

FirstEnergy's Perspective on PJM's Wholesale Electricity Markets: 2018

ADDENDUM: Q1 2018 ISSUES

This section will be updated on a quarterly basis (December 1, March 1, June 1, and September 1), whereas the main body of the report will be updated annually on September 1. The purpose of this section is to provide an overview of key FERC and PJM initiatives active in each quarter.

Executive Summary

In this reporting period, the FERC has initiated new proceedings on resiliency and fast start pricing. PJM has used the new fast start pricing investigation to jump start some of its key energy price formation proposals, filing the first stage of its integer relaxation proposal in the fast start pricing docket. PJM has also announced that its Board has directed PJM to file its capacity repricing proposal and the PJM Market Monitor's revised Minimum Offer Price Rule (MOPR-Ex) proposal at FERC, requesting the Commission to decide on the best approach for integrating markets with state public policy.

Also during this period, FERC issued a final rule directing ISOs and RTOs to file tariff changes to accommodate electric storage participation models in wholesale markets. FERC also announced a technical conference on April 10 and 11 to discuss Distributed Energy Resource (DER) aggregation and coordination with the distribution system, with a separate panel to discuss States' views. FirstEnergy has advocated for PJM to take a holistic approach related to market rule changes around DER to avoid unintended interference with state/local jurisdictional requirements, distribution system operations, and settlements. A quality work product requires the development of rules by a multi-disciplined stakeholder group including active participation from electric distribution companies and state regulators. To that end, FirstEnergy has successfully advocated to develop a separate DER Subcommittee at PJM, to ensure that all impacted stakeholders have an opportunity to participate, and that this key issue gets the attention it deserves. States within PJM, including Ohio, should remain engaged at the PJM/FERC level as stakeholders continue these important discussions.

Capacity Market Initiatives

[Capacity Construct/Public Policy Senior Task Force \(CCPPSTF\)](#): Of the CCPPSTF proposals, the Market Monitor's MOPR-Ex received the most votes, but at the January Market Reliability Committee meeting, stakeholders overwhelmingly supported the status quo. On February 16, PJM announced that the PJM Board has carefully considered comments regarding state policy initiatives and their effect on PJM's markets, and has decided that PJM should file both the PJM's Capacity Repricing and the Market Monitor's MOPR-Ex proposal at FERC under Section 205 of the Federal Power Act. PJM's repricing proposal accommodates state policies, while the MOPR-Ex proposal mitigates offers from resources receiving out of market revenues. While the approaches are different, Andy Ott, on behalf of the PJM Board, expressed that each was just and reasonable, and concluded that the state/federal jurisdictional

question of integrating state public policies into wholesale markets should fall to the Commission as a federal policymaker, not the PJM Board.

Seasonal Resources: On February 23, FERC found that complaints by ODEC and AEMA raised important issues as to whether certain aspects of the capacity performance construct are performing as well as expected. Specifically, complainants question the assumption that permitting any stand-alone participation by Seasonal Resources would negatively impact reliability in non-summer months. FERC directed Commission staff to establish a technical conference to explore these issues and to issue a request for comments prior to the technical conference. Also on February 23, FERC approved PJM's resource aggregation rules filed in November 2016 and conditionally approved by Commission Staff when FERC lacked a quorum. The rules allow seasonal resources to aggregate across locational delivery area borders and include changes to better account for winter performance of demand response and wind.

Energy Market Issues

Fast Start Pricing: On December 21, FERC issued an order withdrawing its previous fast start pricing rulemaking (RM17-3) and opened investigations into the pricing of fast start resources in NYISO, PJM, and SPP. FERC stated that MISO and CAISO already use best practices and therefore are excluded. PJM's investigation will examine whether PJM should revise its tariff to, among other things, 1) allow relaxation of fast-start resources economic minimum operating limits by up to 100%; 2) consider fast-start resources within dispatch in a way that is consistent with minimizing production costs; and 3) modify its pricing logic to allow the commitment of fast-start resources to be reflected in prices. Parties filed comments on February 12. PJM's comments outlined proposed changes to FERC's proposal, including using integer relaxation instead of relaxing minimum operating limits by up to 100%, and to expand the definition of fast start resources to include resources with start-up and minimum run time of two hours or less.

Energy Market Price Formation: PJM's Energy Price Formation Senior Task Force met three times this reporting period. The group's charter is still in development, but it is expected that the group will address PJM's proposals to apply integer relaxation to all resources (not just fast start resources) to allow inflexible resources to set LMP, and to reform shortage pricing by implementing a real-time 30-minute operating reserve product and basing the price on a new Operating Reserve Demand Curve based on the Value of Lost Load.

Ancillary Services Market Initiatives

Primary Frequency Response: On February 15, FERC issued an order revising the requirements for provision of primary frequency response. The final rule amends the Large and Small Generator Interconnection Agreements to require that all new facilities install, maintain, and operate a functioning governor or equivalent controls as a precondition of interconnection, and to include certain operating requirements including maximum droop and dead-band parameters, and sustained response provisions. The final rule takes effect 70 days after publication in the *Federal Register*. It is expected that PJM's Primary Frequency Response Senior Task Force will discuss rules that would apply to existing generators, as FERC's final rule only applies to generators entering into new agreements.

Emerging Technologies

Electric Storage Participation and Distributed Energy Resource Aggregation: On February 15, FERC issued a final rule to remove barriers to participation of electric storage resources in RTO/ISO markets by requiring each grid operator to revise its tariff to establish a participation model for these resources that takes their physical and operating characteristics into account. The final storage rule takes effect 90 days after publication in the *Federal Register*. Compliance filings by the RTOs and ISOs are due 270 days after the effective date, with an additional 365 days to implement the tariff revisions. The NOPR also proposed reforms related to distributed energy resource aggregations, but the Commission found that more information is needed and scheduled a technical conference April 10-11 to help gather additional information.

Distributed Energy Resource Subcommittee: PJM's Distributed Energy Resources Subcommittee, which was established December 7, was created to investigate and resolve issues and procedures associated with markets, operations, and planning related to distributed energy resources in accordance with existing or new PJM process protocols. For the purposes of this subcommittee, a Distributed Energy Resource (DER) is defined as any generation or electric energy storage resource connected to the distribution system and/or behind a load meter. The Committee met 4 times during this reporting period, and has discussed proposals on potential market rules for participation of wholesale distributed energy resources (W-DER). PJM has presented a proposal on accounting for W-DER that is co-located behind the customer meter with additional W-DER or wholesale Demand Response. The group has also discussed the visibility of non-wholesale DER in PJM's footprint and potential primary frequency response rules for W-DER.

Other

Resilience: On January 8, FERC issued an order rejecting the proposed Grid Reliability and Resilience Pricing Rulemaking (RM18-1) and initiating a new proceeding (AD18-7) to holistically examine the resilience of the bulk power system. The order directs operators of the regional wholesale power markets to provide information within 60 days of the order (March 9) as to whether FERC and the markets need to take additional action on resilience of the bulk power system. The goals of the proceeding are to develop a common understanding among the Commission, industry and others of what resilience of the bulk power system means and requires; to understand how each regional transmission organization and independent system operator assesses resilience in its geographic footprint; and to use this information to evaluate whether additional Commission action regarding resilience is appropriate. Interested parties can provide comments 30 days after the due date of the RTO/ISO reports.

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

3/1/2018 5:56:25 AM

in

Case No(s). 14-1297-EL-SSO

Summary: Notice of Quarterly Update Pursuant to Section V.C.2. of the Third Supplemental Stipulation and Recommendation electronically filed by Ms. Carrie M Dunn-Lucco on behalf of The Toledo Edison Company and The Cleveland Electric Illuminating Company and Ohio Edison Company