

155 FERC ¶ 61,088  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

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

Consolidated Edison Company of New York, Inc. v. Docket Nos. EL15-18-001  
PJM Interconnection, L.L.C.

PJM Interconnection, L.L.C. ER14-972-003

PJM Interconnection, L.L.C. ER14-1485-005

Not  
Consolidated

ORDER DENYING REHEARING REQUESTS

(Issued April 22, 2016)

1. On June 18, 2015, the Commission denied a complaint (Complaint), submitted under section 206 of the Federal Power Act (FPA)<sup>1</sup> by Consolidated Edison Company of New York, Inc. (Con Edison),<sup>2</sup> regarding the assignment of costs for two transmission projects that were approved through the PJM Interconnection, L.L.C. (PJM) Regional Transmission Expansion Planning (RTEP) process. PJM submitted the proposed cost responsibility assignments in two underlying cost allocation reports, each of which applied PJM's Order No. 1000-compliant regional cost allocation method to the transmission projects at issue.<sup>3</sup>

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<sup>1</sup> 16 U.S.C. §§ 824e and 825e (2012).

<sup>2</sup> See *Consolidated Edison Company of New York, Inc. v. PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,227 (2015) (June 18, 2015 Order).

<sup>3</sup> See *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, Order No. 1000, FERC Stats. & Regs. ¶ 31,323 (2011) (Order

(continued ...)

2. The June 18, 2015 Order also denied the New York Public Service Commission's (New York Commission), Con Edison's (with the City of New York), and Linden VFT, LLC's (Linden) requests for rehearing of the Commission's order in the underlying cost allocation proceeding,<sup>4</sup> and accepted a May 9, 2014 compliance filing (Compliance Filing) that PJM submitted pursuant to the April 9, 2014 Order. The New York Commission, Con Edison, and Linden have requested rehearing of the June 18, 2015 Order. In this order, we deny rehearing of the June 18, 2015 Order.

3. On September 11, 2015, the Commission accepted in Docket No. ER14-1485-000, the cost responsibility assignments for the Sewaren Project,<sup>5</sup> to become effective on June 11, 2014.<sup>6</sup> Con Edison and Linden have requested rehearing of the Sewaren Order. In this order, we also deny the requests for rehearing of the Sewaren Order, and require a compliance filing.

## I. Background

### A. PJM Cost Allocation Tariff Provisions

4. PJM files cost responsibility assignments for Required Transmission Enhancements that the PJM Board of Directors (PJM Board) approves as part of PJM's RTEP, in accordance with Schedule 12 of the Open Access Transmission Tariff (Tariff)

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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). The Commission approved PJM's regional cost allocation method as part of PJM's Order No. 1000 compliance filing. *See 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 (2015), *order on reh'g and compliance*, 151 FERC ¶ 61,250 (2015).

<sup>4</sup> *PJM Interconnection, L.L.C.*, 147 FERC ¶ 61,028 (2014) (April 9, 2014 Order) (accepting the cost allocation assignments for, among others, the Bergen-Linden Corridor Project in Docket No. ER14-972-000).

<sup>5</sup> The Sewaren Project is identified as project b2276.

<sup>6</sup> *See PJM Interconnection, L.L.C.*, 152 FERC ¶ 61,187 (2015) (Sewaren Order) (accepting modeling revisions to the Sewaren Project cost allocation). The Commission originally approved the cost responsibility assignment for the Sewaren Project in Docket No. ER14-274-000. *See PJM Interconnection, L.L.C.*, Docket No. ER14-274-000 (Jan. 15, 2014) (delegated letter order).

and Schedule 6 of the PJM Operating Agreement.<sup>7</sup> The RTEP 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. Types of reliability projects selected in the RTEP for purposes of cost allocation include Regional Facilities,<sup>8</sup> which as a general matter are AC facilities that are single-circuit 500 kV or double-circuit 345 kV and above, Necessary Lower Voltage Facilities,<sup>9</sup> and Lower Voltage Facilities.<sup>10</sup>

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<sup>7</sup> The PJM Tariff defines Required Transmission Enhancements as “[e]nhancements and expansions of the Transmission System that (1) a Regional 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. Required Transmission Enhancements shall also include enhancements and expansions of facilities in another region or planning authority that meet the definition of transmission facilities pursuant to FERC’s Uniform System of Accounts or have been classified as transmission facilities in a ruling by FERC addressing such facilities constructed pursuant to an Appendix B Agreement cost responsibility for which has been assigned at least in part to PJM pursuant to such Appendix B Agreement.”

<sup>8</sup> 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) (6.1.0).

<sup>9</sup> 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) (Regional Facilities and Necessary Lower Voltage Facilities) (6.1.0).

<sup>10</sup> 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) (6.1.0).

5. The cost allocation method for transmission projects selected in the RTEP for purposes of cost allocation is set forth in Schedule 12 of the PJM Tariff. For Regional Facilities and Necessary Lower Voltage Facilities, 50 percent of the facility's costs is allocated on a region-wide, postage stamp basis according to load-ratio shares 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.<sup>11</sup> For Lower Voltage Facilities, 100 percent of the facility's costs is allocated pursuant to the solution-based DFAX method.<sup>12</sup>

6. As discussed below, the Complaint concerns the application of the PJM Tariff provision implementing the solution-based DFAX method for reliability projects. Specifically, Schedule 12, section (b)(iii)(G) provides:

If Transmission Provider determines in its reasonable engineering judgment that, as a result of applying the provisions of this Section (b)(iii), the DFAX analysis cannot be performed or that the results of such DFAX analysis are *objectively unreasonable*, the Transmission Provider may use an appropriate substitute proxy for the Required Transmission Enhancement in conducting the DFAX analysis. If a proxy is used that is not specified in this Schedule 12, Transmission Provider shall state in a written report (a) the reasons why it

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<sup>11</sup> Prior to using the solution-based DFAX method, PJM used a violation-based DFAX method. The violation-based DFAX method calculated the contributions of load and merchant facilities to flows on the constrained facility that would violate reliability criteria. The solution-based DFAX method evaluates the projected relative use of a new reliability project by load in each zone and withdrawals by merchant transmission facilities, and through this power flow analysis, identifies projected benefits for individual entities in relation to power flows. *See PJM Interconnection, L.L.C.*, 142 FERC ¶ 61,214 at P 416.

<sup>12</sup> One hundred percent of the costs for Required Transmission Enhancements that are included in the RTEP solely to address individual transmission owner Form 715 local planning criteria are allocated to the zones of the individual transmission owners whose Form 715 local planning criteria underlie each project. *See PJM Interconnection, L.L.C.*, 154 FERC ¶ 61,096 (2016) (Planning Criteria Order) (granting rehearing of proposal to assign cost responsibility of projects that are included in the RTEP solely to address transmission owner Form 715 local planning criteria, and are not selected in the RTEP for purposes of cost allocation to the zone of the individual transmission owner whose Form 715 local planning criteria underlies the project *See also PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,172 (2015) (rejecting proposed Tariff changes).

determined the DFAX analysis could not be performed or that the results of the DFAX analysis were objectively unreasonable; (b) why the substitute proxy produced objectively reasonable results; and (3) a recommendation as to what changes, if any, should be considered in conducting the DFAX analysis. (Emphasis added).

## **B. Underlying Cost Allocation Reports and Related Proceedings**

7. In Docket No. ER14-972-000, the Commission accepted the cost responsibility assignments for, among others, the Bergen-Linden Corridor Project.<sup>13</sup> The Bergen-Linden Corridor Project upgrades the facilities over which PJM delivers power to Con Edison in New York City through a wheeling arrangement.<sup>14</sup> The estimated cost of the Bergen-Linden Corridor Project is approximately \$1.2 billion, and under the solution-based DFAX method component of the PJM regional cost allocation method,<sup>15</sup> Con

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<sup>13</sup> *PJM Interconnection, L.L.C.*, 147 FERC ¶ 61,028 (2014) (accepting proposed tariff sheets to become effective on April 10, 2014, subject to a compliance filing). In Docket No. ER15-2562-000, PJM filed revisions to the Tariff sheets due to reconfiguration of the Bergen-Linden Corridor Project. *See PJM Interconnection, L.L.C.*, 155 FERC ¶ 61,091 (2016) (accepting revisions to the Tariff sheets due to reconfiguration of the Bergen-Linden Corridor Project).

<sup>14</sup> The wheeling arrangement consists of a settlement agreement (Settlement Agreement), two transmission service agreements (Service Agreements), and a Joint Operating Agreement Protocol (Operating Protocol) that enables Con Edison to continue to wheel 1,000 MW of power from Con Edison through Public Service Electric and Gas Company's (PSEG) facilities in northern New Jersey for delivery back to Con Edison in New York City (one for 600 MW and another for 400 MW). *See PJM Interconnection, L.L.C.*, 132 FERC ¶ 61,221 (2010) (approving the Settlement Agreement continuing the wheeling arrangement, and the related Service Agreements and Operating Protocol).

<sup>15</sup> As previously noted, as accepted in orders addressing PJM's Order No. 1000 regional compliance filing, PJM's regional cost allocation method allocates 50 percent of the cost of Regional Facilities on a load-ratio share basis and the other 50 percent using the solution-based DFAX method. The Bergen-Linden Corridor Project includes 26 subprojects. Fifteen subprojects are Regional Facilities, and costs are assigned pursuant to PJM's regional cost allocation method. The cost of one subproject is assigned to the PSEG zone, and the costs of the remaining 10 subprojects that are Lower Voltage Facilities are assigned in accordance with the solution-based DFAX method. The Complaint addresses the solution-based DFAX method component of the PJM regional cost allocation method.

Edison was allocated approximately \$629 million of the costs, Linden was allocated approximately \$13 million, Hudson Transmission Partners (Hudson) was allocated approximately \$69 million, and PSEG was allocated approximately \$52 million. The New York Commission, Con Edison, and Linden, among others, protested.

8. In Docket No. ER14-1485-000, the Commission accepted amendments to the cost responsibility assignments for the Sewaren Project, which was approved through the RTEP process for projects to address reliability issues in New Jersey. Linden protested the cost responsibility assignments for the Sewaren Project, as well as the Edison Rebuild Project.<sup>16</sup>

9. In Docket No. EL15-67-000, Linden filed a complaint regarding the assignment of costs for the Bergen-Linden Corridor Project, Sewaren Project, and the Edison Rebuild (Linden Complaint).<sup>17</sup>

## II. Con Edison Complaint

### A. Summary

10. On November 7, 2014, Con Edison filed the Complaint requesting that the Commission set aside the cost responsibility assignments for the Bergen-Linden Corridor Project and Sewaren Project established under the PJM regional cost allocation method. Specifically, Con Edison challenged whether PJM has complied with its Tariff and the review requirement in allocating the costs of these projects. Con Edison argued that the costs assigned to it for the Bergen-Linden Corridor Project are not roughly commensurate with the benefits it will receive. Con Edison argued that the cost responsibility assignments for the Sewaren Project also misalign costs and benefits.

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<sup>16</sup> The Commission also accepted the cost responsibility assignments for the Edison Rebuild Project in Docket No. ER14-274-000. Because the Sewaren Project and the Edison Rebuild Project are lower voltage facilities, 100 percent of the project costs are assigned through the solution-based DFAX method. The estimated cost of the Sewaren Project is approximately \$101 million, and the estimated cost of the Edison Rebuild Project is \$46 million.

<sup>17</sup> See *Linden VFT, LLC v. PJM Interconnection, L.L.C.*, 155 FERC ¶ 61,089 (2016) (Linden Complaint Order) (denying the Linden Complaint).

11. Con Edison contended that PJM has an obligation under the Tariff to ensure that the solution-based DFAX method does not produce objectively unreasonable results and that in such cases, the PJM Tariff requires PJM to redo the solution-based DFAX method analysis using an appropriate substitute proxy. Con Edison argued that a substitute proxy is especially appropriate where the flow-based analysis does not identify beneficiaries of projects to address short-circuit fault currents.<sup>18</sup> Con Edison argued that even if its flows were removed from the line, the short-circuit contingency would have to be resolved. Con Edison also argued that its allocated share of the costs for the Bergen-Linden Corridor Project and Sewaren Project is not consistent with *ex ante* expectations.

12. Con Edison argued that the netting,<sup>19</sup> nesting,<sup>20</sup> and *de minimis* threshold<sup>21</sup> provisions of the Tariff function as cost allocation exemptions and skew the solution-

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<sup>18</sup> Con Edison also contended that the Sewaren Project is needed to rebuild from Superstorm Sandy, harden infrastructure, and resolve short circuit violations in New Jersey.

<sup>19</sup> Under netting, PJM models the transfer of the net of energy flow in the positive and negative directions from generation to all load within an individual transmission zone, and the transfer to the transmission zone. The effect of modeling the transfer to the transmission zone as a whole is to net the positive energy flows through the circuit associated with an individual transmission zone with counter-flows associated with the same transmission zone. For point to point transactions, such as those over DC merchant transmission lines, however, flows are unidirectional and will not be reduced by opposing flows. *See* PJM, Intra-PJM Tariffs, OATT, Schedule 12, § (b)(iii) (DFAX Analysis for Reliability Projects) (6.1.0).

<sup>20</sup> PJM uses nesting in the solution-based DFAX method analysis to establish a reasonable level for the source of the PJM generation serving the zonal load in a Locational Deliverability Area (LDA); i.e., what portion of the zonal load in the LDA is served by PJM generation external to the LDA and what portion is served by generation internal to the LDA. *See* PJM, Intra-PJM Tariffs, OATT, Schedule 12, § (b)(iii) (DFAX Analysis for Reliability Projects) (6.1.0).

<sup>21</sup> Under the *de minimis* threshold, no cost responsibility shall be assigned to a Responsible Zone unless the magnitude of the distribution factor is greater than or equal to one percent. *See* PJM, Intra-PJM Tariffs, OATT, Schedule 12, § (b)(iii) (DFAX Analysis for Reliability Projects) (6.1.0). The threshold was initially set at 0.1 percent, but was modified in 2012 to one percent to address concerns related anomalous allocations to non-adjacent zones. *See PSEG Services. Corp.*, Docket No. ER12-2412-000 (Sept. 19, 2012) (delegated letter order).

based DFAX method results. In arguing that the results of the solution-based DFAX method analysis are objectively unreasonable, Con Edison contended that there is no requirement that the substitute proxy be bound by the nesting, netting, and *de minimis* parameters that produced the objectively unreasonable results.

13. Con Edison stated that its cost responsibility assignment is objectionably unreasonable because the solution-based DFAX method does not identify the Bergen-Linden Corridor Project's short circuit beneficiaries. Con Edison argued that PJM should have realized that the Bergen-Linden Corridor Project has two types of beneficiaries: (1) flow-based beneficiaries that can be identified by solution-based DFAX method analysis; and (2) short circuit beneficiaries that cannot be identified by solution-based DFAX method analysis. Con Edison also argued that PJM states that the Sewaren Project will also address short circuit violations and that PJM should have developed a proxy for both projects that accounted for short circuit beneficiaries.

#### **B. June 18, 2015 Order**

14. The Commission disagreed with Con Edison, the New York Commission, and Linden's argument that the "objectively unreasonable" provision requires PJM to consider whether the cost allocation resulting from the solution-based DFAX method analysis is unreasonable, including whether the solution-based DFAX method analysis properly identifies beneficiaries of projects to address non-flow related reliability violations. The Commission instead found that the provision limits the discretion in reviewing the results of the solution-based DFAX method analysis to its engineering judgment of the flows over the subject facility.

15. The Commission found that the Tariff provision permits PJM to use a substitute proxy only when, in its reasonable engineering judgment, (1) the solution-based DFAX method analysis cannot be performed for the facility in question and (2) the resulting flows are not consistent with the normal expected flow results that an engineer would expect to see, i.e., when the results are "objectively unreasonable." The Commission found that since PJM measured normal flows and was able to complete the solution-based DFAX method analysis, and because Con Edison has provided no evidence the flows were not properly measured, there was no basis upon which to disregard those results.

16. The Commission found that PJM applied its Tariff correctly with respect to the *de minimis* threshold, as well as netting and nesting, and that the Compliance Filing satisfied the requirements of the April 9, 2014 Order. PJM adequately explained that the *de minimis* threshold is applied uniformly as a modeling value, not as a discretionary value. With respect to the nesting provision of the Tariff, the Commission found that the Settlement Agreements implementing the wheeling arrangement establish the zonal treatment for purposes of the solution-based DFAX method analysis in this case. With respect to netting, the Commission accepted PJM's explanation that it models the transfer

to the transmission zone as a whole and not on a bus-by-bus basis, and that the effect of modeling the transfer to the transmission zone as a whole is to net the positive energy flows associated with one customer with negative flow contributed by that same customer. The Commission found that netting is therefore not appropriate unless Con Edison's positive and negative flows offset. On the Bergen-Linden Corridor Project, the Commission recognized that energy flows in one direction for the wheeling arrangement, and therefore no flows offset the cost allocation.

17. The Commission denied Con Edison's motion to lodge PJM Transmission Owners proposed Tariff revisions to allocate all of the costs of certain RTEP projects, which would not otherwise be included in the RTEP but for the fact that they address local transmission owner planning criteria, to the transmission zone of the transmission owner that filed the criteria.<sup>22</sup> The Commission had rejected the PJM Transmission Owners proposal, and denied Con Edison's motion.<sup>23</sup>

### C. Rehearing Requests

18. The New York Commission, Con Edison, and Linden filed requests for rehearing of the June 18, 2015 Order.<sup>24</sup> On rehearing, the parties raise similar concerns. Specifically, the parties contend that the solution-based DFAX method does not result in a cost allocation for Bergen-Linden Corridor Project and Sewaren Project that is roughly commensurate with the benefits received, and that the Commission erred by ignoring evidence supporting their contention. The parties contend that the application of the solution-based DFAX method for the Bergen-Linden Corridor Project and Sewaren Project violates cost causation principles, yielding unjust and unreasonable results. Con Edison contends that PSEG is the primary beneficiary of these projects.<sup>25</sup> Linden

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<sup>22</sup> In addition to other information that the Commission found beyond the scope of the proceeding.

<sup>23</sup> See *PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,172 (rejecting proposed Tariff changes).

<sup>24</sup> PSEG filed an answer to the rehearing requests and Linden filed a responsive answer in opposition to PSEG's request to file an answer.

<sup>25</sup> Con Edison also contends that the Commission erred in denying the motion to lodge the PJM Transmission Owner proposed Tariff revisions to allocate all of the costs of certain RTEP projects, which would not otherwise be included in the RTEP but for the fact that they address local transmission owner planning criteria, to the transmission zone of the transmission owner that filed the criteria.

contends that the evidence supplied by Con Edison and Linden provide numerous examples in which the costs allocated are not roughly commensurate with the benefits, and the Commission failed to examine specific cost allocations, instead allocating costs to entities receiving nonexistent or trivial benefits. In particular, Linden points to evidence that the *de minimis* and netting practices produce unjust and unreasonable results.

19. The parties also contend that the Commission erred by misinterpreting the PJM Tariff, and ignoring arguments relating to the Tariff's interpretation. Specifically, Con Edison contends that the Tariff includes a review requirement that requires PJM to determine whether the results of the solution-based DFAX analysis are objectively unreasonable.<sup>26</sup> Linden contends that the Commission failed to address its arguments that Schedule 6 of the Operating Agreement requires that PJM avoid the imposition of unreasonable costs.<sup>27</sup> Linden contends that Schedule 6 of the Operating Agreement applies to the process by which PJM develops the RTEP.

20. Linden requests rehearing of the June 18, 2015 Order accepting the Compliance Filing. Linden argues that the *de minimis* threshold does not operate as intended, and has not been applied uniformly. Specifically, Linden contends that PJM did not explain whether, by applying the *de minimis* threshold to solution-based DFAX method values, the threshold would eliminate cost responsibility in a non-discriminatory or preferential manner. Linden further maintains that the Commission did not address Linden's arguments that the *de minimis* threshold does not accurately eliminate anomalous results.

### **III. Sewaren Order**

21. In the Sewaren Order, the Commission found that the proposed Tariff revisions reflecting modeling corrections for the cost allocation of the Sewaren Project were consistent with Schedule 12.<sup>28</sup> Con Edison and Linden have sought rehearing of the Sewaren Order. As with their arguments supporting the Complaint, Con Edison and

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<sup>26</sup> Con Edison Rehearing Request at 27 (citing Schedule 12, section (b)(iii)(G)).

<sup>27</sup> Linden Rehearing Request at 25 (citing Operating Agreement, Schedule 6, Section 1.4.(d)(ii)).

<sup>28</sup> In Docket No. ER14-1485-000, PJM sought to correct an error in the modeling used in the calculation of the solution-based DFAX analysis.

Linden contend that the cost responsibility assignments for the Sewaren Project are unjust and unreasonable.<sup>29</sup>

#### **IV. Order Establishing a Technical Conference**

22. By order issued November 24, 2015, the Commission found that the assignment of cost allocation for the proposed Tariff amendments for the revisions to the Bergen-Linden Corridor Project and for the Artificial Island Project had not been shown to be just and reasonable and may be unjust, unreasonable, or unduly discriminatory or preferential.<sup>30</sup> Accordingly, the Commission accepted the proposed Tariff revisions in those proceedings for filing, suspended them for five months, to become effective on April 25, 2016, or an earlier date set forth in a subsequent order, subject to refund, and the outcome of a technical conference.

23. The Commission directed staff to establish a technical conference to explore both whether there is a definable category of reliability projects within PJM for which the solution-based DFAX cost allocation method may not be just and reasonable, such as projects addressing reliability violations that are not related to flow on the planned transmission facility, and whether an alternative just and reasonable *ex ante* cost allocation method could be established for any such category of projects.<sup>31</sup>

##### **A. Comments**

24. Pre-Technical Conference comments were filed by PJM, PJM Transmission Owners, Delaware and Maryland State Agencies,<sup>32</sup> New Jersey State Agencies,<sup>33</sup> Easton,

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<sup>29</sup> The Commission noted that Linden had also filed a complaint regarding the cost allocations for projects for the Sewaren Project, and its arguments are more appropriately addressed in that proceeding.

<sup>30</sup> *PJM Interconnection, L.L.C.*, 153 FERC ¶ 61,245 (2015) (November 2015 Order). Linden filed a request for clarification, or in the alternative, rehearing of the November 2015 Order. In Docket No. ER15-2563-000, PJM filed Tariff revisions for projects included in the RTEP to improve operational performance on bulk electric system facilities in Southern New Jersey. These projects are referred to as the Artificial Island Project.

<sup>31</sup> *Id.* Ordering Paragraph (B).

<sup>32</sup> The Delaware and Maryland State Agencies include the Delaware Commission, the Maryland Commission, and the Delaware Division of Public Advocate and the Maryland Office of Peoples Counsel.

the New York Power Authority (NYPA), Con Edison, Linden, Hudson, and Old Dominion Electric Cooperative (ODEC). Post-Technical Conference comments were filed by PJM, PJM Transmission Owners, Easton, the Delaware Commission, PSEG, Hudson and Neptune Regional Transmission Systems, Inc. (Neptune), NYPA, Dayton, Con Edison, ODEC, Linden, and ITC Mid-Atlantic Development.

25. PJM Transmission Owners, Hudson filed motions to answer the Post Technical Conference comments, and Con Edison filed motions to answer in response.

**1. Comments Supporting Use of Solution-Based DFAX**

26. In order to provide a framework for discussion at the technical conference, PJM provided a matrix outlining the reliability-based drivers of projects included in PJM's RTEP process since its inception in the year 2000, as well as the number of projects within each category. The categories PJM identified include thermal, voltage/reactive, stability, and short-circuit violations to address reliability planning standards. In addition, PJM identified a category of real-time operation concerns to address operational performance violations.<sup>34</sup> Finally, PJM identified storm hardening and end of life/aging infrastructure as other categories that address individual transmission owner planning criteria.<sup>35</sup>

27. PJM states that while the initial nature of a reliability problem may not be related or entirely related to power flows over a planned transmission facility project, over time the solution-based DFAX cost allocation method captures the evolving use of the facility.<sup>36</sup> PJM further recognizes the difficulty of pointing to a single causal element to

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<sup>33</sup> The New Jersey State Agencies include the New Jersey Board and the New Jersey Rate Counsel.

<sup>34</sup> This category of reliability concerns include thermal, voltage/reactive or stability operational violations that occur frequently enough to be operationally unacceptable, but do not rise to the level of reliability criteria violation in the planning analysis.

<sup>35</sup> PJM identified 1268 RTEP projects including 900 projects driven by thermal violations, 300 projects driven by voltage/reactive violations, 50 projects driven by operational performance criteria, 15 projects driven by end of life/aging infrastructure, and 1 project each driven by stability, short-circuit, and storm hardening.

<sup>36</sup> Second Revised Transcript at 10.

address short circuit reliability violations and stability concerns.<sup>37</sup> Instead, PJM states that these concerns are a result of an accumulation of changes over time to the transmission system.<sup>38</sup> PJM comments that for short-circuit and stability concerns, over some period of time the original problem is not all that important.<sup>39</sup> PJM maintains that the solution-based DFAX method is a good indicator over a long period of time and that one of the benefits of the solution based DFAX, method is the users of a facility change over time, and that the solution-based DFAX method is readily calculated year after year so you can measure those benefits as they change.<sup>40</sup>

28. PJM explains this ability to reflect changing system conditions and use over time is one of the primary benefits of the solution-based DFAX method, along with eliminating the necessity of analyzing each violation and driver of a project separately. Specifically, PJM comments that because the solution-based DFAX identifies beneficiaries through use of the facility, the cost allocation does not need to be replicated for solutions that address multiple problems over changing system conditions. PJM further comments that analysis of the solution rather than cost allocation of the individual violations is a significant advantage of the solution-based DFAX method.<sup>41</sup>

29. PJM Transmission Owners argue that the solution-based DFAX method is an objective, neutral, and non-discriminatory cost allocation method. PJM Transmission Owners argue that the matrix PJM submitted has considerable overlap for the descriptions of the violations and that many of the projects were built to address multiple reliability concerns. PJM and PJM Transmission Owners state that the solution-based DFAX cost allocation method avoids the need to parse out the different causes, drivers, or categories of particular transmission enhancements. PJM and PJM Transmission Owners explain that while the cause of a project may sometimes be relevant to the need for the upgrade at the time of construction, it becomes less relevant over the life of the project, especially since load can shift over time.

30. PJM and PJM Transmission Owners assert that a single project may have many drivers and that allocating costs based on use allows for more flexibility as time passes

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<sup>37</sup> *Id.*

<sup>38</sup> *Id.* at 10, 79.

<sup>39</sup> *Id.* at 137-38.

<sup>40</sup> *Id.* at 90.

<sup>41</sup> *Id.* at 139-40.

and enhances PJM's ability to solve multiple problems with one project. PJM Transmission Owners also explain that parties contributing to a short circuit violation can be identified through the facilities with which the circuit breaker is associated. However, PJM Transmission Owners assert, such an approach to identify beneficiaries reverts back to a violation-based DFAX method, which is a one-time calculation that is not based on a repeatable measurement of benefits; rather it is a snap shot of facilities that does not objectively measure benefits across time, and across all types of reliability projects.<sup>42</sup> PJM Transmission Owners argue that the solution-based DFAX method is repeatable and provides for updates annually. PJM Transmission Owners argue that the violation-based DFAX method would result in the loss of the benefits of updating cost responsibility assignments to reflect the use of the facility over time.

31. Similarly, PSEG argues that the solution-based DFAX method is superior to the previous violation-based DFAX approach. PSEG contends the violation-based DFAX method is not suited for analysis of voltage or other issues such as short circuit or stability because those violations would require use of a power flow baseline, which requires proxies or surrogates to analyze. PSEG asserts that selection of proxies would require exercises of engineering judgment. PSEG further contends that solutions to power flow violations can cause non-flow based violations. PSEG asserts that much of the transmission built is regional transmission, which makes the short circuit more than just a local issue. Thus, PSEG argues that the costs of projects to address short circuit violations should be allocated no differently than the costs of projects addressing voltage or thermal violations.

32. PJM Transmission Owners state the solution-based DFAX method is both an *ex ante* cost allocation method and a method that can be applied in a just and reasonable manner to all reliability projects in PJM over the entire useful life of the project. PJM Transmission Owners state that opponents of the solution-based DFAX method propose to define benefits and proposed categories of transmission projects based exclusively on what or who caused the need for the project.<sup>43</sup>

## **2. Comments Opposing Use of Solution-Based DFAX**

33. Con Edison comments that short circuits are not related to energy flows, which are the result of customer demand. Con Edison states that for certain types of projects, like non-flow based projects, neither solution-based nor violation-based DFAX method is appropriate because both are predicated on identifying beneficiaries by measuring flows

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<sup>42</sup> *Id.* at 13.

<sup>43</sup> PJM Transmission Owners Post Tech Comments at 4-6.

on lines. Instead, Con Edison comments that cost should be allocated based on the purpose of the upgrade. Con Edison, Linden, and Hudson all argue that the solution-based DFAX method should not apply to projects that address short-circuit violations. NYPA states solution-based DFAX method is not just and reasonable when applied to reliability projects that resolve short circuit violations because flow on the new transmission element bears no relation to the reliability violations that are resolved. Instead, NYPA states, allocating the cost of all short circuit projects to the local load zone where the violation occurs is a just and reasonable *ex ante* cost allocation for short circuit projects.<sup>44</sup> Hudson and Neptune state that the solution-based DFAX method does not take into consideration cost causation.<sup>45</sup> Con Edison points to PJM Technical Conference comments as evidence that the solution-based DFAX method is limited to identifying benefits after some unspecified passage of time, and that this violates cost causation principles.

34. Hudson and Neptune state that the Merchant Transmission Order<sup>46</sup> found that merchant transmission facilities are responsible for a just and reasonable allocation of costs for new transmission projects.<sup>47</sup> Hudson and Neptune, and NYPA argue that merchant transmission facilities represent static load and it is unduly discriminatory to allocate costs to merchant transmission facilities, because they paid for “but for” upgrades during the interconnection process and do not experience load growth. Additionally, NYPA states merchant transmission facilities are prohibited from increasing their withdrawals from the PJM system without first paying for the “but for” costs of transmission upgrades associated with such withdrawals. Hudson and Neptune state that the solution-based DFAX method requires merchant transmission facilities such as Hudson to pay significant costs, despite the fact that the benefits Hudson and other merchant transmission facilities receive from the facilities are trivial at best.<sup>48</sup> NYPA states that the solution-based DFAX method discriminates against merchant transmission facilities because the solution-based DFAX method analyzes flows during peak periods

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<sup>44</sup> NYPA Post Tech Comments at 1-3.

<sup>45</sup> Hudson and Neptune Post Tech Comments at 7-8.

<sup>46</sup> *PJM Interconnection, L.L.C.*, Opinion No. 503, 129 FERC ¶ 61,161 (2009) (Merchant Transmission Order).

<sup>47</sup> *Id.* at 4-6.

<sup>48</sup> NYPA Post Tech Comments at 7.

to determine flow benefits, and thus cost responsibility assignments, but Hudson and Neptune do not typically operate on the PJM system during periods of peak usage.<sup>49</sup>

35. Several parties, including Delaware and Maryland State Agencies, NYPA, Easton, Hudson and Neptune, Linden, and Con Edison, support allocating 100 percent of the costs of short-circuit projects to the local transmission zone because they state that (i) the projects are meant for local reliability issues, and (ii) solution-based DFAX method does not allocate costs in a manner roughly commensurate with the benefits since the projects are not flow-based.

36. While opposing the solution-based DFAX method for non-flow based projects such as short-circuit and stability violations, some comments support its use for flow-based projects such as thermal or voltage violations. For example, ODEC states that solution-based DFAX produces reasonable cost responsibility assignments for the overwhelming majority of PJM RTEP projects, with a few exceptions, as PJM outlined in its subcategory matrix.<sup>50</sup> ODEC asserts that the Artificial Island Project falls within this subcategory.<sup>51</sup> ODEC states that the PJM matrix itself is evidence that PJM can readily break out RTEP projects by reliability planning drivers. ODEC further states that it is not reasonable to rely on solution-based DFAX for RTEP projects to address stability violations, short circuit violations, or storm hardening.<sup>52</sup> With respect to projects to address operational performance issues, ODEC asserts that if such projects are driven by a non-flow based criterion, such as stability concerns, their costs should be allocated through an alternate cost allocation method. ODEC contends that an alternative cost allocation method can be developed.<sup>53</sup>

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<sup>49</sup> *Id.* at 8-9.

<sup>50</sup> Second Revised Transcript at 55.

<sup>51</sup> *Id.* at 56.

<sup>52</sup> *Id.* at 58-59.

<sup>53</sup> *Id.* at 59.

**V. Discussion****A. Procedural Matters**

37. We will deny the motions to answer the Post Technical Conference comments and responsive pleading because they reargue pleading already filed, or present arguments outside the scope of this proceeding.

**B. June 18, 2015 Order**

38. We deny the requests for rehearing of the June 18, 2015 Order.

39. As an initial matter, we note that the Commission accepted the solution-based DFAX method as part of PJM's Order No. 1000 compliance filing as a just and reasonable method of identifying projected benefits for individual entities, including withdrawals by merchant transmission facilities.<sup>54</sup> The Commission found that under the solution-based DFAX method, entities benefit from a transmission project in proportion to their use of the project. The Court of Appeals for the District of Columbia Circuit affirmed the Commission's adoption of a beneficiary-based cost allocation method.<sup>55</sup> In the underlying cost allocation proceedings, the Commission has found that PJM has correctly applied its Tariff,<sup>56</sup> and the rehearing parties have provided no arguments to the contrary. As discussed below, we find that the solution-based DFAX method has not been shown to be unjust and unreasonable, and we deny rehearing. PJM

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<sup>54</sup> *PJM Interconnection, L.L.C.*, 142 FERC ¶ 61,214, at P 416, *order on reh'g and compliance*, 147 FERC ¶ 61,128, at PP 335 and 342.

<sup>55</sup> *See S.C. Pub. Serv. Auth. v. FERC*, 762 F.3d 41 (D.C. Cir. 2014) (“the Commission’s adoption of a beneficiary-based cost allocation method is a logical extension of the cost causation principle”). *See also FirstEnergy Service Company v. FERC*, 758 F.3d 346, at 355 (D. C. Cir. 2014) (citing *American Transmission Systems, Inc. v. PJM Interconnection, L.L.C.*, 140 FERC ¶ 61,226, at P 26 (2012) (“Even if a new member is not using the system when a particular project was planned or authorized, the new member may nevertheless use and benefit from the new facility in the future”).

<sup>56</sup> *PJM Interconnection, L.L.C.*, 155 FERC ¶ 61,091.

has correctly applied its Tariff, and the cost assignments for the Bergen-Linden Corridor Project and Sewaren Project are just and reasonable.<sup>57</sup>

40. Con Edison, Hudson, and NYPA contend in their Technical Conference comments that a flow-based analysis is not appropriate for non-flow related reliability violations. We disagree. The solution-based DFAX method focuses on the benefits of the facility as measured through use of the facility over time rather than the immediate reliability violation that drove the need for the project. Users of the facilities benefit from the project on an ongoing basis because the presence of the facility ensures reliable delivery of power and alleviates future reliability concerns and reliability violations that could have otherwise caused operational issues. We find convincing PJM's argument that the solution-based DFAX method identifies benefits associated with the use of transmission facilities over time. Specifically, as PJM comments, the initial nature of the problem may not necessarily be related or entirely related to flows, but over time, the evolving use of the facility is well represented by the solution-based DFAX method.<sup>58</sup> We are further persuaded by PJM comments that because the solution-based DFAX method identifies beneficiaries through use of the facility, the solution-based DFAX method does not need to be replicated for solutions that address multiple problems over changing system conditions. We agree with PJM that analysis of the solution rather than cost allocation of the individual violations is a significant advantage of the solution-based DFAX method.<sup>59</sup>

41. We recognize that RTEP projects may have several drivers.<sup>60</sup> In Technical Conference comments, PJM noted the difficulty of pointing to a single causal element for stability and short-circuit types of reliability violations.<sup>61</sup> We find it reasonable that, in PJM, whether a short-circuit or stability violation is the primary driver of a transmission project or the project addresses multiple reliability violations, the solution-based DFAX method allocates costs of a transmission facility that address the reliability violations based on use of the facilities. The ability to reflect changing system conditions and use over time, and thus the changing beneficiaries of a transmission facility, is one of the

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<sup>57</sup> As discussed below, the Sewaren Project is included to address transmission owner Form 715 local planning criteria, and 100 percent of the costs are allocated to the local zone.

<sup>58</sup> Second Revised Transcript at 9-10.

<sup>59</sup> *Id.* at 139-40.

<sup>60</sup> *Id.* at 132.

<sup>61</sup> *Id.* at 10.

primary benefits of the solution-based DFAX method, along with the elimination of the necessity of analyzing each violation and driver of a project separately.

42. In summary, Con Edison's comments would have the cost allocation for planned transmission projects assigned based the initial nature of the reliability violation. Linden's comments support a similar approach. The Commission has recognized the flaws in a violation-based analysis.<sup>62</sup> Specifically, the Commission has recognized that a violation-based analysis cannot identify the causes of multiple constraints and changes in usage and flow direction over time.<sup>63</sup> PJM comments from the Technical Conference, which recount these deficiencies, further note that a violation-based analysis only captures the driver for a project when the project is first identified, does not objectively measure benefits across time, and across all types of reliability projects. Con Edison seeks to characterize PJM comments as suggesting that, because the flows over a planned transmission facility project facility may not be either initially or entirely related to the initial nature of the reliability violation, that the solution-based DFAX method does not identify beneficiaries. Con Edison's arguments miss the point of the solution-based DFAX method analysis. As discussed, it is not the initial nature of the reliability problem, but the identification of beneficiaries through the solution-based DFAX method based on use of the planned transmission facility project that addresses the reliability violation. Because we agree with the Technical Conference comments that support identification of beneficiaries through the solution-based DFAX method, we do not agree with Con Edison's comments.

43. The rehearing parties argue that the Commission erred in not addressing precedent regarding whether cost responsibility assignments for the Bergen-Linden Corridor Project and Sewaren Project are roughly commensurate with the benefits received. The rehearing parties rely on *Wisconsin PSC v. MISO* to support their position.<sup>64</sup> In *Wisconsin PSC v. MISO*, the Commission addressed a *pro rata* allocation of costs that is not related to the identification of specific beneficiaries. *Wisconsin PSC v. MISO* is distinguished from the allocation of costs through the solution-based DFAX method in this proceeding, which identifies specific beneficiaries based on ongoing usage of the facilities. As previously discussed, the solution-based DFAX method allocates the costs of the project based on an

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<sup>62</sup> *PJM Interconnection, L.L.C.*, 142 FERC ¶ 61,214 at P 427 (citing *PJM Interconnection, L.L.C.*, 138 FERC ¶ 61,230 (2012)).

<sup>63</sup> *Id.*

<sup>64</sup> *Pub. Serv. Comm'n of Wisconsin v. Midcontinent Indep. Sys. Operator, Inc.*, 148 FERC ¶ 61,071 (2014), *order on reh'g*, 150 FERC ¶ 61,104 (2105) (*Wisconsin PSC v. MISO*).

analysis of use of the facility. The solution-based DFAX method creates an allocation of costs that is therefore directly related to benefits received. Moreover, the courts have recognized that no cost allocation method can perfectly assign costs to the beneficiaries of a transmission project, particularly in the case of a transmission grid.<sup>65</sup> The Commission has found that where a cost allocation method is accurate in a very high percentage of circumstances to which it applies, then that is a strong indicator that the cost allocation method is just and reasonable.<sup>66</sup> Comments from the Technical Conference broadly support use of the solution-based DFAX method for identifying the beneficiaries of a variety of projects. In fact, comments opposing the solution-based DFAX method can only point to two projects out of over 1,200 identified by PJM as raising concerns. As with the Commission's order denying the Con Edison Complaint, in concurrent orders, we deny the complaints related to those two projects.<sup>67</sup>

44. The rehearing parties further argue that costs are not allocated roughly commensurate with benefits. We disagree. The record shows that both Con Edison and Linden receive substantial benefit from the Bergen-Linden Corridor Project. For example, the record reflects undisputed evidence of the Con Edison wheeling arrangement for 1,000 megawatts (MW) of firm transmission, as well as a significant use of the facilities by Linden. Specifically, Linden maintains contractual firm transmission withdrawal rights of 330 MW. We are not persuaded by Con Edison's and Linden's attempt to minimize their respective contractual entitlements. Moreover, Con Edison acknowledges that there are general reliability benefits of using the Bergen-Linden Corridor Project by virtue of PSEG having a more robust system to support the availability of PJM region-wide resources contemplated by the contract entitlements.

45. The rehearing parties argue that the *de minimis* provision results in an unjust and unreasonable cost allocation because zones with a small load are more likely to receive cost responsibility assignments than zones with a large load. The *de minimis* threshold is

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<sup>65</sup> See *Illinois Commerce Commission*, 576 F.3d 470 at 476-77 (Seventh Cir. 2008) (“[w]e do not suggest that the Commission has to calculate benefits to the last penny, or for that matter to the last million or ten million or perhaps hundred million dollars”). See also *Midwest ISO Transmission Owners v. FERC*, 373 F.3d 1361 at 1369 (D.C. Cir. 2004) (“we have never required a ratemaking agency to allocate costs with exacting precision”).

<sup>66</sup> See *PJM Interconnection, L.L.C.*, 154 FERC ¶ 61,096.

<sup>67</sup> See Linden Complaint Order, 155 FERC ¶ 61,089. See also *Delaware Public Service Commission and Maryland Public Service Commission v. PJM Interconnection, L.L.C.*; 155 FERC ¶ 61,090 (2016).

applied to the distribution factor that is calculated for each entity after performing the solution-based DFAX method analysis, and is based on each zone's percentage flow over the solution facility relative to its load. While the *de minimis* threshold exempts zones with a DFAX value of less than one percent from cost responsibility, we do not find that operation of the *de minimis* threshold to exempt entities whose use of the facility is *de minimis* makes the solution-based DFAX method unjust and unreasonable. Instead, we find the *de minimis* threshold is an efficient and nondiscriminatory mechanism for identifying entities that have relatively little use of the facility relative to their load.

46. Linden argues that the netting provisions, by giving the transmission load zones the benefit of netting, discriminates against merchant transmission facilities. We find unpersuasive Linden's argument that giving the transmission load zones the benefit of netting, unduly discriminates against merchant transmission facilities, because merchant transmission facilities have a single point of withdrawal. In contrast, zones can reduce their calculated flows over a facility through netting because they have multiple points of withdrawal to offset flows. The only change in the netting of flows made by the establishment of the solution-based DFAX method is that flows over the planned transmission facility, rather than the constrained element, are netted.<sup>68</sup> As noted above, Linden's inability to net power flows because it is a merchant transmission facility with a single point of withdrawal is not unduly discriminatory or unreasonable, and realistically reflects how energy flows on an integrated transmission system. We thus find it just and reasonable to allow PJM to model its transfers from generation to all loads within a zone, and because energy flows in one direction for merchant transmission facilities, there are no offsetting flows to be allocated.<sup>69</sup>

47. The rehearing parties contend that the Tariff includes a discretionary cost allocation review requirement, and that the Commission ignored arguments regarding its meaning and erred by misinterpreting the provisions. We disagree. The rehearing requests attempt to reargue the points that were raised in the Complaint, and addressed in the June 18, 2015 Order. The Commission specifically addressed the arguments regarding the relevant Tariff provisions. The Commission found that the provision limits the discretion in reviewing the results of the solution-based DFAX method analysis to

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<sup>68</sup> Schedule 12 (b)(iii)(C)(3) of the PJM Tariff stated, in September 14, 2007, Offer of Settlement: "In the DFAX analysis, when Transmission Provider models a transfer from generation to all load within an individual Zone, Transmission Provider shall model the transfer to the Zone as a whole (not on a bus-by-bus basis)."

<sup>69</sup> See Linden Complaint Order, 155 FERC ¶ 61,089. Comments from the Technical Conference related to allocation of costs for transmission projects are addressed the Linden Complaint Order.

PJM's engineering judgment of the flows over the subject facility. The Commission went on to identify the two instances when PJM may use a substitute proxy in conducting the solution-based DFAX analysis. First, the Commission identified that a substitute proxy would be appropriate when the solution-based DFAX analysis cannot be performed for the facility in question. Second, the Commission identified that a substitute proxy would be appropriate when the resulting flows are not consistent with the normal expected flow results that an engineer would expect to see, i.e., when the results are "objectively unreasonable." The Commission went on to state that the Tariff did not permit discretion to use a substitute proxy whenever PJM believes that the cost allocation resulting from the solution-based DFAX method analysis is unreasonable.<sup>70</sup> The rehearing requests attempt to reargue this interpretation and raise no further persuasive arguments. Specifically, PJM's discretion is limited to its engineering judgment when the flows over the subject facility, not the results of the cost allocation, are objectively unreasonable.

48. Linden also argues that the Commission erred by failing to address arguments that Schedule 6 of the Operating Agreement requires PJM to avoid the imposition of unreasonable costs. Linden's argument is that unreasonable costs were being allocated. But, as discussed above, the solution-based DFAX method did not result in the allocation of unjust or unreasonable costs. Moreover, Linden seeks to insert a cost allocation review into the RTEP planning process of the Operating Agreement. Linden is incorrect. Cost allocation is included in the provisions of Schedule 12 of the Tariff, not Schedule 6 of the Operating Agreement.

49. Linden contends that the Commission erred in accepting the Compliance Filing requirements regarding the *de minimis* provisions. Linden argues that PJM did not support that the *de minimis* threshold would eliminate cost allocations in a non-discriminatory or preferential manner, and that the Commission did not find that the *de minimis* threshold operated to eliminate anomalous results. We disagree. The Commission specifically found that the *de minimis* threshold is applied uniformly as a modeling value, not as a discretionary value. Moreover, the Commission found that PJM

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<sup>70</sup> In addition, the Commission noted that such an interpretation would require PJM to ignore the cost allocation procedures of its Tariff and examine every cost allocation to determine whether it is objectively unreasonable. The Commission found such an interpretation would provide PJM with too much discretion and is at odds with the requirement in Order No. 1000 for public utility transmission providers to participate in regional transmission planning processes with an *ex ante* regional cost allocation method for the cost of new transmission facilities selected in a regional transmission plan for purposes of cost allocation. June 18, 2015 Order, 151 FERC ¶ 61,227 at P 53.

had applied the *de minimis* threshold consistent with the Tariff, and in a consistent manner. The Commission specifically addressed projects referenced by Linden,<sup>71</sup> and accepted PJM's explanations that these examples represented different types of projects.<sup>72</sup> Linden's request on rehearing is a further attempt to reargue its protest, with no further persuasive information.

### C. Sewaren Order

50. Con Edison and Linden have sought rehearing of the Sewaren Order, accepting modeling revisions to the Sewaren Project cost assignment. As discussed above, we have denied rehearing of the Con Edison Complaint, and in a concurrent order denied the Linden Complaint. Linden and Con Edison present no persuasive arguments on rehearing of the Sewaren Order otherwise, and we deny rehearing.

51. As previously noted, the Commission accepted Tariff revisions to assign cost responsibility of projects that are included in the RTEP solely to address transmission owner Form 715 local planning criteria, and are not selected in the RTEP for purposes of cost allocation to the zone of the individual transmission owner whose Form 715 local planning criteria underlies the project.<sup>73</sup> The Commission found that it is just and reasonable for the costs of projects with these characteristics to be allocated entirely to the zone of the individual transmission owner whose Form 715 local planning criteria underlie each project. The Sewaren Project was included in the RTEP to address an

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<sup>71</sup> Linden references subprojects b2436.90 and b2436.91 of the Bergen-Linden Corridor Project.

<sup>72</sup> For the projects referenced by Linden; one project required relocation of a transmission line and any associated equipment for which PJM could calculate a solution-based DFAX method value, and subject to the *de minimis* threshold. The other project involved the relocation of a generating facility for which PJM did not allocate baseline upgrades and the Tariff provisions allow PJM to use a substitute proxy.

<sup>73</sup> *PJM Interconnection, L.L.C.*, 154 FERC ¶ 61,096. Con Edison filed a motion to lodge, in this proceeding, the Commission order accepting these Tariff provisions. PSEG filed comments opposing Con Edison's motion. Because we accepted the Tariff revision to assign cost responsibility of projects that are included in the RTEP solely to address transmission owner Form 715 local planning criteria to the zone of the individual transmission owner, Con Edison's request for rehearing of the June 18, 2015 Order denying the motion to lodge the proposed Tariff revisions is moot.

individual transmission owner's Form 715 local planning criteria.<sup>74</sup> While we deny rehearing of the Sewaren Order because the filing was consistent with the Tariff on file at the time of the filing, the PJM Transmission Owners have revised the Tariff, allocating the costs to the zone of the individual transmission owner whose Form 715 local planning criteria underlies the project and provided no exemption for projects previously included in the RTEP. PJM should make a compliance filing within 30 days of this order to revise the tariff sheets to reflect the cost responsibility assignments for the Sewaren Project, consistent with the current Tariff on file.<sup>75</sup>

The Commission orders:

(A) The requests for rehearing of the June 18, 2015 Order are hereby denied, as discussed in the body of this order.

(B) The requests for rehearing of the Sewaren Order are hereby denied, as discussed in the body of this order.

(C) PJM must file revised Tariff sheets for the Sewaren Project within 30 days of this order, as discussed in the body of this order.

By the Commission. Commissioner LaFleur is dissenting in part with a separate statement attached.

( S E A L )

Nathaniel J. Davis, Sr.,  
Deputy Secretary.

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<sup>74</sup> PSEG, in opposition to Con Edison's motion to lodge, contends that the Sewaren Project is needed to address regional reliability criteria. The criteria test for the Sewaren Project is listed as PSEG criteria. *See* Docket No. ER14-1485-000, March 13, 2014 PJM Filing, Att. A.

<sup>75</sup> *See West Deptford Energy, LLC v. FERC*, 766 F. 3d 10 (D.C. Cir. 2014) (applying the rate on file, absent some type of grandfathering provision).

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Consolidated Edison Company of New York, Inc. v. PJM Interconnection, L.L.C.      Docket Nos. EL15-18-001

PJM Interconnection, L.L.C.      ER14-972-003

PJM Interconnection, L.L.C.      ER14-1485-005

Not  
Consolidated

(Issued April 22, 2016)

LaFLEUR, Commissioner *dissenting in part*:

In companion orders issued today, the Commission denies relief sought in a series of complaints challenging the application of the solution-based distribution factor (DFAX) cost allocation methodology to a limited number of transmission projects approved through the PJM Interconnection, L.L.C. (PJM) Regional Transmission Expansion Plan (RTEP) process.<sup>1</sup> Complainants allege, among other things, that the solution-based DFAX methodology does not result in a just and reasonable cost allocation for these projects because they address reliability violations that are not related to flow on the planned projects, and therefore it is inappropriate to allocate the projects' costs using a flow-based allocation methodology like solution-based DFAX.

I acknowledge that these cases present difficult questions regarding *ex ante* cost allocation methodologies, and I understand the reasoning and considerations that led the Commission to reject the complaints. Determining an appropriate cost allocation methodology for large transmission projects has been among the most complicated issues presented during my time on the Commission.

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<sup>1</sup> *Linden VFT, LLC v. PJM Interconnection, L.L.C.*, 155 FERC ¶ 61,089 (2016); *Delaware Pub. Serv. Comm'n v. PJM Interconnection, L.L.C.*, 155 FERC ¶ 61,090 (2016). In this proceeding, the Commission denies rehearing of its prior order rejecting the complaint filed by Consolidated Edison Company of New York, Inc. (Con Edison). *Consolidated Edison Company of New York, Inc. v. PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,227 (2015).

Nonetheless, I do not agree with the orders' denial of the complaints. Based on the record, particularly as developed through the technical conference, I am persuaded that the complainants have met their burden to establish that the use of solution-based DFAX to allocate the costs of the Bergen-Linden Corridor Project and the Artificial Island Project is unjust and unreasonable.<sup>2</sup>

I strongly support *ex ante* cost allocation in general and PJM's solution-based DFAX cost allocation methodology in particular, as I believe it results in just and reasonable cost allocations in most instances. However, the record in this case clearly establishes that there is a discrete and identifiable set of transmission projects as to which that methodology produces an anomalous result and does not allocate costs in a manner roughly commensurate with benefits. This set of projects includes those developed to address short circuit violations, like the Bergen-Linden Corridor Project, and stability violations, like the Artificial Island Project. These two categories of projects are readily definable,<sup>3</sup> are historically limited in number (and therefore unlikely to impact use of the solution-based DFAX for the vast majority of projects going forward),<sup>4</sup> and address violations unrelated to flows across the planned facility that, in my view, are properly addressed through a more tailored cost allocation methodology.

For these projects, a flow-based methodology alone is insufficient to properly align benefits and costs. Because the solution-based DFAX methodology relies solely on

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<sup>2</sup> Both the Bergen-Linden Corridor and Artificial Island Projects include high-voltage (i.e., 500 kilovolt (kV) or double-circuit 345 kV and above) and lower-voltage components. Pursuant to PJM's existing cost allocation method, 50 percent of the projects' high-voltage costs are allocated through the solution-based DFAX methodology, with the remaining 50 percent allocated on a postage stamp basis. The projects' lower-voltage portions are allocated 100 percent through the solution-based DFAX methodology. Consistent with the PJM tariff and my prior recognition of the regional benefits of high-voltage transmission projects, I would only grant relief for the portion of the projects' costs allocated through the solution-based DFAX methodology.

<sup>3</sup> PJM provided a matrix in preparation for the technical conference that outlines that reliability-based drivers of projects included in its RTEP process since 2000, as well as the number of projects within each category.

<sup>4</sup> As PJM's matrix notes, of the 1,268 RTEP projects approved since 2000, the Bergen-Linden Corridor and Artificial Island Projects are the only projects that address, respectively, short circuit and stability violations. The record shows that short circuit violations are typically addressed through targeted, inexpensive circuit breaker fixes that are allocated to the local zone, and that stability violations are similarly addressed through the generator interconnection process, rather than the RTEP.

the use of the facilities to identify beneficiaries and allocate costs, it fails to adequately identify those entities that benefit from resolution of the very specific underlying reliability issues that triggered the development and selection of these projects, and therefore fails to allocate those entities a corresponding share of the projects' costs. As a result, entities that use the lines may grossly overpay, while entities that benefit from resolution of the underlying violation underpay. I believe the record supports granting the complaints to remedy this flaw.

Had it determined that solution-based DFAX is not just and reasonable in these limited instances, the Commission would be required to establish an alternative cost allocation method to apply to these and other similar projects. In my view, the Commission should direct PJM to include in its tariff a new *ex ante* cost allocation methodology to address stability and short circuit projects like those in dispute here.

The records in these cases largely debate a binary choice between full solution-based DFAX or some other method, such as local zone allocation.<sup>5</sup> However, I do not believe the choice is necessarily that stark. Rather, in my view, a just and reasonable cost allocation methodology should recognize two types of benefits – (1) benefits accruing from resolution of the specific underlying short circuit or stability issue, and (2) benefits accruing from use of the facility over time – and allocate a portion of a project's costs to entities that benefit under each approach. Similar to PJM's existing hybrid methodology for high voltage projects, which recognizes the broad, long-term regional benefits of high voltage transmission as well as the near-term benefits accruing through use of the line, this hybrid methodology would reflect a fairer identification of benefits and allocation of costs.

Therefore, to establish the new hybrid methodology, I believe it would be appropriate to initiate a paper hearing to develop a more complete record regarding (1) what methodology should be used to identify "non-flow based beneficiaries" in short circuit or stability cases, and (2) how to apportion the costs and benefits between that methodology and the solution-based DFAX methodology that identifies beneficiaries based upon their use of the line over time. Upon receipt of that information, the Commission would be able to set the just and reasonable methodology and direct PJM to include the methodology in its tariff to allocate the costs of these and any similar projects going forward.

It is a cliché to observe that hard cases make bad law, but unfortunately I believe that is the result of today's orders. In my view, the orders err by rigidly adhering to the solution-based DFAX methodology in the face of strong record evidence demonstrating

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<sup>5</sup> The relief sought by Con Edison in its complaint is a notable exception, and is, at the highest level of generality, conceptually similar to the relief I discuss here.

its poor fit for the types of projects at issue in these proceedings. Apprehension over the “slippery slope” that will jeopardize *ex ante* cost allocation may invite a “stay the course” approach in the form of solution-based DFAX. However, because the instant cases are discrete and identifiable and have significant rate impacts that are not roughly commensurate with benefits, a failure to grant these complaints may actually undermine a cost allocation methodology that is just and reasonable in the vast majority of instances. I would grant the complaints and develop an expanded record to identify a just and reasonable alternative that better aligns the benefits and costs of the Bergen-Linden Corridor Project, Artificial Island Project, and other similar projects that may arise in the future.

Accordingly, I respectfully dissent in part.

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Cheryl A. LaFleur  
Commissioner