# Illustrative Data Sample for FTR Credit Requirement Enhancements 

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- Template for calculating total IM-H is found here:
- https://www.pjm.com/-/media/committees-groups/task-forces/frmstf/2020/20201215/20201215-item-04-2-ftr-credit-requirement-template-with-im-historical-simulation.ashx
- Credit sample data is available in eCredit for the following dates
- December 21, 2020
- February 1, 2021
- PJM Team is working on making additional dates available for viewing
- A historical simulation methodology for initial margining has been discussed at the FRMSTF
- Utilizes historical price data to generate scenarios for FTR prices for all paths in the portfolio; these price scenarios should simulate price movements over the liquidation period
- For each price scenario a new portfolio value is computed, and consequently, the corresponding change of the portfolio value as compared to the current base case
- After creating the distribution of portfolio value changes, we apply the confidence level to determine the exposure of the portfolio (typical confidence levels are $95 \%, 97 \%$, or $99 \%$ ) and lastly apply a pre-fixed scaling factor to determine the IM
- Whitepaper is available here

Background

- At the request of Stakeholders and to facilitate discussions, results of the Initial Margin methodology have been calculated and will be posted to the PJM eCredit Tool
- These values are illustrative and do not indicate a final requirement or proposal
- Feedback and discussions are encouraged in order to inform and develop a proposal
- Once posted, the data will be accessible in eCredit, the login screen is available here.
- Once logged in, go to the Reports tab:

- Stakeholders that do not have direct access to eCredit are asked to contact their internal credit department or subject matter experts for your individual company account(s).


## Accessing the Data

## - On the Reports tab:

- Select the "FTR Credit Requirement Enhancements-Illustrative Sample Data" report
- Select the applicable information (Account and Date Range)
- Click "View Report"

Reports

FTR Credit Requirement Enhancements-Illustrati.


Select Member:
PJM TEST - 11001 *
Select Account:
All $\quad \geqslant<+$


Certification Form
Certification Form
Letter of Credit

| Domestic Guaranty |
| :--- |
| Foreign Guaranty |

Accessing the Data

- The report will look like the below
- Users can download the data to a csv file by selecting the download button


| $\begin{aligned} & \text { Member } \\ & \text { ID } \end{aligned}$ | Member Name | $\begin{aligned} & \text { Member } \\ & \text { Org ID } \end{aligned}$ | Member Short Name | Account Org ID | Account Shortname | Account Org Name | Date | $\begin{aligned} & \text { Period Start } \\ & \text { Date } \end{aligned}$ | Period End Date | 1 M - Current | IM - Historical Simulation | Per MWH | ARR Credits | Cost of Options | Realized Gains And Losses | MTA for Obligations | Liquidation Penod | Confidence Interval |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11001 | PJM TEST | 2214 | PJMTST | 2214 | PJMTST | PJM TEST | 05/06/2020 | 06/01/2022 | 05/31/2023 | \$0.00 | \$0.00 |  | \$0.00 | \$0.00 | \$0.00 |  | -1 | 99 |
| 11001 | PJM TEST | 2214 | PJMTST | 2214 | PJMTST | PJM TEST | 05/06/2020 | 06/01/2021 | 05/31/2022 | \$0.00 | \$0.00 |  | \$0.00 | \$0.00 | \$0.00 |  | -1 | 99 |
| 11001 | PJM TEST | 2214 | PJMTST | 2214 | PJMTST | PJM TEST | 05/06/2020 | 06/01/2020 | 05/31/2021 | \$0.00 | \$0.00 |  | \$0.00 | \$0.00 | \$0.00 |  | -1 | 99 |
| 11001 | PJM TEST | 2214 | PJMTST | 2214 | PJMTST | PJM TEST | 05/06/2020 | 05/01/2020 | 05/31/2020 | \$0.00 | \$0.00 |  | \$0.00 | \$0.00 | \$0.00 |  | -1 | 99 |
| 11001 | PJM TEST | 2214 | PJMTST | 2214 | PJMTST | PJM TEST | 05/06/2020 | 04/01/2020 | 04/30/2020 | \$0.00 | \$0.00 |  | \$0.00 | \$0.00 | \$0.00 |  | -1 | 99 |

## Explanation of the Data

- The report has several data points, beginning with information specific to each Member:
- Member ID
- Member Name
- Member Org ID
- Member Short Name
- Account Org ID
- Account Shortname
- Account Org Name


## Explanation of the Data

- The next columns pertain to dates:
- Date: This date is the date on which the calculations were computed. For example, a date of $5 / 6 / 2020$ means that these are the values pertaining to the portfolio as of 5/6/2020.
- Period Start Date and Period End Date: These dates represent the start and end date of the period that is being evaluated. For example, a period start date of $5 / 6 / 2020$ and period end date of $5 / 31 / 2020$ means it is the portfolio of the MAY period in 2020. A period start date of $6 / 1 / 2021$ and a period end date of $5 / 31 / 2022$ means it is the portfolio of the 2021/2022 planning year.


## Explanation of the Data

- $\quad I M$ - Current: This value is the initial margin using the current requirements. The current requirement considers the path specific evaluation using historical and adjusted historical values, the undiversified adder, and the 10 $\% / \mathrm{MWh}$.
- IM - Historical Simulation: This value is the initial margin based on the Historical Simulation Initial Margin Methodology as discussed in stakeholder meetings. The calculation only considers obligation hedge types at this time as the options pricing information is not available for all of history. This is provided in order for members to test and replicate and does not constitute a proposal. Whitepaper of this approach is available here.
- Per-MWh: This is the $10 ¢ / \mathrm{MWh}$ value for the associated period start and end date.


## Explanation of the Data

- ARR Credits: These are the ARR credits for the associated period start and end date.
- IM - Current Options: This value is the initial margin using the current requirements for options. The current requirement considers the path specific evaluation using historical and adjusted historical values.
- Realized Gains and Losses: This value is the realized gains and losses that are a result of buying and selling positions in the FTR Auctions. It uses a weighted average methodology.
- MTA: This value is the Mark-to-Auction value associated with Obligation and Option hedge types. It is calculated using the currently employed methodology.


## Explanation of the Data

- Liquidation Period: This value indicates the Liquidation Period employed to calculate the IM-Historical Simulation. It is currently set at 2.
- Confidence Interval: This value indicates the Confidence Interval employed to calculate the IM-Historical Simulation. Confidence Intervals of $95 \%, 97 \%$, and $99 \%$ are currently displayed.

FTR Credit Requirement Template

- A template is posted for calculating the possible total credit requirement using the data published in eCredit.
- Used to assist market participants in calculating a total requirement based on all of the components.
- *Demo of Template*
- Questions, concerns, recommendations, etc. are encouraged and welcomed
- Please direct these to Eric Endress at eric.endress@pjm.com
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SME/Presenter:

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