TCC Credit Policy Coverage

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Background

- On June 21, 2018 PJM declared a Financial Transmission Rights (FTR) market participant in payment default of approximately $1.2 million.
  - Due to the duration of the FTRs and PJM liquidation rules, PJM estimated in its notice of default that the amount of the default allocation assessment is likely to be in the tens of millions of dollars.
    - Intervenor filings in Docket EL18-170 estimate the potential default approximating $110M.
- Notice of the default was provided to PJM members on June 22, 2018.
- NYISO Market Participants have asked the NYISO to provide information on how its TCC credit policy would have performed given this scenario.

NYISO TCC vs. PJM FTR Credit Policy

- The NYISO values TCCs for collateral purposes based on the most recent auction price.

- PJM values FTRs for collateral purposes based on the historic payout on the path.

NYISO TCC vs. PJM FTR Credit Policy

- The NYISO requires payment for TCCs purchased in its auctions prior to the beginning of their term and will hold that amount in its credit requirement until paid.

- In addition, the NYISO holds a margin to cover changes in the market value of future period TCCs or larger than expected payments due on current period TCCs.

- In the PJM auction design, FTRs are not paid for at the time of the auction. Instead, the purchase price is charged to the holder for each month of the FTR duration.

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NYISO TCC vs. PJM FTR Credit Policy

- **The NYISO auctions TCCs for up to two years, with a term extending one year in advance of the current operating year.**
  - NYISO will require payment of the first year of the two-year TCC in advance of its term and will hold a margin to cover greater than expected payments due to the NYISO over its term.
  - The NYISO will hold the payment due the second year plus a margin for the second year of the TCC until that payment is received.

- **PJM sells FTRs out three years in advance of the current operating year.**

NYISO TCC vs. PJM FTR Credit Policy

- The NYISO credit policy includes a margin to cover the potential decline in the value of the TCCs between auctions and in the current month to cover the potential for payments due to the NYISO to be higher than expected.

- PJM has a variety of rules to cover declines in auction value or higher than expected payments due to PJM. However, in practice, these rules appear to result in very little margin requested for certain portfolios such as those held by Greenhat Energy, LLC.

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Analysis

- **PJM does not mark to market their FTRs based on current auction values.**
  - While the NYISO does not sell TCCs three years out, if it did, the TCCs would be marked to market each year based on current auction prices.
  - Had PJM applied a mark to market policy, the NYISO's analysis indicates that Greenhat Energy, LLC would not have been able to buy more FTRs in successive auctions without posting substantially more collateral.

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Analysis

- The NYISO analyzed Greenhat Energy, LLC's portfolio, applying the NYISO annual non-JK TCC calculation with the same auction prices to the Greenhat Energy, LLC FTRs held as of December 2016.
    - Of note, the use of this formula is not a perfect test of the NYISO collateral policy on this portfolio because some of the FTRs are solely on-peak or off-peak and as such, are not quite comparable to an annual TCC.

- Applying the NYISO's calculation would have required Greenhat Energy, LLC to post ~$300 million on the original portfolio in December 2016.
    - The credit requirement for this portfolio would have increased in both December 2017 and May 2018 as the auction value of the portfolio declined.

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Analysis

- **Because the application of the NYISO's one-year TCC credit requirement to the PJM future year TCCs is not a perfect analogy to the Greenhat Energy, LLC situation, the NYISO performed two additional tests of its credit requirements.**
  - The NYISO calculated the margin on the Greenhat Energy, LLC portfolio based on 2 times the auction value for the FTRs that were only on-peak or off-peak.
    - This tested whether the result was impacted by applying the NYISO annual collateral to FTRs with lower auction values because they covered fewer hours.
    - The NYISO found that the margin level of ~$370 million was higher rather than lower.
  - In the second approach the NYISO applied the calculation for future six-month TCCs, which is a mark to market collateral design, to the PJM FTR prices.
    - This resulted in a lower collateral requirement, totaling ~$160 million, however it is still far above the mark to market exposure on the estimated Greenhat Energy, LLC exposure.

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Analysis

- **The NYISO carried out similar collateral margin calculations for the Greenhat Energy, LLC portfolio as of December 2017 and May 2018.**
  - The NYISO verified that the required collateral would have been more than sufficient to cover subsequent declines in portfolio market value and that the credit requirement would have been rising with the falling mark to market value of the portfolio.

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Analysis

- **The NYISO also analyzed the extent to which the decline in the value of the FTRs in the Greenhat Energy, LLC portfolio was due to positively priced FTRs declining in value, low value FTRs declining in value or negatively valued FTRs becoming more negatively valued.**
  - The NYISO's analysis indicates that approximately 75% of the overall decline in value of the Greenhat Energy, LLC portfolio, as of May 2018, was a result of positively priced FTRs declining in value after their purchase.
  - An even higher proportion of the decline in value of the Greenhat Energy, LLC portfolio held as of December 2016 was a result of positively priced FTRs declining in value.
  - The NYISO collateral design includes a collateral offset reflecting the value of positively priced TCCs after they have been paid for, but this offset is calculated with a margin reflecting the potential decline in value of the positively priced TCCs.
  - NYISO calculations indicate that the margin the NYISO would have held on the positively priced FTRs in the Greenhat Energy, LLC portfolio would have substantially exceeded the decline in value of these positively priced FTRs.

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