra's assertion is incorrect.

The January 19th Order specified (at P 60) that in order to trigger a forfeiture, "the net flow across a given constraint attributable to a participant's portfolio of virtual transactions must meet two criteria: (1) the net flow must be in the direction to increase the value of an FTR; and (2) the net flow must exceed a certain percentage of the physical limit of a binding constraint." As recognized in the January 19th Order, the threshold test for forfeiture is whether the impact of the virtual portfolio is to increase the value of an FTR. The value of an FTR is the revenue of the FTR minus the costs of the FTR. The costs of the FTR are fixed

³ Exelon/NextEra refer to the order issued in this proceeding January 19, 2017, *PJM Interconnection*, *L.L.C.*, 158 FERC ¶ 61,038 ("January 19th Order").

when the FTR is purchased. Thus an increase in revenue is identical to an increase in value. The January 19th Order unambiguously requires a revenue trigger.

The current FTR forfeiture rule, reflecting the April 18th Compliance Filing, meets the Commission's requirements and provides that multiple tests be failed before profits are forfeited. PJM's current FTR forfeiture rule determines whether the net impact of each participant's virtual portfolio exceeds 10 percent of the day-ahead limit on any constraint. If the portfolio flow impact exceeds 10 percent of the day-ahead constraint limit, and the direction of the portfolio's net flow is consistent with increasing the value of the FTR, and congestion on the FTR path value in the day-ahead market is greater than in the real-time market, the profit on that FTR is forfeited for that hour. An increase in revenue is identical to an increase in value. The compliance filing defines an increase in an FTR's value to be \$0.01. This is a clear and logical definition of an increase in value.

C. Exelon/NextEra Make Factual Errors.

Exelon/NextEra incorrectly state (at 3) that violation of the FTR forfeiture rule "would trigger forfeiture of all revenues for the FTR path." When the forfeiture rule is violated, only profits are forfeited and only profits for the specific hours in which the rule is violated are forfeited.

Exelon/NextEra incorrectly describe (at 7) their forfeitures as being for virtuals that were "unrelated to the FTR positions." If the identified virtuals triggered the FTR forfeiture, the virtuals were, by definition, related to the FTRs. If the identified virtuals were not related to the FTR, then they played no role in triggering the forfeiture.

Exelon/NextEra assert (at 4) that PJM's position is that all FTR profits are subject to forfeiture. The rule does not state that and the rule as implemented does not have that result. Profits are forfeited only for the hours in which the test is failed.

Exelon/NextEra assert (at 8) that the cited 200 MW virtual transaction was "relatively small." But the average virtual transaction during the time period from January to June 2017 was only 30.2 MW for DECs and 21.3 MW for INCs.

Exelon/NextEra allege (at 2) that the new FTR forfeiture rule has had "severe and unintended consequences." That is not an accurate description either for Exelon/NextEra or for the market. Exelon provided no factual support for the assertion about "severe" and Exelon/NextEra have no basis for the assertion that the consequences were "unintended."

Forfeitures have averaged \$0.3 million per month since the forfeiture amounts and reasons became known to participants. This is 1.5 percent of total average monthly FTR profits over that period.

D. Exelon/NextEra Misunderstand Electrical Distance.

Exelon/NextEra claim (at 7) that its examples regarding a forfeiture triggered by a 200 MW virtual trade at West Hub provided evidence that the PJM's FTR forfeiture rule is inconsistent with the January 19th Order and unjust and unreasonable. Exelon/NextEra argue (at 7) that the virtual affected FTR positons "located in an entirely different part of PJM" even though "the underlying virtual trading activity was legitimate and unrelated to the FTR positions."

If the identified virtuals triggered the FTR forfeiture, the virtuals were by definition related to the FTRs. If the identified virtuals were not related to the FTR, then they played no role in triggering the forfeiture. Exelon/NextEra attempt to confuse the issue by using an example where the FTR and the virtual appear to be geographically distant. But that is not the way the network system actually works. Geography is irrelevant. Electric interconnections are the only relevant consideration.

Exelon/NextEra assert that this is circular logic. It is not. This logic simply reflects the electrical facts of the transmission grid that are known to Exelon/NextEra. Apart from the details of any rule, the Exelon virtual bid did have an impact on the value of its FTR. The FTR forfeiture rule is based solely on dfax values, which are an objective and direct measure of electrical distance on the transmission system, and the geographical distance is irrelevant. Exelon is not actually questioning the definition of impact in the FTR forfeiture rule. It is the definition of impact which makes the Exelon/NextEra argument irrelevant. The virtual bid did have an impact on the value of the FTR.

Market participants must recognize that, regardless of motives, virtual transactions can and do have an impact on the value of FTRs. The FTR forfeiture rule defines virtual trades that impact FTR values quantitatively and algorithmically and ensures that no market participants can profit from such impact. The FTR forfeiture rule is not punitive nor is it about the legitimacy of any specific transaction. The FTR forfeiture rule ensures that no party can increase FTR profits by using virtuals. The rule treats all participants uniformly. The FTR forfeiture rule protects the integrity of the FTR market, and helps ensure that all market participants can have confidence in the markets.

E. Exelon/NextEra Misunderstand and Misstate the Change in Forfeitures.

Exelon/NextEra again argue (at 8) that the higher level of forfeitures immediately following the implementation of the new rule is relevant when considering whether PJM's proposal is just and reasonable. The magnitude of the forfeitures is not relevant to assessing whether the rule is correct. Exelon/NextEra are wrong about the impact.

The new FTR forfeiture rule improves the prior rule. The new rule complies with the Commissions' directives and the old rule did not. The new rule explicitly accounts for participants' portfolio of virtuals and explicitly includes a constraint percentage threshold. The constraint specific threshold based on an individual participant's net portfolio is an improvement on the prior rule which was based on a theoretical virtual unrelated to a participant's actual portfolio. The old rule did not correctly or explicitly capture the effect of a participant's virtual activity on the value of associated FTRs. The new rule explicitly and correctly captures the effect of a participant's virtual activity on the value of associated FTRs. The new rule also includes counter flow FTRs which were incorrectly ignored in the prior rule.

It is to be expected that participants would have to adjust their behavior to the new rule. It is possible, and in fact likely, that some transactions that passed the prior test would fail the new test and that some transactions that failed the prior test would pass the new test. The interesting metric is the relative level of forfeitures after participants became aware of the actual forfeitures under the new rule and could adapt their behavior to the new rule. Ultimately the level of forfeitures is a result of decisions by participants who understand the rules.

Exelon/NextEra's assertion that the new rule caused them to entirely cease virtual trading is hyperbolic, self serving and misleading. The FTR forfeiture rule is not punitive. There are no penalties associated with the rule. The worst result under the rule is that FTR profits for specific hours are forfeited. The choice to end virtual trading is the choice of individual participants and is not the result of the FTR forfeiture rule.

There is no basis for the assertion that the relative magnitude of forfeitures under the FTR forfeiture rule is an indicator of the correct level of sensitivity, or whether the rule is just and reasonable. A smaller monthly forfeiture is no more correct than a larger monthly forfeiture. The details of the rule are all that matter.

In order to understand the observed level of forfeitures, the details of the implementation matter. Per Commission order, the new rule was applied retroactively. PJM did not start enforcing the new FTR forfeiture rule until September 2017 but was required to retroactively bill forfeitures back to January 2017. As the actual effects of the new forfeiture rule were not known for the period from January through September 2017, participants could not modify their behavior. The magnitude of FTR forfeitures reflected the fact that participants lacked the information to make informed decisions on their market behavior. However, after participants could see the effects of the new rule, participants modified their behavior and there was a steady decline in monthly FTR forfeitures. Figure 1 shows the level of forfeitures prior to the implementation of the new rule on January 17, 2017, the level of forfeitures for the period from January 17, 2017, through September 30, 2017, when participants did not know the impact of the rule and the period after September 30, 2017, when participants did adjust their behavior.

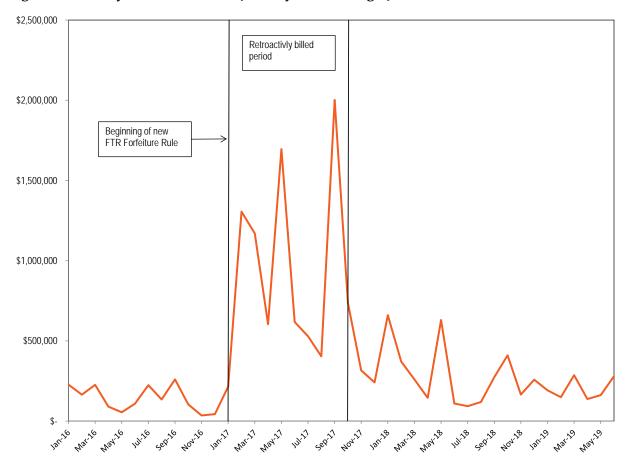


Figure 1 Monthly FTR Forfeitures: January 2016 through June 2019

F. Exelon/NextEra Appear to Misunderstand the Role of Intent and Generally Applicable Rules

Exelon/NextEra recognize (at 6): "While FTR profits as a consequence of virtual trading may be indicative of intent, they are certainly not dispositive of intent." Exelon/NextEra assert (*id*.) that their transactions are for "legitimate hedging activity" that reduce the risk and cost of serving load, and therefore should be exempt from the FTR forfeiture rule. Hedging is an overused and not clearly defined term. Exelon/NextEra do not define what they mean by hedging here. Exelon/NextEra also do not provide a definition of legitimate hedging. Terming an activity hedging does not automatically qualify it as reasonable or legitimate relative to its effect on an FTR position. Exelon/NextEra state that their motive in the activity that violates the FTR forfeiture rule is to make load better off.

But that is not correct. The motive of all private companies is to maximize profits for the benefit of their shareholders. That is appropriate and a fundamental of competitive markets. The FTR forfeiture rule benefits load and all market participants by helping to ensure competitive markets and preventing participants from increasing the value of their FTRs through the use of virtuals, without a detailed investigation of their intent or psychology or of the intent of individual traders within their organizations.

It is not clear what Exelon/NextEra's preferred outcome is. Their arguments prove too much. The Exelon/NextEra position constitutes a collateral attack on the January 19th Order directing PJM to reform its FTR forfeiture rule, and, if accepted would undermine the authority of the Commission to establish rules like the FTR forfeiture rule. Such rules define an unacceptable market impact of clearly defined participant behavior and, as a direct result, avoid the regulatory burden of multiple enforcement cases. The FTR forfeiture rule is a clearly defined and fully transparent rule that participants can and do understand. Exelon/NextEra's position means that the Commission must rule on the legitimacy of each virtual trade before enforcing the FTR forfeiture rule.

But despite all their other arguments, Exelon/NextEra do recognize (at 4) the role of general rules in place of individual determinations of intent:

A benefit of generally applicable rules designed to deter anticompetitive behavior is that the market and Commission do not need to evaluate every single transaction for legitimacy. But, the Commission's review of these rules must appropriately balance the interests of deterring market manipulation and encouraging legitimate, competitive, behavior.

The Market Monitor agrees. The Commission order and PJM's rule implementing that order strike that balance.

The FTR forfeiture rule is required for the competitive operation of the PJM markets. Exelon/NextEra's assertions that the FTR forfeiture rule is unjust and unreasonable are based on the fact that Exelon placed a large virtual that resulted in a forfeiture of profits on an FTR position. The fact that market participants may benefit from violating the rule is not a reason to allow the referenced transactions.

I. MOTION FOR LEAVE TO ANSWER

The Commission's Rules of Practice and Procedure, 18 CFR § 385.213(a)(2), do not permit answers to answers or protests unless otherwise ordered by the decisional authority. The Commission has made exceptions, however, where an answer clarifies the issues or assists in creating a complete record.⁴ In this answer, the Market Monitor provides the Commission with information useful to the Commission's decision making process and which provides a more complete record. Accordingly, the Market Monitor respectfully requests that this answer be permitted.

II. CONCLUSION

The Market Monitor respectfully requests that the Commission afford due consideration to this answer as the Commission resolves the issues raised in this proceeding.

Respectfully submitted,

affrey Mayes

Joseph E. Bowring Independent Market Monitor for PJM President Jeffrey W. Mayes

General Counsel

⁴ See, e.g., PJM Interconnection, L.L.C., 119 FERC ¶61,318 at P 36 (2007) (accepted answer to answer that "provided information that assisted … decision-making process"); California Independent System Operator Corporation, 110 FERC ¶ 61,007 (2005) (answer to answer permitted to assist Commission in decision-making process); New Power Company v. PJM Interconnection, L.L.C., 98 FERC ¶ 61,208 (2002) (answer accepted to provide new factual and legal material to assist the Commission in decision-making process); N.Y. Independent System Operator, Inc., 121 FERC ¶61,112 at P 4 (2007) (answer to protest accepted because it provided information that assisted the Commission in its decision-making process).

Monitoring Analytics, LLC 2621 Van Buren Avenue, Suite 160 Eagleville, Pennsylvania 19403 (610) 271-8051 *joseph.bowring@monitoringanalytics.com*

Howard J. Haas Chief Economist Monitoring Analytics, LLC 2621 Van Buren Avenue, Suite 160 Eagleville, Pennsylvania 19403 (610) 271-8054 *howard.haas@monitoringanalytics.com*

Dated: August 19, 2019

Monitoring Analytics, LLC 2621 Van Buren Avenue, Suite 160 Eagleville, Pennsylvania 19403 (610) 271-8053 *jeffrey.mayes@monitoringanalytics.com*

Seth A. Hayik Senior Analyst Monitoring Analytics, LLC 2621 Van Buren Avenue, Suite 160 Eagleville, Pennsylvania 19403 (610) 271-8050 seth.hayik@monitoringanalytics.com

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Eagleville, Pennsylvania, this 19th day of August, 2019.

officer Marger

Jeffrey W. Mayes General Counsel Monitoring Analytics, LLC 2621 Van Buren Avenue, Suite 160 Eagleville, Pennsylvania 19403 (610) 271-8053 *jeffrey.mayes@monitoringanalytics.com*