

157 FERC ¶ 61,152
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Norman C. Bay, Chairman;
Cheryl A. LaFleur, and Colette D. Honorable.

PJM Interconnection, L.L.C.

Docket No. ER16-2539-000

ORDER ON COST ALLOCATION AND TARIFF REVISIONS

(Issued November 29, 2016)

1. On September 1, 2016, pursuant to section 205 of the Federal Power Act (FPA),¹ PJM Interconnection, L.L.C. (PJM), in accordance with Schedule 12 of the PJM Open Access Transmission Tariff (Tariff) and section 1.6 of Schedule 6 of the Amended and Restated Operating Agreement of PJM (Operating Agreement), filed amendments to Schedule 12-Appendix A of the PJM Tariff (PJM Filing).² The Tariff revisions incorporate cost responsibility assignments for new baseline upgrades included in the recent update to the Regional Transmission Expansion Plan (RTEP) approved by the PJM Board of Managers (PJM Board) on August 3, 2016.

2. In this order, we accept the cost responsibility assignments included in the PJM Filing, effective November 30, 2016, as requested.

I. Background

A. PJM RTEP Cost Allocation Tariff Provisions

3. PJM files cost responsibility assignments for Required Transmission Enhancements that the PJM Board approves as part of PJM's RTEP, in accordance with Schedule 12 of the Tariff and Schedule 6 of the Operating Agreement.³ The RTEP

¹ 16 U.S.C. § 824d (2012).

² *See Appendix*

³ The PJM Tariff defines Required Transmission Enhancements as “[e]nhancements and expansions of the Transmission System that (1) a Regional

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provides for the construction of expansions and upgrades to PJM's transmission system in order to comply with reliability criteria and to maintain and enhance the economic and operational efficiency of PJM's wholesale electricity markets.⁴ Schedule 6 of the Operating Agreement sets forth the process by which transmission expansions and enhancements are identified and developed. PJM is required to choose projects that provide for the more efficient or cost-effective transmission enhancements or expansions to address the planning and reliability criteria needs for inclusion in the RTEP, and the Operating Agreement describes the process for posting needs, opening a project proposal window, reviewing proposed projects, and determining which transmission projects will be included in the RTEP.

Transmission Expansion Plan developed pursuant to Schedule 6 of the Operating Agreement or (2) any joint planning or coordination agreement between PJM and another region or transmission planning authority set forth in Schedule 12-Appendix B (Appendix B Agreement) designates one or more of the Transmission Owner(s) to construct and own or finance.” *See* PJM, Intra-PJM Tariffs, OATT, § 1.38C (R - S, OATT Definitions – R - S, 8.0.0)

⁴ PJM's RTEP planning criteria include PJM planning procedures, NERC Reliability Standards, Regional Entity reliability principles and standards, and individual Transmission Owner FERC filed planning criteria as filed in FERC Form No. 715. *See PJM*, Intra-PJM Tariffs, Operating Agreement, Schedule 6, §1.2(e) (Conformity with NERC Reliability Standards and Other Applicable Reliability Criteria) (2.0.0).

4. The types of Reliability Projects⁵ selected in the RTEP for purposes of cost allocation include Regional Facilities,⁶ Necessary Lower Voltage Facilities,⁷ and Lower Voltage Facilities.⁸ Schedule 12 provides for the following cost allocation for projects resulting from a PJM reliability violation. For Regional Facilities and Necessary Lower Voltage Facilities, 50 percent of the facility's costs is allocated on a region-wide, postage stamp basis and the other 50 percent is allocated pursuant to the solution-based distribution factor (DFAX) method described in Schedule 12(b)(iii) of the Tariff. For Lower Voltage Facilities, 100 percent of the facility's costs is allocated pursuant to the solution-based DFAX cost allocation method. As relevant here, Schedule 12 also provides that when a project is developed solely to address an individual transmission owner's planning criteria (as filed in Form No. 715), 100 percent of the costs of that project will be allocated to the zone of the transmission owner whose Form No. 715 local planning criteria underlie each project.⁹

⁵ Reliability Projects are defined as Required Transmission Enhancements included in the Regional Transmission Expansion Plan to address reliability violations or operational adequacy and performance issues. *See* PJM, Intra-PJM Tariffs, OATT, Schedule 12, § (b)(i)(A)(2)(a) (Regional Facilities and Necessary Lower Voltage Facilities) (8.0.0).

⁶ Regional Facilities are defined as Required Transmission Enhancements included in the RTEP that are transmission facilities that (a) are AC facilities that operate at or above 500 kV; (b) are double-circuit AC facilities that operate at or above 345 kV; (c) are AC or DC shunt reactive resources connected to a facility from (a) or (b); or (d) are DC facilities that meet the necessary criteria as described in section (b)(i)(D). PJM, Intra-PJM Tariffs, OATT, Schedule 12, § (b)(i) (Regional Facilities and Necessary Lower Voltage Facilities) (8.0.0).

⁷ Necessary Lower Voltage Facilities are defined as Required Transmission Enhancements included in the RTEP that are lower voltage facilities that must be constructed or reinforced to support new Regional Facilities. PJM, Intra-PJM Tariffs, OATT, Schedule 12, § (b)(i) (8.0.0).

⁸ Lower Voltage Facilities are defined as Required Transmission Enhancements that (a) are not Regional Facilities and (b) are not "Necessary Lower Voltage Facilities." PJM, Intra-PJM Tariffs, OATT, Schedule 12, § (b)(ii) (Lower Voltage Facilities) (8.0.0).

⁹ One hundred percent of the costs for Required Transmission Enhancements that are included in the RTEP solely to address individual transmission owner Form No. 715 local planning criteria are allocated to the zone of the individual transmission

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B. PJM Filing

5. The PJM Filing amends Schedule 12-Appendix A to the Tariff to incorporate cost responsibility assignments for new transmission enhancements or expansions included in the recent update to the RTEP, including Regional Facilities, Lower Voltage Facilities, and enhancements or expansions to relieve one or more economic constraints. Included in the Regional Facilities was project b2744, a rebuild of the Carson-Rogers Road 500 kV transmission line,¹⁰ to resolve two criteria: a regional generation deliverability violation and an individual transmission owner Form No. 715 local planning criterion.

6. PJM requests an effective date of November 30, 2016.

II. Notice, Intervention, and Responsive Pleadings

7. Notice of the September 1, 2016 filing was published in the *Federal Register*, 81 Fed. Reg. 62,499 (2016), with an errata issued on September 6, 2016, extending the comment date to October 3, 2016.

8. Timely motions to intervene were filed by American Electric Power Service Corporation, American Municipal Power, Inc., Dayton Power and Light (Dayton Power), Dominion,¹¹ Delaware Public Service Commission, Exelon Corporation, ITC Mid-Atlantic Development LLC, North Carolina Electric Membership Corporation, and Public Service Electric and Gas Company. Old Dominion Electric Cooperative filed a motion to intervene out-of-time.

9. On September 19, 2016, as amended on September 20, 2016, Dayton Power filed a limited protest. On October 12, 2016, PJM filed an answer to Dayton Power's limited protest. On October 17, 2016, Dayton Power filed a reply to PJM's answer.

owners whose Form No. 715 local planning criteria underlie each project. *See PJM Interconnection, L.L.C.*, 154 FERC ¶ 61,096 (2016) (February 2016 Order).

¹⁰ Project b2744 is a \$48.5 million project that Virginia Electric and Power Company (VEPCO) has proposed to replace the existing 500 kV line between its Carson and Rogers Road substations. Dominion Resources Services, Inc. (Dominion) is acting on behalf of VEPCO in this proceeding.

¹¹ Dominion provides services to VEPCO and PJM assigns costs allocated to VEPCO for upgrades included in the RTEP to the Dominion zone.

On October 20, 2016, Dominion filed an answer to Dayton Power's limited protest in support of PJM's answer.¹²

A. Dayton Power Protest

10. Dayton Power's protest is limited to the assignment of cost responsibility for project b2744. Dayton Power states that b2744 has not been fully vetted to ensure that the project is in fact the most cost-effective way to address a regional reliability violation based on a generation deliverability violation. First, Dayton Power asserts that PJM has not clearly established that the complete rebuild of project b2744 is the least-cost alternative to resolving the generation deliverability violation. Dayton Power asserts that based on PJM's presentations at stakeholder meetings, there are lower cost alternatives to resolve the generation deliverability violation associated with project b2744, and that the only basis for PJM to choose a higher-cost alternative is because it also resolves Dominion's individual transmission owner Form No. 715 local planning criteria violation.¹³ Dayton Power does not dispute that project b2744 addresses both Dominion's Form No. 715 local planning criteria and also a PJM regional criterion, but asserts that project b2744 still must meet the requirement of being the most cost-effective option available. Dayton Power urges the Commission to defer a decision to designate project b2744 as a baseline project and direct PJM to supplement its filing to ensure that the complete rebuild of project b2744 is truly the least-cost solution to resolve the regional criteria violation. Without this showing, Dayton Power contends that only the costs of the least-cost solution to resolve the regional reliability criteria violation should

¹² Dominion states that it supports PJM's answer and reiterates a few basic points from PJM's Answer that it asserts to demonstrate the fallacy of Dayton's protest. *See* Dominion Answer at 3.

¹³ Dayton Power Protest at 4-5. Dayton Power specifically notes that at PJM's Transmission Expansion Advisory Committee (TEAC) meeting on May 12, 2016, PJM noted several alternative approaches, including one that costs as little as \$24 million and that involved construction of 230 kV facilities that mitigated the 500 kV reliability criteria violation. *See* Dayton Power Protest at 5, Attachment 1 (PJM TEAC Presentation: Reliability Analysis), at 14 (May 12, 2016). Dayton Power acknowledges that there is not sufficient detail in the presentation to verify that the lower-cost \$24 million option is one of the 230 kV options, but asserts that that would be a reasonable assumption given the lower costs of constructing 230 kV facilities versus 500 kV facilities.

be eligible for cost allocation and that the additional costs should be allocated to Dominion.¹⁴

11. Second, Dayton Power further asserts that the regional reliability violation that was identified appears to be an outgrowth of using an older load growth forecast, and updated forecasts suggest that there may be no regional reliability violation. Dayton Power contends that PJM has not studied whether the generation deliverability violation would still exist if studied using the lower load projection.¹⁵ Dayton Power contends that there appears to be a disconnect in PJM's planning process such that a generation interconnection study, using one set of assumptions, may permit the interconnection of a generator without charging the generator for network service upgrades, while an RTEP study, using a different set of assumptions may find that there are network service upgrades that are needed with that generator interconnecting.¹⁶ Dayton Power requests that the Commission direct PJM to evaluate the implication of the lower PJM load forecast on the manifestation of the violation.¹⁷

B. Answers

1. PJM

12. PJM argues that Dayton Power's objection to treating project b2744 as a Regional Facility is without merit.¹⁸ First, PJM asserts that Dayton Power improperly challenges PJM's recommendation of project b2744 in this docket. PJM argues that the sole issue before the Commission in this proceeding, which Dayton Power does not appear to challenge, is whether the cost responsibility assignments PJM filed in this proceeding are consistent with the Commission's acceptance of the cost allocation method for FERC Form No. 715 criteria set forth in the PJM Tariff. Second, PJM asserts that Dayton

¹⁴ *Id.* at 9-10, 11. More specifically, Dayton requests that the Commission provide guidance to PJM and transmission owners stating that for projects that are planned primarily to resolve violations of local reliability criteria, but also resolve a regional criteria violation, only the amount of costs associated with the most cost-effective way to resolve the regional criteria violation will be eligible for cost allocation. *Id.* at 11.

¹⁵ Dayton Power Protest at 6.

¹⁶ *Id.*

¹⁷ Dayton Power Protest at 10, 11.

¹⁸ PJM Answer at 5 (citing Dayton Power Protest at 17).

Power does not dispute that PJM presented the pros and cons of the options considered in selecting project b2744 at the TEAC meeting on May 12, 2016, and Dayton Power's objections should have been raised during that process. PJM contends that Dayton Power does not cite to any provision in Section 1.5.8 of Schedule 6 that PJM failed to follow in presenting this project proposal to the TEAC or in posting the proposal, or presenting its recommendation for stakeholder review and comment.¹⁹

13. Finally, PJM states that Dayton Power's challenge to PJM's selection of project b2744 as the least-cost alternative to resolving the regional reliability criterion misses the mark.²⁰ PJM notes that "Order No. 1000 requires PJM, in consultation with its stakeholders, to consider whether the proposed transmission solution is either the '*more efficient or cost effective*' solution needed to meet the regional reliability, economic and Public Policy Requirements."²¹ PJM explains that it selected this project based on a number of factors that PJM determined, in its engineering judgment, made this project the more efficient or cost-effective solution. PJM also explains that it had two violations that needed to be resolved; a 500 kV reliability criteria issue and Dominion's individual transmission owner Form No. 715 local planning criteria. Project b2744 was the only option that resolved both issues. Thus, PJM asserts that Dayton Power's allegation that the only basis for PJM choosing project b2744 is because it resolves Dominion's individual transmission owner Form No. 715 local planning criteria violation is unfounded.

2. Dayton Power

14. Dayton Power contends that it raised its objections to the rebuild of the Carson-Rogers Road 500 kV transmission line at a stakeholder meeting, and Hertz Shamash, Vice President at Dayton Power, followed up these objections with an e-mail to the appropriate PJM staff and the entire RTEP group distribution list. Dayton Power asserts that while PJM's Answer relies heavily on the undisputed fact that a regional reliability violation was found to exist, PJM has failed to address the material and unanswered questions that Dayton Power has raised regarding the validity of the assumptions within

¹⁹ *Id.* at 6.

²⁰ *Id.* at 7 (citing Dayton Power Protest at P 7).

²¹ *Id.* at 7 (citing Order No. 1000, FERC Stats. & Regs. ¶ 31,323 at P 11), emphasis in original.

PJM's study, as well as Dayton Power's point that lower-cost alternatives exist to completely resolve the regional reliability violation.²²

3. Dominion

15. Dominion asserts in its answer that Dayton Power seeks to have the Commission overturn PJM's planning judgment and assign the costs of project b2744 solely to the Dominion zone. Dominion also asserts that the fact that a rebuild of the Carson – Rogers Road 500 kV transmission line was *also* found to satisfy Dominion's individual transmission owner Form No. 715 local planning criteria does not disqualify it from RTEP eligibility. Dominion contends that Dayton Power's comments related to the planning assumptions are speculation and an attempt to manufacture a factual dispute that it could have resolved in the stakeholder process.

III. Discussion

A. Procedural Matters

16. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2016), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

17. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2016), prohibits an answer to a protest or to an answer unless otherwise ordered by the decisional authority. We will accept the answers filed in this proceeding because they have provided information that assisted us in our decision-making process.

B. Determination

18. We accept PJM's proposed Tariff revisions, to be effective November 30, 2016. As discussed below, we reject Dayton Power's protest arguments.

19. Under Order No. 1000, each public utility transmission provider is required to participate in a regional transmission planning process that complies with the identified transmission planning principles of Order No. 890 and that, in consultation with stakeholders, results in the development of a regional transmission plan.²³ The regional transmission plan identifies transmission facilities that have been selected by the region as the more efficient or cost-effective solutions to meet the region's reliability, economic,

²² Dayton Power Answer at 2-4.

²³ Order No. 1000, FERC Stats. & Regs. ¶ 31,323 at PP 6, 11, 146.

and Public Policy Requirements-related needs than solutions identified by individual public utility transmission providers in their local transmission planning processes.²⁴

20. PJM, in its answer, describes the process by which it determined, pursuant to Schedule 6 of the PJM Operating Agreement, that project b2744 was the more efficient or cost-effective solution. PJM states that it opened up the proposal window to address generator deliverability and common mode outage, as well Dominion's Form No. 715 end-of-life local planning criterion.²⁵ PJM explains that it considered three categories of alternative options to address the Carson – Rogers Road 500 kV transmission line overload and Dominion individual transmission owner Form No. 715 local planning criteria, and that while all three options addressed PJM's regional reliability criteria violation, the other two options did not address Dominion's individual transmission owner Form No. 715 local planning criteria. PJM further notes that it considered several other factors in its evaluation of the options. PJM explains that after consideration of all of the factors, it determined the rebuild of the Carson – Rogers Road 500 kV transmission line to be the more efficient or cost-effective solution.²⁶ PJM then recommended to the PJM Board that project b2744 be selected in the PJM regional transmission plan for purposes of cost allocation. Project b2744 was then among many new baseline upgrades approved by the PJM Board on August 3, 2016.²⁷ Importantly, PJM makes clear that this process was conducted in consultation with stakeholders.²⁸ Questions related to the load forecast on which the reliability criteria violation is determined are addressed within the stakeholder process.²⁹ We note that Dayton Power's answer in this proceeding provides evidence that it participated as a stakeholder in this process, and we find that Dayton Power has not supported its assertion that this issue was not adequately vetted within the stakeholder process.³⁰ We find that while Dayton Power disputes PJM's selection of

²⁴ *Id.* PP 11, 148.

²⁵ PJM Answer at 2.

²⁶ *Id.* at 3-4.

²⁷ *Id.* at 1.

²⁸ *Id.* at 1-4; *see also*, Transmission Expansion Advisory Committee Reliability Updates (Jan. 7, 2016; Feb. 11, 2016; Mar. 10, 2016; Apr. 11, 2016; May 11, 2016) at <http://www.pjm.com/~media/committees-groups/committees/teac.ashx>.

²⁹ *See* PJM Operating Agreement § 1.5.6.

³⁰ Dayton Power Protest at Attachment 1 (“Reliability Analysis Update,” PJM presentation, Transmission Expansion Advisory Committee meeting, May 12, 2016).

project b2744, Dayton Power makes no assertion that the process that PJM undertook in selecting project b2744 in the PJM regional transmission plan for the purposes of cost allocation is inconsistent with Schedule 6 of the PJM Operating Agreement.³¹

21. Moreover, Dayton Power does not dispute that project b2744 addresses both Dominion's individual transmission owner Form No. 715 local planning criteria and also a region-wide PJM reliability criterion. The PJM tariff provides in Schedule 12(b)(xv) that 100 percent of costs for reliability projects that are included in the PJM RTEP solely to address individual transmission owner local planning criteria (as filed in FERC Form No. 715) will be allocated to the zone of the transmission owner whose Form No. 715 local planning criteria underlie each project. In accepting the proposed revisions, the Commission stated:

“[a]ny project included in the RTEP not only to address an individual transmission owner Form No. 715 local planning criteria, but also to address PJM regional criteria or NERC reliability standards, would not be in this category and would continue to be selected for purposes of cost allocation, making it eligible to use the regional cost allocation method.[³²]

22. We find that the cost responsibility assignment for project b2744, which PJM submitted as Attachment A to its Filing, makes clear that the criteria test for the Carson – Rogers Road 500 kV transmission line is the region-wide PJM reliability criterion, Generation Deliverability.³³ Based upon PJM's analysis, we find that project b2744 was selected in the RTEP for purposes of cost allocation based on this region-wide PJM reliability criterion. While Dayton Power maintains that other projects may meet the region-wide reliability criterion at lower cost, PJM has shown that b2744 project is the more efficient or cost-effective solution, consistent with its obligations in Schedule 6. Therefore, we find that PJM's proposed cost responsibility assignment for project b2744 is consistent with Schedule 12 as it addresses a region-wide PJM reliability violation.³⁴

³¹ The provisions of Schedule 6 of the PJM Operating Agreement contain the requirements and procedures to which PJM must adhere-in developing its RTEP. *See* PJM, Intra-PJM Tariffs, OA, Schedule 6 (8.0.0).

³² February 2016 Order, 154 FERC ¶ 61,096 at P 14.

³³ PJM Filing, Att. A (cost assignment summary sheets, project b2744).

³⁴ PJM, Intra-PJM Tariff, Schedule 12, §§(b)(i)(1)(a) & (b)(i)(2)(a) (8.0.0).

The Commission orders:

PJM's proposed Tariff revisions are hereby accepted, effective November 30, 2016, as discussed in the body of this order.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

Appendix

PJM Interconnection, L.L.C.
Intra-PJM Tariffs
Tariff Records Accepted Effective November 30, 2016.

PJM Interconnection, L.L.C., [Intra-PJM Tariffs](#), [OATT](#), [OATT OPEN ACCESS TRANSMISSION TARIFF, 0.0.0](#), [VI, OATT VI. ADMINISTRATION AND STUDY OF NEW SERVICE REQUESTS; R, 0.0.0](#), [SCHEDULE 12 - APPENDIX A, OATT SCHEDULE 12 - APPENDIX A - Required Transmission Enhanc, 0.1.0](#) [SCHEDULE 12.APPX A - 25, SCHEDULE 12.APPX A - 2, OATT SCHEDULE 12.APPENDIX A - 2 Baltimore Gas and Electric, 3.0.0](#), [SCHEDULE 12.APPX A - 5, OATT SCHEDULE 12.APPENDIX A - 5, Metropolitan Edison Company, 7.0.0](#), [SCHEDULE 12.APPX A - 7, OATT SCHEDULE 12.APPENDIX A - 7 Pennsylvania Electric Compan, 7.0.0](#), [SCHEDULE 12.APPX A - 8, OATT SCHEDULE 12.APPENDIX A - 8 PECO Energy Company, 6.0.0](#), [SCHEDULE 12.APPX A - 9, OATT SCHEDULE 12.APPENDIX A - 9 PPL Electric Utilities Corpo, 7.0.0](#), [SCHEDULE 12.APPX A - 12, OATT SCHEDULE 12.APPENDIX A - 12 Public Service Electric and, 9.0.0](#), [SCHEDULE 12.APPX A - 14, OATT SCHEDULE 12.APPENDIX A - 14 Monongahela Power Company, 7.0.0](#), [SCHEDULE 12.APPX A - 15, OATT SCHEDULE 12.APPENDIX A - 15 Commonwealth Edison Company, 7.0.0](#), [SCHEDULE 12.APPX A - 17, OATT SCHEDULE 12.APPENDIX A - 17 AEP Service Corporation, 9.0.0](#), [SCHEDULE 12.APPX A - 20, OATT SCHEDULE 12.APPENDIX A - 20 Virginia Electric and Power, 9.0.0](#), [SCHEDULE 12.APPX A - 23, OATT SCHEDULE 12.APPENDIX A - 23 American Transmission Syste, 7.0.0](#), [SCHEDULE 12.APPX A - 25, OATT SCHEDULE 12.APPENDIX A - 25 East Kentucky Power Coopera, 6.0.0](#), [SCHEDULE 12.APPX A-26, OATT SCHEDULE 12.APPENDIX A - 26 Northeast Transmission Dev, 1.0.0](#).