



Financial Risk Mitigation Senior Task Force Monthly Progress Report

MC Webinar
June 21, 2021

The Markets and Reliability Committee (MRC) approved the creation of the Financial Risk Mitigation Senior Task Force (FRMSTF) to evaluate the recommendations in the Report of the Independent Consultants on the GreenHat Default (<https://www.pjm.com/-/media/library/reports-notice/special-reports/2019/report-of-the-independent-consultants-on-the-greenhat-default.ashx?la=en>) (the Report) related to:

- Market rules updates
- Credit and risk management rules updates
- Membership qualifications and processes updates
- Stakeholder process changes

Progress Update

5/13/19 Meeting Update

The first meeting of FRMSTF took place on May 13, 2019. PJM staff provided a review of their observations of the Report of the Independent Consultants on the GreenHat Default in relation to the recommendations within the report. In addition, PJM staff also introduced various framing questions focused on each of the four work streams to provide a baseline for stakeholder discussion and feedback. Education was also provided during this meeting including an overview of current OA language for the responsibilities of the PJM Board, Officers and Office of the Interconnection in relation to the stakeholder process.

Stakeholders were asked to continue their review of the observations document and framing questions and provide additional written feedback via a follow-up survey which was distributed as a follow-up to the meeting.

6/6/19 Meeting Update

The second meeting of the FRMSTF took place on June 6, 2019. During this meeting, a timeline was shared with the Stakeholders on the sequencing of various work products associated with each work stream that would be presented at future meetings. Education was also provided by PJM staff during this meeting including an overview of the OATT Schedule 9, an overview of the FRT and Bilateral Markets and a comparison of the credit rules across various ISOs/RTOs. In addition, the IMM also presented on their perspectives of ARR/FTR Market Design. The meeting continued with discussion on the framing questions survey feedback where a summary was provided of the results within each work stream. Stakeholders also had the opportunity to offer additional feedback on PJM's observations of the Report of the Independent Consultants on the GreenHat Default.



6/25/19 Meeting Update

The third meeting of the FRMSTF took place on June 25, 2019. During this meeting, Ms. Anita Patel provided a demo of the newly developed FRMSTF dashboard which allows stakeholders to track the status of work related to each of the recommendations included in the Report of the Independent Consultants on the GreenHat Default. Education was also provided by both PJM staff and stakeholders. Education from PJM included a review of FTR performance improvement analysis and stakeholders presented on load serving entities' perspectives on the ARR/FTR market design and ARR/FTR market design risk factors and reduction. The meeting continued with a review of discussion papers on Enduring Governance of PJM's Financial Markets and FTR Default Allocation and Central Counterparty. The meeting concluded with a review and comparison of ISO/RTO requirements for long-term FTR products.

7/17/19 Meeting Update

The fourth meeting of the FRMSTF took place on July 17, 2019. During this time, it was announced that the FRMSTF Dashboard was live and would be updated following each meeting as applicable. This meeting included an education session from Nodal Exchange titled Futures Clearing 101 and provided background and education on an external clearing house. The meeting continued with discussion on topics within the Credit and Risk Management work stream including a report on a Desktop Review for Methodologies for Initial Margin Calculation, a discussion paper on Position Limits and Liquidity Risk and Variation and Post-Auction Settlement was also presented. The meeting also included discussion on two initial proposals including Enduring Governance (Stakeholder Process) and the recommended changes of the FTR Product Range and Auction process. The meeting concluded with some education from stakeholders on the topic of FTR Market Rules and Market Design.

Stakeholders were encouraged to provide feedback and consider alternative proposals leading up to the next FRMSTF meeting for the two proposals presented at the meeting.

8/14/19 Meeting Update

The fifth meeting of the FRMSTF took place on August 14, 2019. During this meeting, Ms. Susan Riley introduced Ms. Nigeria Bloczynski, the new Chief Risk Officer for PJM. Ms. Nigeria Bloczynski provided her vision for the credit work stream of the FRMSTF and her participation in the senior task force moving forward. The meeting discussion focused on the initial proposal for PJM's recommended changes with respect to due diligence criteria and an assessment process and PJM's recommended changes with respect to authorities and discretion to deny or revoke trading rights. Stakeholders provided feedback for review by PJM. In addition, two solution matrices were presented including an update to the proposal for Enduring Governance (Stakeholder Process) to include subcomponents as well as PJM's initial proposal on the FTR Product Range.

Stakeholders were encouraged to provide feedback and consider alternatives for the proposals presented at the meeting.

9/5/19 Meeting Update

The sixth meeting of the FRMSTF took place on September 5, 2019. During this meeting, a voting schedule and timeline was presented to the FRMSTF participants to allow stakeholders to follow the progress and expected dates for voting for each work stream. In addition, the discussion focused on the Credit and Risk Management work stream and an overview of a paper addressing default and termination events and financial criteria for market participation were presented at this meeting. PJM also reviewed their proposal for the FTR Product Range and stakeholders reviewed alternatives for discussion during the meeting.



Stakeholders were encouraged to review the all the FTR Product Range packages and were informed that voting for this item would open the following week. Voting results will be announced at the September 24-25 meeting.

10/30/19 Meeting Update

Two meetings of the FRMSTF took place on September 24-25 and October 18, 2019. During the September meeting, the discussion focused on the Credit and Risk Management and Markets work streams. Nodal Exchange presented a proposed solution for an FTR Clearing Proposal and PJM discussed a paper addressing External Clearing for the PJM FTR Market. The results of the FTR Product Range and Auction Process vote was also presented at this meeting. The PJM/Vitol package received the highest level of support with 75% voting in favor of this package.

During the October 18th meeting of the FRMSTF, discussion continued on the Market Participant Qualification work stream. A follow-up to the discussion that started at the August 14th meeting of the FRMSTF was presented at this meeting which focused on best practices associated with credit policy, collateral management and know your customer. Draft language associated with the endorsed package for the FTR Product Range and Auction Process was also presented to stakeholders at this meeting prior to review at the MRC at the end of October. Lastly, education was also presented on FTR underfunding which was requested by stakeholders at the September FRMSTF meeting.

Following this meeting, a poll was distributed to allow stakeholders to provide feedback on the key areas of the Credit Industry Standards and Best Practices presentation that was discussed at this meeting. Poll results will be posted prior to the next FRMSTF scheduled for November 7, 2019.

12/2/19 Meeting Update

Two meetings of the FRMSTF took place on November 11th and 21st, 2019. During the November 11 meeting, the discussion focused on the Credit and Risk Management and Markets work streams. Poll results from the previous meeting associated with Credit Best Practices and FTR Underfunding and Risk Mitigation were reviewed with stakeholders. In addition, the solutions matrix for the Market Participant Qualification/Credit Best Practices work stream was presented to stakeholders for discussion. This meeting also included a review of the results of a Risk Model Quantitative Analysis pertaining to Monte Carlo simulations. Lastly, PJM presented and discussed an initial proposal on addressing PJM Initial Margin.

During the November 21st meeting of the FRMSTF, discussion continued on the Market Participant Qualification work stream. This included a follow-up to the solutions matrix that was presented at the November 11th meeting in preparation for vote in December. In addition, as a follow-up to the discussion that started at the July 17th FRMSTF meeting, an updated proposal was presented on the Stakeholder Governance/Process changes.

Two alternate proposals were also discussed on behalf of stakeholders including one focusing on Exchange Based Clearing of FTRs and a second alternate proposal on FTR Minimum Collateral Requirements.

Based on the above discussion and what was presented during the November 11th meeting of the FRMSTF, stakeholders were also presented with an updated voting timeline to allow time for the appropriate discussion to take place leading up the voting on the packages. The updated voting timeline can be found with the November 21st meeting materials on the FRMSTF page on pjm.com. This discussion included delaying the Credit and Risk Management work stream out to 2020 to while continuing forward with the Market Participant Qualification/Best Practices work stream through the end of this year.

An additional meeting was also added on December 9th to accommodate the timeline changes.

Next meeting: December 9, 2019

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1/21/2020 Meeting Update

Three meetings took place for the FRMSTF on December 9th, 17th and then most recently on January 13th 2020. Below are the states updates for each work stream associated with the FRMSTF based on the end of 2019 progress.

FTR Product Range and Auction Process - This item that was previously voted on at the FRMSTF in August with 75% support in favor and 78% preferring a change over status quo was endorsed at the MRC endorsement on December 19th. This work stream package will proceed to MC this month for final endorsement on January 23rd 2020. PJM is seeking action from FERC in time to allow the rule changes to be implemented in time for the upcoming 2020 FTR auction.

Stakeholder Governance Process - Discussions at the FRMSTF considered three potential proposals however discussions resulted in all proposed solutions being withdrawn. At the December 9th meeting, the task force supported a recommendation to retain status quo for this work stream. There are no expected changes as a result and this work stream is considered to be completed.

Market Participant Risk Evaluation Enhancements – This item was voted on following the December 9th task force meeting resulting with 64% support and 97% supporting a change over status quo. The task force has since spent time reviewing corresponding governing document language revisions at the FRMSTF. During the January 13th meeting, discussion continued with review of the proposed revisions incorporating some feedback from stakeholders. A first read of revisions was completed at the December 19th MRC. MRC and MC endorsement will be sought at the January 23rd meeting.

Additional meetings have been scheduled for 2020 on the following dates - 2/25, 3/30, and 4/23. The initial focus of the 2020 meeting will be on Initial Margining which is part of the Credit and Risk Management work stream.

5/26/2020 Meeting Update

Market Participant Risk Evaluation Enhancements – Based on stakeholder feedback, additional time was taken to continue review of the corresponding governing document language revisions. MRC Special Sessions were held on February 26th and March 13th to conduct page turn reviews of the proposed revisions incorporating some feedback from stakeholders. Endorsement/approval of the revisions occurred at the March 26th MRC meeting and was completed with three friendly amendments incorporated. The amended proposed Tariff and OA revisions were endorsed/approved in a sector-weighted vote with 4.50 in favor. MC endorsement/approval followed on the same day resulting in an acclamation vote with one objection and three abstentions registered.

The FRMSTF resumed meetings on 3/30 with a focus on Phase II of the task force efforts including the remaining work stream addressing Credit and Risk Management. Additional meetings were also held on 4/23 and 5/11. Efforts thus far have focused on education surrounding Initial Margining and Liquidation Processes and the consideration of FTR credit requirement components and a holistic FTR Credit Requirement calculation. The FRMSTF's next meeting has been scheduled for 5/27.

6/15/2020 Meeting Update

The FRMSTF last met on 5/27 with a discussion focused on concepts around default management and continued education from Intercontinental Exchange (ICE) pertaining to their liquidation process. The FRMSTF's next meeting is scheduled for 6/24 and is targeting back testing information updates, a liquidation process design components discussion, and additional education as necessary.



7/20/2020 Meeting Update

The FRMSTF last met on 6/24 with a discussion focused on the process to evaluate the third party clearing proposal, a high-level discussion of minimum capital requirements, and continued discussion regarding concepts around default management. Small adjustments to the work plan were reviewed primarily to adjust the liquidation process and back testing informational updates to shift these topics to the next meeting. The FRMSTF's next meeting is scheduled for 7/21.

09/14/2020 Meeting Update

The FRMSTF met on 7/21 and 8/26. Topics at the 7/21 meeting included updates on the external clearing timeline and PJM's July 2 surety bond filing, a review of back testing results, a discussion of proposed default management design components, and a presentation regarding the termination of defaulted portfolios. Discussion at the 8/26 meeting included presentations from Wells Fargo surrounding Future Commission Merchant (FCM) and Perast Capital Management regarding a proposed methodology to be used in conjunction with initial margining. PJM also lead a discussion focused on the liquidation process including impacts to the initial margining discussion and a proposed path forward to move default management forward as a separate filing in advance of the remaining items being discussed in this phase of the task force. The FRMSTF's next meeting is scheduled for 9/10.

10/26/2020 Meeting Update:

The FRMSTF met on 9/29 and 10/15. Topics at the 9/29 meeting included updates on the external clearing timeline, a discussion on initial margining and FTR credit requirements, an update on minimum capitalization requirements, proposed revisions to PJM's default management process, and presentations by Monitoring Analytics and Perast Capital Management regarding their respective liquidation proposals. Following the 9/29 meeting, FRMSTF stakeholders were asked to endorse a proposed solution in a vote. Topics at the 10/15 meeting included updates on the external clearing timeline, initial margining and FTR credit requirements, and minimum capitalization requirements. Perast Capital Management provided a presentation on the purpose of minimum capitalization and PJM reviewed examples regarding the FTR liquidation positions. The results of the task force vote on liquidation process proposals were also discussed. The PJM package with 87% support will move forward to the MRC as the main motion for endorsement at its 10/29 meeting. The Monitoring Analytics and Perast Capital Management proposals received 23% support and 19% support respectively and will not move forward to the MRC. The FRMSTF will hold its next meeting on 11/9.

11/16/2020 Meeting Update:

The FRMSTF met on 11/9. Topics included an update on the external clearing timeline, continued discussions on minimum capitalization requirements and FTR credit requirements, a review of the algorithm utilized for calculating pricing proxies, and a presentation by Perast Capital Management regarding their initial margining concerns. The FRMSTF work plan was reviewed and the timeline shifted to allow for KPMG to conduct an independent assessment and validation of PJM's Initial Margin methodology. The FRMSTF's next meeting is scheduled for 12/15.

12/14/2020 Meeting Update:

Please refer to the above update from 11/16/2020 for the latest information following the 11/9 FRMSTF meeting. No additional FRMSTF meetings were held since that time. The FRMSTF's next meeting is scheduled for 12/15.



01/25/2021 Meeting Update:

The FRMSTF met on 12/15/2020 and 01/21/2021. Topics at the 12/15 meeting included an informational update regarding data posted on the FRMSTF webpage such as pnode mapping, unwind schedule, and others, discussion of an illustrative data sample for the FTR Credit Requirement Enhancements, a verbal overview of the FTR collateral calculation related to ARR considerations and other charges/credits, a discussion of FTR bid collateral, and an update regarding the process to evaluate the third party clearing proposal. Topics at the 01/21 meeting included an update regarding the process to evaluate the third party clearing proposal, additional information updates regarding an illustrative Data Sample for the FTR Credit Requirement Enhancements, and a discussion of FTR bid collateral. The FRMSTF's next meeting is scheduled for 02/05/2021.

02/22/2021 Meeting Update:

The FRMSTF meeting scheduled for 02/05/2021 was cancelled to provide an opportunity for additional stakeholder feedback and proposal development. The next FRMSTF meeting will be scheduled for March and will include an updated work plan for the timing and path forward.

03/22/2021 Meeting Update:

The FRMSTF last met on 01/21/2021. The next FRMSTF meeting will be held on March 24, 2021. Notice will be sent to the FRMSTF email list when the agenda and materials are available on PJM.com.

04/19/2021 Meeting Update:

The FRMSTF last met on 03.24.2021. Topics at the 3/24 meeting included an informational update regarding data posted on the FRMSTF webpage surrounding sample data and confidence interval analysis, a discussion of FTR bid collateral, an update addressing some ARR questions received from stakeholders, a review by Nodal Exchange of their line of credit size, and a PJM update and discussion regarding the process to evaluate the external clearing proposal. Notice will be sent to the FRMSTF email list when the next FRMSTF meeting is scheduled.

06/21/2021 Meeting Update:

The FRMSTF last met on 06.02.2021. Topics at the 6/2 meeting included a discussion of PJM's proposal to address FTR credit portfolio requirements, a presentation by Perast Capital Management discussing initial margining cost-benefit analysis, and discussions related to External Clearing. External Clearing topics included a discussion by Nodal Exchange regarding the governance of Nodal Clear, a Nodal Exchange presentation of FTR clearing costs, a PJM presentation of FTR clearing costs, and a PJM discussion addressing regulatory considerations associated with external clearing. The next FRMSTF meeting is scheduled for 07/16/2021.

09/27/2021 Meeting Update:

The FRMSTF last met on 07/16/2021, 08/04/2021, and 09/15/2021. Topics at the 7/16 and 8/4 meetings included External Clearing and Initial Margining. PJM discussed external clearing analysis completed and PJM's recommendation to not move forward with the external clearing of FTRs. For initial margining, stakeholders considered two solution proposals PJM's proposed solution (Package A) and a joint Duke Energy and Perast Capital proposed solution (Package B). FMRSTF voting determined support for Package B with 69% in favor and 82% preferring Package B over status quo. Package B moved forward to the MRC as the Main Motion for consideration and was first read at the August 25, 2021 MRC meeting. The 9/15 meeting focused on addressing questions raised during the MRC first read and on conducting a review of proposed Tariff revisions supporting the initial margin solution. MRC endorsement will be sought on September 29, 2021.