

144 FERC ¶ 61,191
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Philip D. Moeller, John R. Norris,
Cheryl A. LaFleur, and Tony Clark.

PJM Interconnection, L.L.C.

Docket No. ER13-1911-000

ORDER ACCEPTING TARIFF REVISIONS

(Issued September 6, 2013)

1. On July 9, 2013, PJM Interconnection, L.L.C. (PJM) filed proposed revisions to Schedule 6A of its Open Access Transmission Tariff (OATT)¹ to (1) implement enhancements made to PJM's black start² procurement and system restoration planning, and (2) to alter PJM's black start cost allocation in order to support the provision of cross-zonal black start support.³ For the reasons discussed below, we accept PJM's proposed tariff revisions, effective September 9, 2013, as requested.

I. Background and Details of the Filing

2. Schedule 6A of the PJM OATT sets forth the details for how generators will provide, and how users of the transmission system will obtain, and pay for, black start service. All transmission customers are required to take black start service pursuant to the terms of Schedule 6A. Schedule 6A specifies that "[t]he PJM Manuals shall set forth the criteria and process for selecting or identifying the Black Start Units...."⁴ Schedule 6A also contains annual black start service revenue requirements for the PJM Region and sets forth cost recovery for black start service providers.

¹ PJM OATT, Schedule 6A, Black Start Service (7.0.0).

² Black start service allows a generating unit to start without an outside electrical supply or to continue operating at reduced levels when disconnected from the grid, and is needed for restoration of the transmission system in the event of a de-energizing event (e.g., a blackout).

³ PJM Transmittal at 1.

⁴ PJM OATT, Schedule 6A, Black Start Service, section 4 (7.0.0).

3. PJM states that, while there is no reliability concern identified in the current system restoration plan, a variety of industry developments, such as the development of mandatory reliability standards and increased federal and state regulations, may impact the availability of viable black start generation in the future.⁵ For example, PJM states that approximately 42 percent of the capacity of the existing fleet of black start generation may be impacted by environmental regulations.⁶ PJM explains that, as a result, in January 2012, PJM's Markets and Reliability Committee chartered the System Restoration Strategy Task Force which reviewed PJM's current system restoration planning process and applicable rules, and recommended various proposals to improve the process.

4. PJM states that the System Restoration Strategy Task Force determined that the system restoration planning process should be amended to include new strategies for black start service procurement so as to maximize the availability of black start resources in the PJM region and enhancing black start capability. The System Restoration Strategy Task Force's recommendations included: (1) elimination of a "one size fits all" target restoration time, (2) increased redundancy in black start generation, (3) cross-zonal coordination, (4) clarification of PJM's responsibility for selecting black start resources and creation of a system-wide restoration plan consistent with PJM's role as the North American Electric Reliability Corporation (NERC)-registered transmission operator, (5) revision of the current 90-minute minimum start time for black start resources to a three hour or less start time requirement, (6) re-definition of "critical load" to include cranking power to all units with a hot start time of four hours or less instead of eight hours or less, (7) an RTO-wide five-year black start procurement process rather than an *ad hoc* procurement process, and (8) elimination of the business rule limiting the number of black start units at any one site.⁷ PJM states that some of System Restoration Strategy Task Force's recommendations were implemented by amendments to PJM's business rules and manuals, while other recommendations required revisions to the PJM OATT.

5. Specifically, PJM proposes to revise Schedule 6A of the OATT to clarify that PJM has the sole responsibility for selecting black start resources and developing a system restoration plan. PJM explains that, as Schedule 6A currently exists, the responsibility for procuring black start resources and creating a system restoration plan appears to be a shared task with transmission owners. PJM adds that, despite this proposed change, it

⁵ *Id.* at 2.

⁶ *Id.* at 3.

⁷ *Id.* at 3-4.

will work closely with transmission owners to identify viable black start resources and the amount or number required to support system restoration.

6. In addition, PJM proposes to eliminate the requirement that a black start unit be able to close its output circuit to a de-energized bus within 90 minutes of a request from a transmission owner or PJM.⁸ PJM claims that eliminating the 90 minute minimum start time will make approximately 64,000 MW of additional black start capacity eligible to potentially provide black start service in PJM, without degrading the efficiency of the restoration plan as a whole.⁹

7. PJM also proposes to eliminate the rule limiting the number of black start units at one site to three units.¹⁰ PJM states that, while this tariff provision was originally implemented to ensure diversity in black start resources and to limit the amount of compensation due to any one black start unit owner, experience has shown this practice is unnecessary and limits PJM's ability to consider viable black start resources.

8. PJM explains that PJM stakeholders approved the System Restoration Strategy Task Force's recommendation to allow cross-zonal black start coordination, procurement, and support.¹¹ PJM states that the proposed revisions to Schedule 6A are necessary to account for the allocation of revenue requirements for black start units providing cross-zonal support. Specifically, PJM proposes tariff revisions to base zonal rates on the black start capability of generation units designated by PJM and allocated to network service customers and point-to-point reservations in the receiving transmission owner's zone. PJM also proposes that black start units that are shared and designated to serve multiple zones will have their annual revenues allocated based on the amount of critical load they serve in each transmission zone.

⁸ *Id.* at 5. PJM states that it has specified a three hour minimum start time in its manuals as a general rule unless a shorter time is warranted due to critical load restoration timing requirements.

⁹ In conjunction with this change, PJM states that it has revised the definition of "critical load" in its manuals to include all units with a hot start time of four hours or less, in place of the previous definition which allowed for only steam units with hot start times of eight hours or less.

¹⁰ *Id.* at 6.

¹¹ *Id.*

9. Finally, PJM proposes various tariff revisions to correct or clarify existing rules or procedures. Specifically, PJM proposes to clarify that a black start unit providing a two-year rolling commitment and not electing to recover new or additional black start capital costs may be terminated involuntarily for failing to successfully pass its annual black start test. PJM states that it has always applied this rule to those types of units, but currently the tariff only explicitly applies the rule to black start units recovering new or additional black start capital costs. In addition, PJM has identified that the capital improvement-based “capital recovery factor” table in paragraph 18 of Schedule 6A does not include the applicable recovery period and term of commitment timeframes, and therefore proposes a revision to amend this discrepancy.¹² Finally, PJM states that, currently, any PJM member may request and inspect data supporting new or additional black start NERC-Critical Infrastructure Protection capital costs. Accordingly, PJM proposes to revise Schedule 6A to specify that only those PJM members that are affected by proposed cost recovery may request and inspect such data.

II. Notice and Responsive Pleadings

10. Notice of PJM’s filing was published in the *Federal Register*, 78 Fed. Reg. 42,516 (2013), with interventions and protests due on or before July 30, 2013. Timely motions to intervene were filed by Dayton Power and Light Company, and NRG Companies. The Maryland Public Service Commission (Maryland PSC) filed a notice of intervention and protest. American Electric Power Service Corporation (AEP) filed a motion to intervene and protest. Motions to intervene out-of-time were filed by Duquesne Light Company (Duquesne) and American Municipal Power, Inc. (AMP). A motion to intervene out-of-time and comment was filed by Rockland Electric Company (Rockland).

11. On August 19, 2013, PJM filed an answer to Maryland PSC’s and AEP’s protests.

A. Protests and Comment

12. Maryland PSC expresses concern in its comments that PJM stakeholder discussions have included assertions that black start service should be priced on a “value of service” compensation approach. Maryland PSC states there are alternatives to obtain black start service that better control costs; for example, the Commission could mandate black start service be provided by transmission owners or generators under traditional cost of service rates, similar to other reliability-related services.

13. Maryland PSC also asserts that PJM’s new cross-zonal restoration strategy could cause significantly longer delays before Maryland end users are returned to service,

¹² *Id.* at 7.

because black start service in Maryland transmission zones may end up being provided by generation located in Pennsylvania, Delaware or Virginia. Maryland PSC urges the Commission to require PJM either to demonstrate how such a possibility could not occur and/or to permit transmission owners themselves to install black start units.

14. Finally, Maryland PSC seeks clarification that PJM does not intend to compensate the additional 64,000 MW of black start capability that may result from revising the criterion for a black start unit, but rather that compensation will continue to be limited to those units that serve PJM critical load by starting at the time of a complete black out. Maryland PSC requests that the Commission direct PJM to clarify the current level of compensated black start capacity and how much black start capacity compensation will increase under its revised black start restoration plan.

15. In its comments, AEP states that, while it does not oppose PJM's filing, an additional revision to Schedule 6A is necessary to ensure that black start service providers that utilize differing technologies are treated on a comparable basis. Specifically, AEP asserts that, under the existing tariff, Automatic Load Rejection (ALR) units¹³ are treated in a manner that is different than the treatment of non-ALR units when it comes to the recovery of variable O&M costs. AEP requests that the Commission require PJM to remove from Schedule 6A the language that restricts the ability of ALR units to recover variable black start service costs.

16. In its comments, Rockland states that it supports PJM's filing because the system restoration planning process should be amended to maximize the availability and capability of black start resources in the PJM region.

B. PJM's Answer

17. In its answer, PJM states that Maryland PSC's and AEP's concerns regarding black start compensation are not appropriately considered in the context of the present filing because the proposed revisions do not seek to change existing compensation methodologies. PJM states that a proposal to amend black start compensation may be filed with the Commission in the near future and that filing would present a more appropriate forum for these concerns. With respect to Maryland PSC's concern regarding cross-zonal black start support, PJM argues that its concern is unfounded and fails to recognize that system restoration is based solely on evaluating the cranking paths between the available black start units and the critical load that is being restored. PJM

¹³ AEP explains that ALR units provide black start service by automatically disconnecting themselves from the electrical grid during a disturbance, while remaining operational with the ability to quickly reconnect to aid in faster restoration.

also argues that concerns about cross-zonal coordination expressed by transmission owners were addressed during stakeholder meetings and stakeholders overwhelmingly endorsed the proposed revisions with no objections and one abstention. Finally, PJM clarifies that compensation for black start service will be limited to those black start units that are actually chosen and identified in PJM's system restoration plan and meet all the generally applicable rules for providing black start service.

III. Discussion

A. Procedural Matters

18. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure,¹⁴ the notice of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

19. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure,¹⁵ the Commission will grant Duquesne's, AMP's, and Rockland's late-filed motions to intervene given their interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.

20. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure¹⁶ prohibits an answer to a protest or to an answer unless otherwise ordered by the decisional authority. We will accept PJM's answer because it has provided information that has aided us in our decision-making process.

B. Substantive Matters

21. We will accept PJM's proposed tariff revisions. As PJM explains, its proposed revisions should allow it to consider additional black start resources when developing its system restoration plan, have greater flexibility in selecting black start units, and address its concerns regarding availability of black start generation in the future. We will therefore accept the revisions effective September 9, 2013, as requested.

22. Maryland PSC has provided no support for its claims that cross-zonal black start coordination may result in significant delays in service restoration for Maryland

¹⁴ 18 C.F.R. § 385.214 (2013).

¹⁵ 18 C.F.R. § 385.214(d).

¹⁶ 18 C.F.R. § 385.213(a)(2) (2013).

customers. Moreover, PJM explains in its answer that cross-zonal black start coordination will allow coordination of resources to, among other things, improve restoration timing and/or efficiency. PJM further explains that, in conducting system restoration, it evaluates cranking paths, i.e., the electrical paths between the available black start units and the critical load that is being restored, and does not focus on geographic or political boundaries.

23. Maryland PSC's concerns with PJM stakeholder discussions regarding potential approaches to black start compensation are outside the scope of the proceeding because PJM's proposed tariff revisions do not address this issue. Regarding Maryland PSC's concerns that additional units may receive black start compensation, Schedule 6A provides that black start units must commit to a term of black start service and be selected by PJM to provide black start service.¹⁷ As PJM explains in its answer, compensation therefore will be limited to those black start units that are actually chosen and identified in PJM's system restoration plan and meet the rules for providing black start service.

24. The Commission further notes that AEP's request for the Commission to direct PJM to revise its existing tariff to address AEP's claim of differing treatment regarding recovery of variable operations and maintenance costs for ALR black start units also is beyond the scope of the tariff provisions proposed in this section 205 filing. AEP may pursue its concerns through the PJM stakeholder process, since, as PJM states in its answer, it anticipates submitting a proposal to amend black start compensation in the near future.

The Commission orders:

PJM's proposed revisions are hereby accepted, effective September 9, 2013, as requested, as discussed in the body of this order.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

¹⁷ PJM OATT, Schedule 6A, Black Start Service, sections 5-6 (7.0.0).