

Members Committee
Motion to Vote on Next
HSIM Confidence
Interval

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March 23, 2022



Background

- Refer to:
 - August 4, 2021 FRMSTF Meeting: Agenda Item 4B – Duke Energy & Perast – IM Confidence Interval Analysis - Presentation
 - <https://www.pjm.com/-/media/committees-groups/task-forces/frmstf/2021/20210804/20210804-item-04b-duke-energy-and-perast-im-confidence-interval-analysis-presentation.ashx>
 - February 28, 2022 FERC Order for Docket No. ER22-703-001 / EL22-32-000
 - <https://elibrary.ferc.gov/eLibrary/filedownload?fileid=6792B2B9-4AAA-C906-9499-7F430C400000>
 - March 9, 2022 Special Meeting of the Risk Management Committee
 - PJM Presentation: Agenda Item 2 – Intitial [sic] Margin Filing Next Steps
 - <https://www.pjm.com/-/media/committees-groups/committees/rmc/2022/20220309/20220309-item-02-initial-margin-filing-next-steps.ashx>
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March 9 RMC

- Item 2, slide 2 (Background and Summary):

PJM Members Committee voted for **FTR Credit Requirement revisions including adoption of HSIM model with 97% confidence interval (CI)** in Oct. 2021.

PJM filed its **Initial Margin filing with HSIM at 97% CI** on Dec. 21, 2021, supplemented Feb. 2, 2022.

Comments were filed by OPSI, the IMM, Joint Consumer Advocates and Joint Filers.

Comments **supported the adoption of a CI**

- OPSI urging FERC to issue a Notice of Deficiency
- IMM urging FERC to order PJM to implement 99% CI and include a specific timeline to get to 99% CI

March 9 RMC

- Item 2, slide 3 (Background and Summary):

FERC issued an order Feb. 28 rejecting PJM’s FTR Credit Requirement revisions including HSIM 97% CI as unsupported by the record.

FERC found PJM proposed use of HSIM model at a 97% CI was not supported by the record.

- Lower aggregate collateral amounts to be collected
- PJM failed to demonstrate how the FTR Credit Requirement is calibrated to ensure Market Participants will be required to provide adequate collateral relative to risk of positions
- Lack of evidence that adequate margin will be in place for riskiest FTR counterparties
- Recent defaults in the FTR markets

FERC had concerns regarding imposing use of HSIM model at a 99% CI.

- Unspecified transition to go from 97% CI to 99% CI
- Concern that some participants may unwind their portfolios

FERC cited concerns that the existing FTR Credit Requirement is no longer just and reasonable and instituted a 206 proceeding. FERC also recognized that PJM could propose revisions to its tariff in a 205 filing.

FERC order appears to provide support for moving to 99% CI.

March 9 RMC

- Item 2, slide 6 (205 Filing):

Pursue 205 filing at 99% confidence interval (end of March)

- Meets core objective of moving from status quo to an enhanced HSIM approach
- Provides some certainty, as FERC would have 60 days to rule*
 - Continue using current FTR credit requirement for 22/23 FTR Auction, May and June 2022 BOPP/Monthly Auctions
- Transition to new credit requirement*
 - Long-Term FTR Auction (June 2, 2022)
 - All existing and future FTR transactions

* Subject to FERC approval

As an aid to Market Participants, PJM will endeavor to have available an FTR Credit Calculator, which Members can use to determine their collateral requirements at the 99% CI.

- Provides transparency of resulting collateral movements
- Provides additional time for funding increases
- Provides opportunity to adjust positions

Most efficient path to adoption of the HSIM 99% CI and quickest FERC ruling.

March 9 RMC

- Item 2, slide 7 (Path Forward):

<p>If PJM were to make a 205 filing, we would provide 7-days notice and consultation per Section 9.2 of the OATT, and as such would not intend to seek a vote</p>	<p style="text-align: center;">Potential Timeline</p> <ul style="list-style-type: none">• Consult with Members at MC (March 23)• Obtain Board support for 205 filing• Notice to Transmission Owners at TOA-AC• 205 filing by the end of March• 206 response, which is due on or before April 29 our filing will point to the 205 filing
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Observations

- During the October 20, 2021 MC, the Members endorsed the amended main motion (*i.e.*, 97% CI) by acclamation with two objections and one abstention
- But, the analysis that PJM based its testimony in support of 97% was based on the HSIM model at a 99% CI, which FERC found insufficient to support 97%
 - P32-35: We agree with OPSI and the Market Monitor that the record fails to support PJM’s proposed use of an HSIM model with a 97% confidence interval. ⁵⁷ PJM states that “[t]he HSIM Model Has Been Validated by Independent Auditors,” ***but PJM concedes that its independent auditors validated the HSIM model at a 99% confidence interval rather than the 97% confidence interval as proposed.*** ⁵⁸ Validating the HSIM model under conditions different from how PJM proposes to use it, *i.e.*, at a 99% confidence interval rather than a 97% confidence interval, does not demonstrate whether the HSIM model would operate as represented across extreme events or that the initial margin estimates would cover losses as expected. Furthermore, PJM has not provided sufficient information regarding ***how validation conducted at the 99% confidence interval would apply at the 97% confidence interval.*** For example, while the Eydeland affidavit provides a general description of the validation, the exhibits provided are not sufficient to understand the test periods used. ⁵⁹
- **Explicitly, why doesn’t PJM update the model at a 97% CI rather than propose a 99% CI? Why won’t PJM address how 99% validation would apply to 97%?**

Observations

FERC expressed concern that 97% CI would “ensure adequate margin requirements for the riskiest market participants”

- **Explicitly, why doesn't PJM address this specific question?**

8/4/21 FRMSTF Item 4B slide 3

PJM COLLATERAL RULES: BEFORE & AFTER GREENHAT

	Before GreenHat	Now/Proposed
Collateral framework	FTR collateral was based upon the difference in bid/purchase price and the FTR's historical performance, allowing GreenHat to select "free" paths whose cost was less than historical congestion	Proposed collateral requirements are based upon volatility, which more closely relates to actual risk
Mark-to-auction (MTA)	No MTA rule, which would have ended GreenHat's mounting losses much sooner, resulting in a much smaller default	MTA currently in place, meaning any shortfall would be limited to price moves over only two auctions
Minimum credit	No minimum \$/MWh rule, which would have required GreenHat to post tens of millions to amass their position rather than <\$1M	Minimum \$/MWh rule currently in place, meaning no free positions and there is a sizable cost to any materially large portfolio
Additional safety measures	No enhanced flexibility for PJM to take further action against GreenHat before it was too late	PJM has substantial flexibility to analyze participant's history, current market activity, and events outside of PJM to limit the participant's access or require more collateral
Failure rate	~8%	~1% (proposed rules)

Observations

- FERC gave PJM options:
 1. Show cause why existing FTR Credit Requirement remains just and reasonable;
 2. Explain what Tariff changes are needed to remedy the identified concerns (*i.e.*, HSIM run on 99% CI and 97% CI may not address riskiest market participants);
 3. Make a FPA section 205 filing revising the FTR Credit Requirements; and,
 4. Hold FERC's FPA section 206 proceeding in abeyance while it addresses a new PJM section 205 filing to revise the FTR Credit Requirements.
 5. PJM also has the option to seek rehearing.

Observations

- To date, PJM has publicly stated it is choosing Option #3 - pursue a FPA section 205 filing to revise the CI to 99%
 - Argues that the FERC order “appears to provide support for moving to 99% CI”
 - Not clear this is true as FERC also agreed that 99% CI could “force some market participants to unwind market positions or decide not to continue participation....” but noted that more evidence is needed.
 - Argues that 205 filing is the most expeditious path to a FERC order
 - Fails to acknowledge the concerns with a 99% CI
- PJM should choose Option #2 - explain what changes are needed to remedy the identified concerns:
 - Rerun the HSIM on 97% CI
 - Demonstrate other changes already made to mitigate the risk of the riskiest market participants.

Conclusion

- AMP understands PJM has received significant feedback and is now amenable to a vote of the membership on this issue
- AMP proposes to suspend the rules to allow for non-truncated voting on three possible paths forward:
 1. Support 97% stakeholder compromise filing (as amended)
 2. File 99% Confidence Interval
 3. File 97% Confidence Interval with a transition to 99% within one year

Motion

1. Approve waiving the rules in Manual 34 section 9.7, Motion Voting Order, to allow voting more than one motion (i.e. NOT to use truncated voting).
2. Endorse the FTR Credit Requirement revisions, including the HSIM Initial Margining proposal, filed by PJM on December 21, 2021, as amended, **with the 97% confidence interval (CI) accompanied by some new supporting rationale.**
3. Endorse the FTR Credit Requirement revisions, including the HSIM Initial Margining proposal, filed by PJM on December 21, 2021, as amended, **replacing the 97% confidence interval (CI) with the 99% CI.**
4. Endorse the FTR Credit Requirement revisions, including the HSIM Initial Margining proposal, filed by PJM on December 21, 2021, as amended, **with the 97% confidence interval (CI), and then moving to the 99% CI in one year.**



THANK YOU!

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