Projected True-Up Exposure Enhancement

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Background

- In 2014, in response to market conditions brought about by the polar vortex, the NYISO proposed a change to its credit requirements.

- This change requires that Market Participants meeting certain triggers shall be subject to the projected true-up exposure credit requirement.

- This requirement became effective in February 2015.

Background (continued)

- As part of the 2017 project prioritization, Market Participants requested that the NYISO re-evaluate the projected true-up exposure credit calculation.

- The NYISO agreed to analyze alternatives that would most reasonably align this credit requirement with market risk and presented those results to Market Participants in April 2017 (see Appendix).

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Current Methodology

- **The projected true-up exposure credit requirement is calculated for all Market Participants in the Energy and Ancillary Services Market.**

- **Market Participants are required to post credit support in the amount of the projected true-up exposure if:**
  - The Market Participant's 4-month true-ups, over the most recent four months of actual data (months with both initial settlement and 4-month true-up data), are an average credit exposure of greater than 10% of the initial settlement.

  or

  - The Market Participant is no longer active in the Energy and Ancillary Services market, but will still be subject to unsettled true-up obligations.

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Current Methodology (continued)

- **The credit requirement equals projected true-up exposure calculated as follows:**
  - Calculate six-month rolling average percentage of 4-month true-up to initial settlement (Version 1),* subject to the maximum percentage
  - Multiply the calculated percentage by the outstanding initial settlements not yet trued-up at the 4-month level and sum
  - Calculate six-month rolling average percentage of final bill closeout true-up to the Version 2 settlement,* subject to the maximum percentage
  - Multiply the calculated percentage by the outstanding initial settlements not yet final billed and sum
  - Sum total the 4-month true-up exposure and final bill closeout exposure

* Calculations utilize the Power Supplier, Transmission Customer and Interest line items from the Consolidated Invoice

Alternate Methodology

- **Market Participants would still be required to post credit support in the amount of the projected true-up exposure if:**
  - The Market Participant's 4-month true-ups are an average credit exposure of greater than 10% of the initial settlement, calculated based on a period not to exceed the most recent four months of actual data (i.e. one month data will have a one month average, 2 months data will average 2 months, 3 months data will average 3 months and 4 months data will average 4 months).

  or
  - The Market Participant is no longer active in the Energy and Ancillary Services market, but will still be subject to unsettled true-up obligations.

- **The trigger percentage of 10% would not change.**

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Alternate Methodology (continued)

- The credit requirement would equal projected true-up exposure calculated as follows:
  - Sum of the four most recent actual 4-month true-ups

  Plus

  - Sum of the eight most recent actual final bill close out true-ups

Feedback

- Market Participants had no additional comments and/or requests from the study.
- Project approved for a June 2018 deployment during the project prioritization process.

Next Steps

- BIC January 2018
- MC January 2018
- Board of Directors March 2018
- FERC Filing April 2018
- Deployment in June 2018 contingent on FERC approval.

Appendix

Analysis

- Since implementation of the projected true-up exposure credit requirement, the NYISO has monitored the number of Market Participants affected and the amount of additional collateral they are required to post with the NYISO.

- In most months the projected true-up exposure credit requirement fairly represented the Market Participant's exposure.

Analysis (continued)

- **In certain circumstances, however, some Market Participants may have been required to post collateral in excess of actual exposure, while others may have posted less.**
  - The primary issue stems from the use of percentages in the current methodology.
    - There is potential for anomalous outcomes due to large percentages associated with small errors on small settlements.
      - Accordingly, an amount of credit support that exceeds actual exposure could be requested, even when the percentage is capped.
    - Once the Market Participant begins to forecast more accurately in the initial settlement they will likely experience higher than needed true-ups as the percentage will now be based off of higher initial settlements.
    - Alternatively, average percentages utilized in this methodology, at times, may not project enough credit support to cover future exposure as initial settlements, when under-forecasting, may be lower prior to correcting behavior.

- **Using data from the past two years, the NYISO analyzed an alternate methodology that may potentially better align the credit requirement to market risk.**

Observations

- **Under the current methodology a Market Participant who did not forecast accurately previously may have a higher percentage and, as such, will experience higher true-ups as they begin to forecast more accurately. This is because the current calculation incorporates the percentage of the initial settlement.**
  - The higher the initial settlement the higher the amount held.
    - This will not roll off until the trigger percentage falls below 10%.
  - Higher than needed collateral will be held even when the Market Participant is attempting to correct the errors.

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Observations (continued)

- **Under the alternate methodology, coverage is based on actual historical true-ups and as such, removes anomalous outcomes that can occur under the current methodology, such as**
  - When an entity is new to the market and initially does not forecast its load, the true-up could be small but the percentage large, thereby creating a high credit requirement.
  - A generator down for maintenance receiving a true-up could also receive a large percentage (i.e. station power in the 4-month true-up) which could, in turn, create a high credit requirement.

- **From March 2015 through March 2017 overall collateral held under the alternate methodology would have been reduced by 34%.**

Observations (continued)

- **In comparing the two methodologies, the NYISO would continue to receive sufficient credit support.**
  - Under the alternate methodology collateral held by individual Market Participants, in most instances, would be reduced.
  - Collateral held, compared to actual exposure, is better aligned under the alternate methodology.
  - Similar to other credit requirements, this methodology does not eliminate all credit risk.

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