

## Illustrative Data Sample for FTR Credit Requirement Enhancements

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- 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% or 99%) and lastly apply a pre-fixed scaling factor to determine the IM
  - Whitepaper is available <u>here</u>



- At the request of Stakeholders and to facilitate discussions, results of the Initial Margin methodology have been calculated and posted to the PJM eCredit Tool
- These values are illustrative and <u>do not</u> indicate a final requirement or proposal
- Feedback and discussions are encouraged in order to inform and develop a proposal



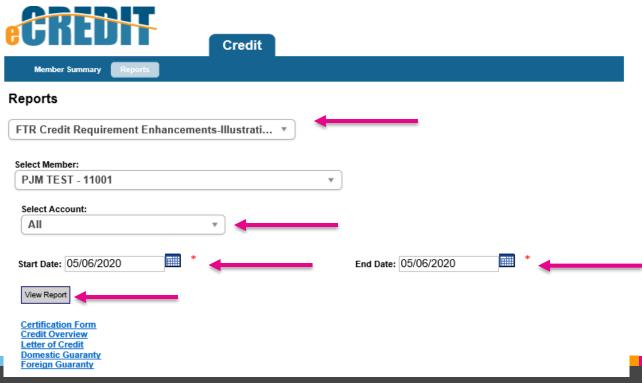
- Data is accessible in eCredit, the login screen is available <u>here</u>.
- Once logged in, go to the Reports tab:





## 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"





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

| FTR Credit Requirement Enhancements-Illustrative Sample Data | download | <u>back</u> |
|--|----------|-------------|
|--|----------|-------------|

| Member<br>ID | Member Name | Member<br>Org ID Member<br>Short<br>Name | Account Account<br>Org ID Shortname | Account Org Name | Date       | Period Start<br>Date | Period End<br>Date | IM - Current | IM - Historical<br>Simulation | Per MWH |        | Cost of F<br>Options | Realized Gains And<br>Losses | MTA for Obligations Li | iquidation<br>Period | nConfidence<br>Interval |
|--------------|-------------|--|-------------------------------------|------------------|------------|----------------------|--------------------|--------------|-------------------------------|---------|--------|----------------------|------------------------------|------------------------|----------------------|-------------------------|
| 11001        | PJM TEST    | 2214 PJMTS                               | T 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 PJMTS                               | T 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 PJMTS                               | T 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 PJMTS                               | T 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 PJMTS                               | T 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                      |

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- 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



- 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.



- IM 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¢/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 <a href="here">here</a>)
- Per-MWh: This is the 10¢/MWh value for the associated period start and end date



- ARR Credits: These are the ARR credits for the associated period start and end date
- Cost of Options: This value is the netted purchase cost of option hedge types. It is calculated as the original purchase price times the transacted quantity, netted with any sold positions
- 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 for Obligations: This value is the Mark-to-Auction value associated with just Obligation hedge types. It is calculated using the currently employed methodology



- Liquidation Period: This value indicates the Liquidation Period employed to calculate the IM-Historical Simulation. It is currently set at -1, which represents a Liquidation Period of "to Settlement". This assumes that the position will be held until the time of settlement.
- Confidence Interval: This value indicates the Confidence Interval employed to calculate the IM-Historical Simulation. It is currently using a 99% confidence interval.



- Questions, concerns, recommendations, etc are encouraged and welcomed
- Please direct these to Bridgid Cummings at bridgid.cummings@pjm.com