Markets and Reliability Committee

Financial Transmission Right (FTR) Default and Liquidation Update Suzanne Daugherty – SVP, CFO & Treasurer July 26, 2018

Liquidation Process Update

As reported to the members last month, PJM declared GreenHat Energy, LLC in payment default on June 21, 2018. The FTR portfolio on which GreenHat defaulted includes positions for the current planning year and the subsequent two planning years.

As stipulated in the Operating Agreement, during this month's FTR auction PJM commenced liquidation of the significant volume of August 2018 through May 2019 FTR positions on which GreenHat defaulted. For reference, the Operating Agreement FTR liquidation provisions were established nearly a decade ago but are being utilized for only the second time this month – but for the first time with a portfolio of this size. This liquidation process directs PJM to offer the positions for liquidation "at an offer price designed to maximize the likelihood of liquidation of those positions."

When PJM reviewed multiple iterations of the preliminary results of this month's FTR auction, the potential impact of the existing liquidation process became evident. For example, even to liquidate half of the FTR positions in certain months beyond August 2018 would have required paying as much as six times last month's auction clearing prices for the same paths.

The default allocation assessment for the GreenHat default will include the costs of liquidating any FTR positions on which GreenHat defaulted. With that in mind, PJM decided it was not prudent for PJM to liquidate FTRs for all the remaining months in the current planning period from the GreenHat portfolio in this month's FTR auction. Unlike other PJM markets, there are no mechanisms (such as price caps or offer caps) to guard against temporary price shocks to FTR values for unusual items, such as offering significant volumes of FTRs for liquidation. We believe it is important to take a pause to engage the members on the current liquidation process and possibly some alternatives to the current liquidation process before locking in multiple months' liquidation costs.

So, PJM filed a waiver request at FERC today asking that PJM only be required to attempt to liquidate FTR positions for one month forward in any of the FTR auctions to be completed in July 2018 through October 2018. This waiver is intended to allow PJM time to talk with the members, and file any changes to the current FTR liquidation process, if the members wish to do so after PJM and stakeholder discussion.

Dave Anders and I will work together tomorrow to schedule applicable stakeholder meetings as soon as possible to discuss the current FTR liquidation process and any alternatives members may want to consider. Our goal would be to identify by the end of August whether members are inclined to retain the current FTR liquidation process or to make any changes, even if the specifics of any such changes have not yet been finalized. This timing would inform PJM whether to request FERC consider the waiver for any additional months it may take for the Members Committee to vote on any potential changes to the FTR liquidation process and for FERC to rule on any such proposed changes.

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Liquidation of August 2018 Positions

PJM has requested the waiver be effective July 27, 2018. Consistent with that timing and the necessity to calculate multiple solutions as a result of the FTR Flow Undiversified credit check, PJM anticipates posting the results of this month's FTR auction by close of business tomorrow. In those auction results, 100% of the August 2018 positions offered for liquidation will be fully liquidated but no other GreenHat FTR positions will be liquidated. PJM did not request a waiver of the liquidation process for the August 2018 positions as there is no future auction in which those positions could be liquidated.

Billing Timeline Update

Billings for the default allocation assessments related to this portfolio will commence in the July 2018 month-end invoices and will continue over the periods of the applicable positions in the FTR portfolio on which GreenHat defaulted.

- This billing timing is an update from PJM's initial communications on the invoice timing to better align the
 default allocation assessment billings to members with the time period in which PJM will owe those funds to
 FTR market participants.
- Specifically, the July 2018 month-end invoices will include the actual net charges from June 1 July 18, 2018 that total an estimated \$17 million.
- Then, the August 2018 month-end invoices will include the actual net charges for July 19 31, 2018 plus the
 costs to liquidate the August 2018 positions. This amount to be included in the August 2018 month-end
 invoices should be available by August 10, 2018.

Communications

PJM has established an "FTR Portfolio Liquidation" section on the FTR page of PJM's website to consolidate information on this default in one place for Members, such as:

- a. PJM's communications to Members, including this update;
- b. Link to waiver request filed today;
- c. FTR positions being offered for liquidation in each applicable auction;
- d. FTR auction liquidation results; and
- e. Billing schedule and default allocation assessment amounts to be included in each applicable monthend invoice, as the amounts become known.

We appreciate the ongoing stakeholder engagement in FTR Credit Policy enhancements, including incorporation of known transmission system changes implemented in April 2018, the minimum FTR credit requirement on which you voted today, and the additional topics in the Credit Subcommittee, particularly consideration of mark-to-auction and minimum participation requirements.

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