169 FERC ¶ 61,234 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman; Richard Glick and Bernard L. McNamee.

Docket Nos. EL15-95-005

Delaware Public Service Commission and Maryland Public Service Commission v. PJM Interconnection, L.L.C. and Certain Transmission Owners Designated under CTOA RS FERC No. 42

PJM Interconnection, L.L.C. PECO Energy Company ER19-1501-000

ORDER GRANTING REHEARING AND REJECTING COMPLIANCE FILING

(Issued December 19, 2019)

1. On July 19, 2018, the Commission granted rehearing of an order in *Delaware Public Service Commission v. PJM Interconnection, L.L.C.* (July 2018 Order),¹ finding that it is unjust and unreasonable to apply specific provisions of Schedule 12 of the PJM Interconnection, L.L.C. (PJM) Open Access Transmission Tariff (Tariff) to assign cost responsibility for transmission enhancements and expansions that address stability-related

¹ 164 FERC ¶ 61,035 (2018). See Del. Pub. Serv. Comm'n v. PJM Interconnection, L.L.C., 155 FERC ¶ 61,090 (2016) (April 2016 Order). In the April 2016 Order, the Commission accepted the cost allocation report and denied a complaint filed by the Maryland Public Service Commission and the Delaware Public Service Commission (Complaint) contending that the use of the solution-based distribution factor (DFAX) method to allocate the costs of certain transmission projects that were approved through the PJM Regional Transmission Expansion Planning (RTEP) process is unjust, unreasonable, and unduly discriminatory and preferential.

reliability issues,² such as the Artificial Island Project,³ that are selected for purposes of cost allocation in the PJM Regional Transmission Expansion Plan. In order to establish the just and reasonable rate to be applied, the Commission established paper hearing procedures. The Commission issued an order on February 28, 2019 (February 2019 Order), following the paper hearing procedures, establishing a just and reasonable rate.⁴ On April 1, 2019, the Indicated PJM Transmission Owners requested rehearing,⁵ and PJM requested clarification, or in the alternative, rehearing of the February 2019 Order.⁶

³ The Artificial Island Project encompasses a number of separate sub-projects to address stability limits on generation at the Salem and Hope Creek Nuclear Generating Stations in southern New Jersey, as well as the transmission constraints that are preventing those generators from exporting power at their full capacity under certain circumstances. July 2018 Order, 164 FERC ¶ 61,035 at P 6.

⁴ Del. Pub. Serv. Comm'n v. PJM Interconnection, L.L.C., 166 FERC ¶ 61,161 (2019).

⁵ The Indicated Transmission Owners are: American Electric Power Service Corporation, Dominion Energy Services, Inc., Duke Energy Corporation, FirstEnergy Service Company, and PPL Electric Utilities Corporation.

⁶ As discussed below, PJM's and the Indicated PJM Transmission Owners' requests for rehearing are limited to concerns with specific provisions of the rate identified in the February 2019 Order.

² Stability is the ability of a generator to operate in phase with the transmission system (within an acceptable range of angular deviation) before losing synchronism. It is a function of generator output, generator loading, generator inertia, and the strength of the transmission system from the generator to the grid. *See* NERC Reliability Guideline, Establishing IROLs, at 17,

https://www.nerc.com/comm/PC_Reliability_Guidelines_DL/Reliability_Guideline_Met hods_for_Establishing_IROLs.pdf. Stability events result from an imbalance of generation and load caused by a sudden event on the transmission system where the rotational inertia of the generator could cause the generator to lose synchronism with the rest of the transmission system. Depending on the severity of the disturbance and the actions of power system controls, the system may remain stable or experience a large separation of generator rotor angles and eventually lose synchronism. July 2018 Order, 164 FERC ¶ 61,035 at P 40.

2. In compliance with the February 2019 Order, on April 1, 2019, PJM submitted, on behalf of the PJM Transmission Owners, proposed revisions to Schedule 12 of the PJM Tariff to implement the directives of the February 2019 Order.⁷

3. As discussed below, we grant rehearing of the February 2019 Order and reject the compliance filing revisions to Schedule 12 of the PJM Tariff.

I. <u>Background</u>

4. PJM files cost responsibility assignments for transmission projects that the PJM Board of Managers (PJM Board) approves as part of PJM's RTEP in accordance with Schedule 12 of PJM's Open Access Transmission Tariff (Tariff) and Schedule 6 of the Amended and Restated Operating Agreement of PJM (Operating Agreement).⁸ Schedule 12 of the Tariff establishes Transmission Enhancement Charges for "[o]ne or more of the Transmission Owners [that] may be designated to construct and own and/or finance Required Transmission Enhancements by (1) the PJM RTEP periodically developed pursuant to Operating Agreement, Schedule 6 or (2) any joint planning or coordination agreement between PJM and another region or transmission planning authority set forth in Tariff, Schedule 12-Appendix B."⁹ In developing the RTEP, PJM

⁸ In accordance with the Tariff and the Operating Agreement, PJM "shall file with FERC a report identifying the expansion or enhancement, its estimated cost, the entity or entities that will be responsible for constructing and owning or financing the project, and the market participants designated under section 1.5.6(l) above to bear responsibility for the costs of the project." *See* PJM Operating Agreement, Schedule 6, section 1.6 (b). "Within 30 days of the approval of each Regional Transmission Expansion Plan or an addition to such plan by the PJM Board pursuant to section 1.6 of Schedule 6 of the PJM Operating Agreement, the Transmission Provider shall designate in the Schedule 12-Appendix A and in a report filed with the FERC the customers using Point-to-Point Transmission Service and/or Network Integration Transmission Service and Merchant Transmission Facility owners that will be subject to each such Transmission Enhancement Charge "Responsible Customers" based on the cost responsibility assignments determined pursuant to this Schedule 12." PJM Tariff, Schedule 12, section (b)(viii).

⁹ Required Transmission Enhancements are defined as "enhancements and expansions of the Transmission System that (1) a RTEP developed pursuant to Schedule 6 of the Operating Agreement or (2) any joint planning or coordination

⁷ PJM filed the proposed revisions pursuant to Order No. 714, on behalf of the PJM Transmission Owners, as provided by the Consolidated Transmission Owners Agreement. *See Electronic Tariff Filings*, 124 FERC ¶ 61,270 (2008) (Order No. 714); PJM Rate Schedules, TOA-42 § 4.1.3 PJM Tariff, 0.0.0 ("Each Party shall transfer to PJM … responsibility for administering the PJM Tariff").

identifies transmission projects to address different criteria, including PJM planning procedures, North American Electric Reliability Corporation (NERC) Reliability Standards, Regional Entity reliability principles and standards,¹⁰ and individual transmission owner Form No. 715 local planning criteria. Types of Reliability Projects¹¹ identified in the RTEP include Regional Facilities,¹² Necessary Lower Voltage Facilities,¹³ and Lower Voltage Facilities.¹⁴

¹⁰ As established by Reliability First Corporation, Southeastern Electric Reliability Council, and other applicable Regional Entities. *See* PJM Operating Agreement, Schedule 6, sections1.2(b) and 1.2(d) (Conformity with NERC and Other Applicable Reliability Criteria) (2.0.0).

¹¹ Reliability Projects are Required Transmission Enhancements that are included in the RTEP to address one or more reliability violations or to address operational adequacy and performance issues. *See* PJM Tariff, Schedule 12, section (b)(i)(A)(2)(a).

¹² 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 Tariff, Schedule 12, section (b)(i) (Regional Facilities and Necessary Lower Voltage Facilities) (6.1.0).

¹³ 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 Tariff, Schedule 12, section (b)(i) (Regional Facilities and Necessary Lower Voltage Facilities) (6.1.0).

¹⁴ Lower Voltage Facilities are defined as Required Transmission Enhancements that: (a) are not Regional Facilities; and (b) are not "Necessary Lower Voltage Facilities." PJM Tariff, Schedule 12, section (b)(ii) (Lower Voltage Facilities) (6.1.0).

agreement between PJM and another region or transmission planning authority set forth in Tariff, Schedule 12-Appendix B "Appendix B Agreement" designates one or more of the Transmission Owner(s) to construct and own or finance." PJM Tariff, OATT Definitions - R - S, 13.0.0. Transmission Enhancement Charges are established to recover the revenue requirement with respect to a Required Transmission Enhancement. *See* PJM Tariff, Schedule 12, section (a)(i).

5. PJM utilizes a hybrid cost allocation method, which the Commission found complies with Order No. 1000,¹⁵ for Regional Facilities and Necessary Lower Voltage Facilities that address a reliability need.¹⁶ Under this method, PJM allocates 50 percent of the costs of Regional Facilities or Necessary Lower Voltage Facilities on a load-ratio share basis and the other 50 percent based on the solution-based distribution factor (DFAX) method.¹⁷ PJM allocates all of the costs of Lower Voltage Facilities using the solution-based DFAX method.¹⁸

¹⁵ See Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, Order No. 1000, 136 FERC ¶ 61,051 (2011) (Order No. 1000), order on reh'g, Order No. 1000-A, 139 FERC ¶ 61,132, order on reh'g and clarification, Order No. 1000-B, 141 FERC ¶ 61,044 (2012), aff'd sub nom. S.C. Pub. Serv. Auth. v. FERC, 762 F.3d 41 (D.C. Cir. 2014). See also PJM Interconnection, L.L.C., 142 FERC ¶ 61,214 (2013), order on reh'g and compliance, 147 FERC ¶ 61,128 (2014), order on reh'g and compliance, 150 FERC ¶ 61,038, and order on reh'g and compliance, 151 FERC ¶ 61,250 (2015).

¹⁶ PJM identifies reliability transmission needs and economic constraints that result from the incorporation of public policy requirements into its sensitivity analyses, and allocates the costs of the solutions to such transmission needs in accordance with the type of benefits that they provide. *See PJM Interconnection, L.L.C.*, 142 FERC ¶ 61,214 at P 441. *See also* PJM Tariff, Schedule 12, section (b)(v) (Economic Projects) (assigning cost responsibility for Economic Projects that are either accelerations or modifications of Reliability Projects, or new enhancements or expansions that relieve one or more economic constraints). *See* PJM Operating Agreement, Schedule 6, section 1.5.7(b)(iii).

¹⁷ Prior to adopting the solution-based DFAX method for assigning cost responsibility the Tariff included a violation-based DFAX method for assigning the costs of Lower Voltage Facilities. Under the violation-based DFAX method, to determine cost responsibility for Lower Voltage Facilities, PJM conducted studies to determine which loads contribute to the reliability violation that caused the upgrade by examining power flows on the constrained facilities at the time of a reliability violation. *See* April 2016 Order 155 FERC ¶ 61,090 at P 5 n.7.

¹⁸ The Commission accepted a PJM Transmission Owner Tariff proposed revision to allocate 100 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 to the zone of the individual transmission owner whose Form No. 715 local planning criteria underlie each project. *See PJM Interconnection, L.L.C.,* 154 FERC ¶ 61,096, *order on reh'g*, 157 FERC ¶ 61,192 (2016). *See Old Dominion Elec. Coop. v. FERC,* 898 F.3d 1254 (D.C. Cir. 2018) (setting aside the Commission's

On August 28, 2015, PJM filed cost responsibility assignments for transmission 6. enhancements and expansions for the Artificial Island Project. The August 28, 2015 Filing included the cost responsibility assignments for 12 new transmission enhancements and expansions. Five of these new transmission enhancements and expansions will operate at 500 kV or will be double-circuit 345 kV facilities,¹⁹ with 50 percent of the costs for these five Regional Facilities allocated on a region-wide, loadratio share basis, and 50 percent allocated pursuant to the solution-based DFAX method. The remaining seven transmission enhancements and expansions are Lower Voltage Facilities,²⁰ with 100 percent of the costs of these facilities allocated pursuant to the solution-based DFAX cost allocation method. The 12 transmission enhancements and expansions included in the August 28, 2015 Filing are referred to as the Artificial Island Project.²¹ On April 13, 2017 (as amended on April 28, 2017), in Docket No. ER17-1420, PJM submitted revisions to the PJM Tariff to incorporate the cost responsibility assignments for a reconfiguration of the Artificial Island Project. The reconfigured Artificial Island Project consists of seven new transmission enhancements and expansions. One new transmission enhancement and expansion that will operate at 500 kV or will be double-circuit 345 kV facilities,²² with 50 percent of the costs for this Regional Facility allocated on a region-wide, load-ratio share basis, and 50 percent allocated pursuant to the solution-based DFAX method. The remaining six transmission

¹⁹ August 28, 2015 PJM Filing at 3 (Docket No. ER19-2563). These five projects include: b2633.3, b2633.6, b2633.6.1, b2633.7, and b2633.8.

²⁰ August 28, 2015 PJM Filing at 4 (Docket No. ER15-2563). The remaining seven projects include: b2633.1, b2633.2, b2633.4, b2633.5, b2633.91, b2633.92, and b2633.10. *See* August 28, 2015 PJM Filing, Appendix A.

²¹ Total cost for the Artificial Island Project, as proposed on August 28, 2015, was \$275.37 million, with \$59.45 million for Regional Facilities allocated pursuant to the hybrid cost allocation method, and \$215.92 million for Lower Voltage Facilities allocated pursuant to the solution-based DFAX method.

²² Project b2633.4. April 13, 2017 Filing at 4.

order accepting the PJM Transmission Owners' proposed Tariff revisions to allocate the costs of projects identified in the RTEP solely to address individual transmission owner Form No. 715 local planning criteria 100 percent to the zone of that transmission owner, and remanding for further proceedings); *PJM Interconnection, L.L.C.*, 168 FERC ¶ 61,133 (order on remand, rejecting PJM Transmission Owner Tariff proposed revisions).

enhancements and expansions are Lower Voltage Facilities,²³ with 100 percent of the costs of these facilities is allocated pursuant to the solution-based DFAX cost allocation method.²⁴

7. As previously noted, in the April 2016 Order, the Commission denied the Complaint, and accepted the August 28, 2015 Tariff revisions assigning cost responsibility for the Artificial Island Project.²⁵ However, in the July 2018 Order, the Commission granted rehearing of the April 2016 Order, finding that the portion of cost responsibility assigned pursuant to the solution-based DFAX method was unjust and unreasonable for transmission enhancements and expansions that address stability-related reliability issues.²⁶ The Commission found that the beneficiaries of Regional Facilities, Necessary Lower Voltage Facilities and Lower Voltage Facilities that are solution-based DFAX method, which primarily determines the beneficiaries of flow-based reliability violations.²⁷ In particular, the Commission found that the record has demonstrated that, given the analytically unique nature of stability-related reliability issues, further analysis of the identification of the beneficiaries is required.²⁸

8. In order to establish the just and reasonable replacement rate under Federal Power Act section 206,²⁹ the Commission established paper hearing procedures to develop additional information to help it determine a just and reasonable *ex ante* cost allocation method for Regional Facilities, Necessary Lower Voltage Facilities, and Lower Voltage

²⁴ Total cost for the reconfigured Artificial Island Project is \$279.02 million, with \$38 million for Regional Facilities allocated pursuant to the hybrid cost allocation method, and \$241.02 million for Lower Voltage Facilities allocated pursuant to the solution-based DFAX method.

²⁵ See PJM Interconnection, L.L.C., 161 FERC ¶ 61,024 (2017) (accepting revised cost responsibility assignments for the reconfigured Artificial Island Project filed on April 13, 2017 in Docket No. ER17-1420).

²⁶ July 2018 Order, 164 FERC ¶ 61,035 at P 37.

²⁷ *Id.* P 40.

²⁸ Id.

²⁹ 16 U.S.C. § 824e (2012).

²³ The remaining six projects include: b2633.1, b2633.2, b2633.5, b2633.91, b2633.92, and b2633.10. *See* April 13, 2017 PJM Filing, Appendix A.

Facilities in PJM that address stability-related reliability issues.³⁰ The Commission specifically requested comment on proposals that PJM put forward in a White Paper (PJM White Paper),³¹ in which PJM identified two alternative approaches for identifying the beneficiaries of transmission projects that address stability-related reliability issues: (1) the Stability Deviation Method;³² and (2) the Stability Interface DFAX Method.³³

9. As relevant here, in paper hearing comments, PJM provided proposed Tariff provisions to implement the Stability Deviation Method and the Stability Interface DFAX Method. Specifically, as relevant to the requests for rehearing discussed below, PJM proposed the following Tariff provision to implement the Stability Deviation Method:

For purposes of the assignment of cost responsibility for Reliability Projects designed to address stability issues under subsection (b)(i)(A)(2)(a) and subsection (b)(ii)(A) of this Schedule 12, the Transmission Provider shall, using the same inputs and assumptions from the simulation that originally drove the need for the stability upgrade, perform a stability simulation that includes the stability upgrade under the worst fault condition. The worst fault condition shall be the fault condition in the simulation that produces the maximum rotor angle swing with the stability upgrade included. For each load bus on the system, the difference between the highest and lowest voltage angle that occurs during the simulation of the worst fault condition will be recorded. Load buses having a voltage angle deviation less than 25 percent of the load bus

³⁰ July 2018 Order, 164 FERC ¶ 61,035 at P 42.

³¹ See Alternative Approaches to Identification of Artificial Island Project Beneficiaries, <u>http://www.pjm.com/~/media/committees-</u> groups/committees/teac/20170609/20170609-stability-project-beneficiaryidentification.ashx.

³² PJM states that the Stability Deviation Method identifies beneficiaries of transmission projects that address stability-related reliability issues by modeling the transient voltage (angle) deviations at each PJM substation to assess the stability performance of a generator or cluster of generators to critical faults, and allocates costs based on a load-weighted deviation for each zone. PJM White Paper at 9, 12.

³³ PJM states that the Stability Interface DFAX Method identifies the beneficiaries of transmission projects that address stability-related reliability issues by analyzing the power flows over the collection of lines that connect the generator(s) that is experiencing the stability-related reliability issue being addressed. PJM White Paper at 7, 12.

with the largest voltage angle deviation will not be included in the cost allocation calculation. For the remaining load buses, the voltage angle deviation will be multiplied by the megawatt load at the bus obtained from the stability simulation model, or, in the case of a Merchant Transmission Facility, the Firm Transmission Withdrawal Rights at the bus. The products of the voltage angle deviation and megawatt load at each bus will be summed for each Responsible Zone. The Stability Deviation cost allocation for a Responsible Zone or Merchant Transmission Facility will be determined by dividing the sum of the load-weighted angle deviations for the Responsible Zone or Merchant Transmission Facility by the sum of the load-weighted angle deviations for each Responsible Zone and Merchant Transmission Facility. Transmission Provider shall round cost responsibility assignments to the nearest one-hundredth of one percent.³⁴

10. Based on the record developed through the paper hearing procedures, the Commission found that the Stability Deviation Method is a just and reasonable replacement rate for PJM to apply to all of the costs of Lower Voltage Facilities that address stability-related reliability issues, and 50 percent of the costs of Regional Facilities and Necessary Lower Voltage Facilities that address stability-related reliability issues, including the Artificial Island Project.³⁵ As discussed below, the Commission included the Stability Deviation Method Tariff provision with additional provisions, as discussed in the paper hearing, in Appendix A to the February 28, 2019 Order and directed PJM to make a compliance filing to include Appendix A in its Tariff within 30 days.

11. As relevant to the rehearing requests, the PJM Transmission Owners, in their paper hearing comments,³⁶ noted that PJM had identified a concern that, in instances where a transmission facility resolves all fault conditions, there may be no conditions available after the project goes into service to measure voltage angle deviation to identify beneficiaries.³⁷ In its comments, PJM acknowledged the concern that in performing the

³⁴ PJM Comments at 18.

³⁵ February 2019 Order, 166 FERC ¶ 61,161 at P 43.

³⁶ The PJM Transmission Owners filed comments acting through the PJM Consolidated Transmission Owners Agreement. *See* PJM Rate Schedules, TOA-42 § 8.5 Manner of Acting, 1.0.

³⁷ PJM Transmission Owner Reply Comments at 10.

Stability Deviation Method analysis, which measures the difference between the highest and lowest voltage angle during the stability simulations, the transmission facilities to address the stability-related reliability issue may be robust enough that a technically meaningful voltage angle deviation can no longer be observed with the transmission facilities in place.³⁸ PJM commented that this situation may require an alternative approach, and suggested that one approach may be to perform the simulation without the transmission facility included in the analysis.³⁹

12. In the February 2019 Order, the Commission sought to address these concerns by requiring PJM to adopt a Tariff provision to address instances in which no technically meaningful voltage angle deviation can be observed once the transmission facility is in place, i.e., perform the simulation without the transmission facility included in the analysis, using a voltage angle measurement consistent with the duration of the worst fault condition of the stability disturbance analysis (deviation measurement provision). Specifically, the Commission added the following revision to the Tariff provision provided by PJM, as included in Appendix A of the February 2019 Order:

If the Transmission Provider determines that a technically meaningful voltage angle deviation can no longer be observed with the stability upgrade included, the Transmission Provider shall perform the stability simulation without the stability upgrade included, using a voltage angle measurement consistent with the duration of the worst fault condition of the stability disturbance analysis.⁴⁰

13. In their paper hearing comments, the PJM Transmission Owners also raised concerns that, under the operation of the 25 percent stability deviation threshold identified by PJM, not all stability deviation measurement will be taken into account for the purpose of determining cost allocation.⁴¹ In its paper hearing comments, PJM stated that it selected a 25 percent threshold as an attempt to provide a mechanism to restrict the allocation to those loads that would likely experience the majority of the stability impacts

³⁸ PJM Comments at 17.

³⁹ *Id.* PJM qualified its suggestion stating that if the Commission were to adopt the Stability Deviation Method, "PJM would have to explore further how to address such situations." *Id.*

⁴⁰ February 2019 Order, 166 FERC ¶ 61,161 at Appendix A.

⁴¹ PJM Transmission Owner Reply Comments at 10-11.

under the specified conditions identified.⁴² PJM further noted that defining an acceptable voltage angle deviation may vary based on different stability-related reliability issues.⁴³

14. In the February 2019 Order, the Commission required PJM to adopt the 25 percent threshold, but in response to the PJM Transmission Owners' comment, also included a provision permitting PJM to adjust the threshold level for the loads that would be impacted by a stability disturbance when certain specific conditions exist.⁴⁴ Accordingly, for stability-related reliability issues subject to the Stability Deviation Method, the Commission included a provision that allows PJM, under the specific conditions (i.e., generation dispatch, system topology, load patterns), to explain within the Transmission Expansion Advisory Committee process, an adjustment to the 25 percent threshold (discretionary threshold provision). Specifically, the Commission added the following to the revision to the Tariff provision provided by PJM, as included in Appendix A of the February 2019 Order (as emphasized below):

Load buses having a voltage angle deviation less than 25 percent of the load calculation will not be included in the cost allocation, unless the Transmission Provider determines that an alternative, case-specific voltage angle deviation threshold is supported for the specific conditions (i.e., generation dispatch, system topology, load patterns).⁴⁵

II. <u>Rehearing Requests</u>

15. The Indicated PJM Transmission Owners contend that the discretionary threshold provision that the Commission required PJM to include in its Tariff provides PJM with the authority to unilaterally determine the rate design under the PJM Tariff to recover the costs of a Stability Project based solely on PJM's own discretion and with no approval or participation by the PJM Transmission Owners. The PJM Transmission Owners further contend that this level of discretion violates the PJM Tariff and the PJM Transmission Owners' rights under the FPA, as defined in *Atlantic City*.⁴⁶ The Indicated PJM Transmission Owners contend that PJM has already demonstrated that it can obtain

⁴² PJM Comments at 17.

⁴³ Id.

⁴⁴ February 2019 Order, 166 FERC ¶ 61,161 at P 49.

⁴⁵ *Id.* Appendix A.

⁴⁶ Indicated PJM Transmission Owner Rehearing Request at 5 (*citing Atlantic City Electric Company, et al. v. FERC*, 295 F.3d 1 (D.C. Cir. 2002) (*Atlantic City*)).

meaningful results applying the 25 percent threshold to the Artificial Island Project without modification, and the additional provision is not necessary for the Artificial Island Project to proceed. The Indicated PJM Transmission owners request that the Commission grant this limited request to remove the discretionary threshold provision.

16. PJM seeks rehearing of the deviation measurement provision the Commission directed in the February 2019 Order to address the concerns that there may be no conditions available after the project goes into service to measure voltage angle deviation to identify beneficiaries in instances where a transmission facility resolves all fault conditions. PJM states that, following issuance of the February 2019 Order accepting the Stability Deviation Method and inclusion of the deviation measurement provision, it undertook further analysis and has determined that performing the simulation without the transmission facility may not result in a just and reasonable allocation.⁴⁷ Specifically, PJM states that removing the stability upgrade would cause the model to go unstable and, therefore, fail to provide any meaningful information upon which to base the cost allocation.⁴⁸ PJM seeks rehearing limited to its request to delete, or at least suspend the implementation of, the deviation measurement provision pending further consideration to address this one discrete issue.

17. PJM states that if the Commission determines that additional Tariff language is needed to address those limited situations where the stability upgrade may be robust enough that technically meaningful voltage angle deviations can no longer be observed, it will assist in the development of Tariff language to address the concern.⁴⁹ PJM further posits, based on the further evaluation conducted after the Commission accepted the Stability Deviation Method, that a more reasonable approach can be developed that would produce technically meaningful voltage angle deviations with the stability upgrade included.⁵⁰ PJM states that it believes that such an approach could also resolve the discretionary threshold concerns objected to by the Indicated PJM Transmission Owners in their request for rehearing.⁵¹ As a result, PJM contends that allowing additional time for discussion and resolution of issues related to instances in which a transmission facility resolves all fault conditions may obviate the need for the discretionary threshold provision.

⁴⁸ Id.

⁴⁹ PJM Rehearing Request at 8.

⁵⁰ Id.

⁵¹ Id.

⁴⁷ PJM Rehearing Request at 6.

III. <u>Discussion</u>

A. <u>Rehearing Requests</u>

18. As discussed below, we grant PJM's and the Indicated PJM Transmission Owners' requests for rehearing of the February 2019 Order and find that the Stability Deviation Method, as originally submitted in response to the paper hearing procedures is just and reasonable.

19. The Commission included the deviation measurement provision and the discretionary threshold provision in light of concerns previously raised by PJM and the Indicated PJM Transmission Owners. However, with respect to the deviation measurement provision, PJM now contends that it has undertaken further analysis and has determined that performing the simulation without the transmission facility may not result in a just and reasonable allocation. With respect to the discretionary threshold provision, the Indicated PJM Transmission Owners contend that despite their previous comments, a provision for changing the threshold is not necessary. Accounting for these changed perspectives, we grant rehearing and remove both the deviation measurement provision and the discretionary threshold provision.

20. Under their section 205 filing rights, the PJM Transmission Owners may make a section 205 filing if they believe a further revision to the Tariff is necessary to address stability-related reliability issues that may arise.

B. <u>Compliance Filing</u>

21. On April 1, 2019, PJM submitted, on behalf of the PJM Transmission Owners, revisions to Schedule 12 of the PJM Tariff to include the Stability Deviation Method.⁵² The PJM Transmission Owners state that the compliance filing contains the Stability Deviation Method included in Appendix A of the February 2018 Order.⁵³ The compliance filing includes the deviation measurement provision and the discretionary threshold provision added by the Commission to the Tariff provision provided by PJM in the paper hearing.

22. Notice of the compliance filing was published in the *Federal Register*, 84 Fed. Reg. 13,647 (2019), with interventions and protests due on or before April 22, 2018.

⁵² Schedule 12 (b)(xviii).

 53 The PJM Transmission Owners also propose limited revisions to sections (b)(i)(A)(2)(a) and (b)(ii)(A) of Schedule 12 that are necessary to implement new section (b)(xviii) and to avoid confusion over which cost allocation methodology applies to a particular project.

Motions to intervene were filed by Exelon, American Electric Power Service Corporation, PPL Electric Utilities Corporation, FirstEnergy Service Company, Virginia Electric and Power Company, and American Municipal Power, Inc. No comments were filed.

23. Because we grant the rehearing requests to remove the deviation measurement provision and the discretionary threshold provision, we reject the compliance filing, and direct the PJM Transmission Owners⁵⁴ to submit, within 30 days of the date of this order, a further compliance filing with the Stability Deviation Method, as originally submitted in response to the paper hearing procedures.

The Commission orders:

(A) The requests for rehearing of the February 2019 Order are hereby granted, as discussed in the body of this order.

(B) The PJM Transmission Owner's compliance filing is hereby rejected, as discussed in the body of this order.

(C) The PJM Transmission Owners are directed to submit a compliance filing within 30 days of the date of this order, as discussed in the body of this order.

By the Commission.

(SEAL)

Nathaniel J. Davis, Sr., Deputy Secretary.

⁵⁴ PJM files the proposed revisions to Schedule 12 on behalf of the PJM Transmission Owners.