June 8, 2016

VIA ELECTRONIC DELIVERY

Mr. Howard Schneider
Chair, PJM Board of Managers
PJM Interconnection, LLC
P.O. Box 1525
Southeastern, PA 19399-1525

RE: Cost Allocation For Artificial Island Project

Dear Mr. Schneider:

Just over a year ago, the Delaware Public Service Commission (“Delaware PSC”) and the Maryland Public Service Commission (“Maryland PSC”) submitted letters to the PJM Board expressing our commissions’ “significant concerns with the potential cost allocation impacts” of the portfolio of transmission system upgrades that comprise the Artificial Island Project. The Delaware and Maryland PSC were not alone in expressing concerns with the proposed cost allocation for this Project. While we clear that we were not proposing or requesting changes to the cost allocation methodologies that apply to the overwhelming number of transmission projects that are approved through the Regional Transmission Expansion Planning (“RTEP”) process, both the Delaware and Maryland PSC recognized that the Artificial Island Project was unique among RTEP projects, which PJM later confirmed by identifying the Project as the only one of more than 1,200 RTEP projects that was approved to address stability issues. We also recognized that, because the Project is so unique, PJM’s standard cost allocation methodologies, when applied to the Artificial Island Project, were not capable of producing just and reasonable transmission rate outcomes.

The PJM Board appeared to understand and, to some extent, share the Delaware and Maryland PSC’s and others’ concerns about the proposed Artificial Island Project allocation. In adopting the proposed cost allocation for the Artificial Island Project that PJM later filed with the Federal Energy Regulatory Commission (“FERC”), the PJM Board stated:

The Board also recognizes the valid concerns raised by Governor Markell, the Delaware Public Service Commission, the Maryland Public Service Commission, and others regarding the allocation of costs associated with this project. PJM must follow its Tariff. And with regard to the cost allocation provisions applicable to this project, PJM also must respect legal precedent in the Atlantic City case allocating specific rate filing responsibilities between PJM and its
transmission owners. Nonetheless, we recognize that several parties have appropriately questioned the specific allocation in this case. Accordingly, PJM will continue to provide technical analysis and information to affected stakeholders in order to help FERC with its ruling on this particular cost allocation and its cost allocation rules in general.¹

We appreciate PJM conducting, at the Delaware PSC’s request, an analysis of the locational marginal price (“LMP”) benefits of the Artificial Island Project. The results of the analysis were critical in identifying the proportional distribution of benefits from the Artificial Island Project. During the Technical Conference, Mr. Herling confirmed this point, stating that the study conducted by PJM at the Delaware PSC’s request is “analytically a good way of pointing to the buses and the zones that would be impacted by the stability of the plant.” He added that, “The further away you get, the less market efficiency benefit would be realized, and coincidently the less impact there would be of the stability of the plant.” In short, PJM’s “technical analysis and information” provided a realistic assessment of the distribution of benefits from the Artificial Island Project, an assessment that was not capable of being provided by traditional application of a solutions-based DFAX (“SBDFAX”) methodology according to existing PJM Tariff provisions, given the unique nature of the Artificial Island Project.

Unfortunately, the Federal Energy Regulation Commission (“FERC”) appears not to have fully understood the merits and value of the PJM analysis. In an order issued April 22, 2016, FERC denied the Delaware and Maryland PSC’s complaint, which sought only narrow changes to the PJM Tariff to ensure that the allocation of Artificial Island Project costs aligned in a manner that was “roughly commensurate” with the benefits of the Project as revealed through PJM’s analysis. FERC found that the PJM analysis conducted at the Delaware PSC’s request was “flawed” because the study compared a scenario where the Project was not in service and one Salem unit was off-line with a scenario where the Project was in service and all Salem units were on-line. Because the study was run for both hourly and annual scenarios, the assumption as posited was that one Salem unit was off-line for an entire year. That assumption, according to FERC, was the “flaw” in the analysis.

On May 23, 2016, the Delaware PSC, the Maryland PSC, and five other parties jointly filed a Request for Rehearing of the April 22 Order. A copy is attached for your review.

The Request for Rehearing attempts to make clear that PJM’s analysis was not flawed; the assumption of a one-year outage of a Salem unit was merely a worst-case scenario that was not a necessary element of the analysis. Additionally, the total dollar value of the benefits revealed by the PJM analysis is not necessary to evaluate Artificial Island Project benefits. The value of the PJM analysis is that it shows very clearly, based on an analytically sound approach, the proportional distribution of benefits of the Artificial Island Project. These benefits should serve as the basis for allocating Artificial Island Project costs, consistent with FERC and appellate court determinations that costs and benefits must be “roughly commensurate.”

The SBDFAX methodology, in contrast, was not and is not capable of revealing the proportional distribution of benefits of the Project. A key “flaw” that makes application of SBDFAX to the Artificial Island Project unjust and unreasonable is the placement of the

¹ See PJM Board Letter to PJM Members Committee, July 29, 2015.
Chairman Howard Schneider  
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terminus of the Artificial Island Project transmission line. The transmission line could have terminated in a number of locations and provided exactly the same customer benefits that are provided by terminating the line in the Delmarva Zone. Mr. Herling was very clear, during his remarks at the Technical Conference, that if the Artificial Island Project line were to be terminated in any of the neighboring zones, the stability problems at Artificial Island would have been equally resolved. The very objective of the Artificial Island Project – i.e., to address stability problems associated with generation at Artificial Island – makes it unsuitable for application of the flow-based SBDFAX methodology.

The Delaware and Maryland PSC respectfully request that the PJM Board join Delaware Governor Markell and members of the Delaware Congressional delegation in sending a letter to FERC expressing the PJM Board’s support for, or at least its non-opposition to, the Request for Rehearing that was filed by the Delaware and Maryland PSC and six other parties. We understand that the PJM Board perceives it is duty-bound to apply the SBDFAX methodology for purposes of Artificial Island Project cost allocation. However, expressly acknowledging that such an application of SBDFAX does not necessarily produce just and reasonable rates in the context of the Artificial Island Project is not inconsistent with the PJM Board’s obligations. While there is no specified deadline for submitting such a letter to FERC, we request that the PJM Board take this step at its earliest convenience.

Please feel free to contact ourselves or Delaware PSC Executive Director Mr. Robert Howatt and Maryland PSC Senior Commission Advisor Morris Schreim at (410) 767-3556 should you have any questions or need additional information. Thank you.

Sincerely,

Dallas Winslow  
Chairman  
Delaware Public Service Commission

W. Kevin Hughes  
Chairman  
Maryland Public Service Commission

CC:  
Mr. Vincent Duane, Esq., General Counsel, PJM  
Mr. Craig Glazer, Vice President-Federal Government Policy, PJM  
Mr. Steve Herling, Vice President-Planning, PJM  
Mr. Paul McGlynn, Chair, Transmission Expansion Advisory Committee, PJM  
Mr. David Bonar, Delaware Public Advocate
REQUEST FOR REHEARING

On April 22, 2016, the Federal Energy Regulatory Commission (“FERC” or “Commission”) issued its “Order Denying Complaint and Accepting Cost Allocation Report” (“April 22 Order” or “Order”) in the above-referenced proceeding. Pursuant to Rule 713 of the Commission's Rules of Practice and Procedure, the Delaware Public Service Commission (“Delaware PSC”) and the Maryland Public Service Commission (“Maryland PSC”) (together, “Complainants”), and the Delaware Division of Public Advocate, the Maryland’s Office of People’s Counsel, Old Dominion Electric Cooperative (“ODEC”), the Easton Utilities Commission (“Easton”), and the Delaware Municipal Electric Corporation (together,

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1 *PJM Interconnection, L.L.C.*, 155 FERC ¶ 61,090 (2016) (hereinafter “April 22 Order” or “Order”)
“Supporters”), seek rehearing of the April 22 Order. As detailed below, the April 22 Order (1) contains factual findings that are not supported by substantial evidence, and, indeed in many instances are contrary to the record; (2) presents legal conclusions that are not the product of reasoned decision-making; (3) would allocate the costs of the Artificial Island Project in a manner that is contrary to applicable precedent; and (4) if not corrected on rehearing, will produce rate outcomes that are unjust, unreasonable, and unduly discriminatory, in violation of the Federal Power Act.

I. BRIEF PROCEDURAL HISTORY


Also on August 28, 2015, pursuant to Section 206 of the FPA, the Complainants filed a complaint (“Complaint”) contending that the application of a solution-based distribution factor (“Solution-Based DFAX” or “SBDFAX”) method to allocate the costs of the Artificial Island Project was unjust, unreasonable, and unduly discriminatory and preferential. At the time of the Complaint, PJM had proposed to calculate the cost responsibility assignments for the Artificial Island Project pursuant to its standard cost allocation method, including SBDFAX, which the

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Commission had accepted in an earlier order as being generically compliant with Order No. 1000.\(^5\)

The Commission issued an order in response to the August 28, 2015 PJM filing and the Complaint on November 24, 2015.\(^6\) After reciting the concerns raised in the Complaint and in protests of PJM’s August 28, 2015 filing, the November 24 Order states that “the proposed Tariff amendments [submitted by PJM in its August 28, 2015 filing] have not been shown to be just and reasonable, and may be unjust, unreasonable, or unduly discriminatory or preferential.”\(^7\) The Commission suspended the proposed tariff amendments for five months, allowing them to become effective subject to refund. The November 24 Order also directed the Commission’s staff to convene a technical conference to explore two specific topics: (1) 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 (2) whether an alternative just and reasonable *ex ante* cost allocation method could be established for any such category of projects.\(^8\) The Commission staff conducted the Technical Conference on January 12, 2016, and a transcript of the conference was subsequently posted. A number of stakeholders filed post-conference comments.

On April 22, 2016, the Commission denied the Complaint and accepted PJM’s proposed cost responsibility assignments for the Artificial Island Project as set forth in the August 28,

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\(^7\) *See id.*

\(^8\) April 22 Order at P 42 (citing November 24 Order at Ordering Paragraph (B)).
2015 Filing. In a dissenting opinion, Commissioner LaFleur disagreed with the Commission’s denial of the Complaint, finding that the Complainants had met their burden to establish that the use of the SBDFAX method for the Artificial Island Project was unjust and unreasonable. Commissioner LaFleur explained that the SBDFAX methodology, as applied to the Artificial Island Project, “produce[d] an anomalous result and [did] not allocate costs in a manner roughly commensurate with the benefits.” Accordingly, Commissioner LaFleur concluded that the cost allocation approach would result in gross overpayments by the customers that would be saddled with costs under that approach. In order to achieve a just and reasonable cost allocation methodology, Commissioner LaFleur recommended a paper hearing to develop a more complete record to determine (1) the methodology that should be used to identify “non-flow based beneficiaries” in short circuit or stability cases, and (2) the proper means 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.

II. STATEMENT OF ISSUES/SPECIFICATION OF ERRORS

Pursuant to Rule 713(c), the Complainants and Supporters respectfully submit that the April 22 Order is arbitrary, capricious, insufficiently supported, and results in a rate outcome that is unjust, unreasonable, unduly discriminatory, and preferential. The Order errs in accepting the cost responsibility assignments in PJM’s August 28, 2015 Filing and allowing the SBDFAX methodology to be used to determine the cost allocation of the Artificial Island Project. The Complainants and Supporters respectfully submit that:

1. The Order errs by misconstruing the Complainants’ burden. PJM Interconnection, L.L.C., 155 FERC ¶ 61,090 (Apr. 22, 2016); Blumenthal v. FERC, 552 F.3d 875

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9 LaFleur Dissent at p. 2.
10 Id. at 2-3.
11 Id. at 3.
12 18 C.F.R. § 385.713.


III. REQUEST FOR REHEARING

For the reasons set forth below, which are based in large part on the same concerns expressed in Commissioner LaFleur’s dissent, the Complainants and Supporters respectfully submit that the Order was in error in several key respects. A Commission order will be reversed on review if it is arbitrary or capricious, reflects an abuse of discretion, is not otherwise in accordance with law, or is not supported by substantial evidence. In order to satisfy its obligation to engage in reasoned decision-making, the Commission must examine the relevant data and articulate a rational connection between the facts found and the choices made. The Commission must reach its conclusion through decision-making that is “reasoned, principled, and based upon the record.”

The Commission’s acceptance of PJM’s August 28, 2015 Filing and acceptance of the Solution-Based DFAX methodology to allocate the costs of the Artificial Island Project, and its denial of the Complaint, are not the product of reasoned decision-making, and these actions result in a rate outcome that is unjust, unreasonable, unduly discriminatory, and preferential. The

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15 *ExxonMobil Oil v. FERC*, 487 F.3d 945, 953 (D.C. Cir. 2007); *see New York v. FERC*, 535 U.S. 1, 36 (2002); *see also Transmission Access Policy Group v. FERC*, 225 F.3d 667, 705, 716 (D.C. Cir. 2000) (citing *Associated Gas Distributors v. FERC*, 824 F.2d 981, 1021 (D.C. Cir. 1987)).
rate outcome of the Order, if left to stand, will have significant adverse financial impacts on customers in the Delmarva Zone. Accordingly, Complainants and Supporters respectfully submit that rehearing of the April 22 Order is necessary.


Under Section 206 of the FPA, the complainant has the burden to prove that a rate (based upon the application of a methodology that yields that rate) is unjust and unreasonable, not the burden to prove that an entire methodology is universally unjust and unreasonable. The Complainants did not ask the Commission to find that the Solution-Based DFAX method is categorically unjust and unreasonable; they contended only that the Solution-Based DFAX method, as applied to allocate Artificial Island Project costs, would result in unjust, unreasonable, unduly discriminatory, or preferential rates. The Complaint argues that “PJM’s application of solution-based DFAX to the Artificial Island Project results in the Delmarva Zone…being assigned approximately 90 percent of the costs of the Artificial Island Project,” and that the “Solution-Based DFAX, as applied to the Artificial Island Project,” does not produce a cost allocation roughly commensurate with the benefits of the Project. The

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16 In a rehearing request, the Commission can accept new information, such as evidence of substantial cost increases at the Artificial Island Project, “if based on matters not available for consideration by the Commission at the time of the final decision or order.” See Northeast Utilities Serv., 136 FERC ¶ 61,123 at P 10 (Aug. 23, 2011) (citing TransCanada Alaska Pipeline System, 67 FERC ¶ 61,175, at 61,531 (1994)). Here, the April 22 Order denied pleadings filed after the March 9, 2016 deadline for Post-Conference comments, thereby closing the record on March 9. On March 10, 2016, the PJM Transmission Expansion Advisory Committee had a meeting at which it was disclosed in a presentation that, according to Public Service Electric & Gas Company, the costs of the Artificial Island Project elements it had been assigned had increased by a total of $135 million over the “PJM Board approved cost.” These increases result in a near doubling (from $137 million to $272.3 million) of total Project cost. See slides 23 – 30 of the presentation posted at http://www.pjm.com/~/media/committees-groups/committees/teac/20160310/20160310-market-efficiency-update.ashx. Under these circumstances, the Commission has discretion to consider this relevant and material evidence of substantial cost increases.

17 See Blumenthal v. FERC, 552 F.3d 875, 881 (D.C. Cir. 2009) (citing 16 U.S.C. § 824e(b)).

18 Complaint of Delaware Service Commission and Maryland Public Service Commission (filed Aug. 8, 2015), Docket No. EL15-95, at P 3 (emphasis added) (hereinafter “Complaint”).

19 See id. at PP 17, 18, 22, 23, 26, 32, 33 (emphasis added).
Complainants do not take issue with the application of Solution-Based DFAX in other circumstances, such as where flow-based violations drive the need for reliability projects.

The April 22 Order misconstrues and overstates the Complainants’ position. The Order appears to start from the premise that Complainants were contending that the Solution-Based DFAX methodology itself was unjust and unreasonable. The Order’s initial finding was that the Complainants “failed to satisfy [their] burden under FPA section 206 to demonstrate that the solution-based DFAX method is unjust, unreasonable, unduly discriminatory or preferential.”20 In implying that the Complainants had the burden to establish that the Solution-Based DFAX method was unjust, unreasonable, unduly discriminatory, or preferential, the Order fails to reflect reasoned decision-making. In her dissent, Commissioner LaFleur correctly described the Complainants’ burden with respect to the Artificial Island Project. Commissioner LaFleur recognized that “the complainants have met their burden to establish that the use of the solution-based DFAX to allocate costs of . . . the Artificial Island Project is unjust and unreasonable.”21 Because the April 22 Order misconstrues the Complainant’s FPA Section 206 burden with respect to the allocation of costs of the Artificial Island Project, and because the ensuing reasoning in the April 22 Order stems from this mistaken presumption, rehearing is warranted.

2. The April 22 Order is Arbitrary and Capricious and Reflects a Lack of Reasoned Decision-Making Because It Departs, Without Any Explanation, from the November 24 Order.

A Commission order will be reversed on review if it is arbitrary or capricious, reflects an abuse of discretion, is not otherwise in accordance with law, or is not supported by substantial evidence.22 The Commission must examine the relevant data and articulate a rational connection

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20 April 22 Order at P 65.
21 LaFleur Dissent at p. 1-2, Docket EL15-95-000 (emphasis added)
22 South Carolina, 762 F.3d at 55; Sacramento, 616 F.3d at 528.
between the facts found and the choices made. FERC must reach its conclusion through decision-making that is “reasoned, principled, and based upon the record.”

On November 24, 2015, the Commission issued an order to suspend PJM’s proposed tariff revisions and to establish a technical conference. After reciting concerns raised in the Complaint and in the protests of PJM’s August 28, 2015 filing, the November 24 Order concluded that “the proposed Tariff amendments [submitted by PJM in its August 28, 2015 filing] have not been shown to be just and reasonable, and may be unjust, unreasonable, or unduly discriminatory or preferential.” In light of the Commission’s stated concerns regarding PJM’s proposed tariff revisions, the November 24 Order directed the Commission’s staff to convene a technical conference to explore two specific topics: (1) 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 (2) whether an alternative just and reasonable ex ante cost allocation method could be established for any such category of projects. These two specific topics were the exclusive focus of the Technical Conference.

The April 22 Order’s departure from the substantive concerns and two specific directives in the November 24 Order reveals a disconnect in FERC’s reasoning as well as a lack of principled decision-making based upon the record. The November 24 Order expressed concerns

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24 ExxonMobil, 487 F.3d at 953; see New York v. FERC, 535 U.S. at 36; see also Transmission Access Policy Group, 225 F.3d at 705, 716 (citing Associated Gas Distributors, 824 F.2d at 1021).


26 See April 22 Order at P 42 (citing PJM Interconnection, L.L.C., 153 FERC ¶ 61,245 at Ordering Paragraph (B) (Nov. 2015)).

27 In fact, the FERC staff presiding over the Technical Conference precluded discussion that strayed from these two topics. See Second Revised Transcript 7: 18-20 (LeComte) (“In order to efficiently address the Commission’s directives, I will cut off questions that go beyond the scope of the Commission's directives.”)
that the cost allocation at issue may be unjust, unreasonable, unduly discriminatory, or preferential. On that basis, the November 24 Order suspended the tariff filing for five months and ordered the Technical Conference. Yet, the April 22 Order essentially concludes that the application of the SBDFAX cost allocation methodology raises no concerns in this instance. In finding that the SBDFAX method produces a just and reasonable outcome as applied to the Artificial Island Project, the reasoning in the April 22 Order mostly hinges on arguments and information that were available to the Commission when it issued the November 24, 2015 Order. This disconnect in reasoning and unexplained shift in thinking reveals a lack of principled, reasoned decision-making by the Commission.28

In more detail, the November 24 Order recognized that the Solution-Based DFAX cost allocation methodology could, indeed, result in rates that may not be just and reasonable. On that basis, the November 24 Order identified for consideration at the Technical Conference specific factors that could identify when the Solution-Based DFAX cost allocation methodology should not be applied because in such instances it would allocate costs in a manner that is not at least roughly commensurate with benefits. The specific factors identified by the Commission, i.e., a definable category or projects and availability of an ex ante cost allocation for such projects, were either ignored or were misunderstood by the Commission in its April 22 Order. Only Commissioner LaFleur, in her dissent, addressed the factors that were identified in the November 24 Order as supporting application of a cost allocation methodology other than Solution-Based DFAX for the Artificial Island Project.29

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28 While it might be supposed that the Commission’s change in view resulted from argument or information made available for the first time through the Technical Conference or related comments, the substantive determination section of the April 22 Order refers to the Technical Conference and comments only a small handful of times. See April 22 Order at PP 65-74. The linchpin of the decision, as expressed in the April 22 Order, consists of reasoning that the Transmission Owners had presented to the Commission in submittals that preceded the November 24 Order.

29 See LaFleur Dissent at p. 2-4.
The Commission recognized an extremely narrow category of one out of more than 1,200 Regional Transmission Expansion Plan (“RTEP”) projects that could meet the first of the two criteria identified in the November 24 Order. Complainants and Supporters cannot suggest a more limited category for the Commission to address as meeting the first criterion identified in the November 24 Order. Surprisingly, in the April 22 Order the Commission dismissed this criterion without providing any support for its dismissal. The only basis provided by the Commission for this determination is included as a footnote referring to other parallel orders issued addressing complaints regarding Consolidated Edison and Linden. A review of those parallel orders, however, shows absolutely no discussion in the Commission’s determinations that address the criterion of identifying a category of projects for which the Solution-Based DFAX could result in an allocation of costs that is not roughly commensurate with benefits. Only Commissioner LaFleur directly addressed this issue, in supporting her dissent. She states on pages 2 - 3 of her Dissent:

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, are historically limited in number (and therefore unlikely to impact use of the solution-based DFAX for the vast majority of projects going forward), and address violations unrelated to flows across the planned facility.

30 April 22 Order, n. 76 (PJM identified 1,268 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).
31 Id. at P 66.
32 Id. at n. 103: “See Consolidated Edison Company of New York, Inc. v. PJM Interconnection, 155 FERC ¶ 61,088 (2016); see also Linden Complaint Order, 155 FERC ¶ 61,089.”
33 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.
34 As PJM’s matrix notes, of the 1,268 RTEP projects approved since 2000, the Artificial Island Projects is the only project that addresses stability violations. The record shows that all stability violations, except the one that prompted the Artificial Island Project, have been addressed through the generator interconnection process, rather than the RTEP.
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 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.35

Commissioner LaFleur’s conclusion that the Artificial Island Project is, indeed, unique and unprecedented in the history of the RTEP process finds firm footing in the record. PJM’s Mr. Herling confirmed during the Technical Conference that, aside from the stability problems underlying the Artificial Island Project, “every other stability problem that we have ever identified turned up in a generator impact study to the interconnection process. So it's even more skewed toward not turning up in the RTEP.”36

For the second criterion – establishing an *ex ante* cost allocation methodology for projects identified in the category of project – the Commission misunderstood the alternative proposal for reflecting actual benefits, rather than reflecting only changes in energy flow, to be used as a measure of the reasonableness of cost allocation. The suggested alternative was not intended to reflect specific operating conditions or absolute values of benefits but, rather, the relative benefits received by nearly all PJM zones, except one, as a result of the operation of the project to address stability violations. That analysis demonstrates that the proportional distribution of costs under SBDFAX does not roughly square with the benefits. Accordingly, the

35 LaFleur Dissent at p. 2-3.
36 Second Revised Transcript 87: 13-23 (Herling).
April 22 Order is arbitrary and capricious and reflects a lack of reasoned decision-making because it departs, without any explanation, from the November 24 Order.

3. **The Order Errs in Its Assessment of the Benefits of the Artificial Island Project and the Order’s Finding that the Delmarva Zone Will Receive “Significant Benefits” from the Artificial Island Project is Not Supported by Substantial Evidence.**

A Commission order will be reversed on review if it is arbitrary, capricious, reflects an abuse of discretion, or is not supported by substantial evidence – which is defined as relevant evidence a reasonable person might accept as adequate to support a conclusion.37 The courts have held that cost allocations must be “roughly commensurate” with benefits, and this Commission incorporated that principle in its Regional Cost Allocation Principle 1 in Order No. 1000.38 By accepting a cost allocation for the Artificial Island Project with no supporting evidence of the purported benefits of the project to the customers to whom the costs are being allocated, the April 22 Order runs afoul of appellate court holdings and must be reheard.

The April 22 Order addresses only in passing the potential benefits conferred on customers relative to the costs of the Artificial Island Project that application of SBDFAX would allocate to those customers. But the Order errs in evaluating the benefits of the Artificial Island Project, and its finding that the Delmarva Zone will receive significant benefits from the Artificial Island Project is not supported by substantial evidence.

The April 22 Order includes a factual finding that “the Delmarva zone will receive significant benefits associated with its use of the Artificial Island Project.”39 Specifically, after

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37 *South Carolina*, 762 F.3d at 55.
38 The cost of transmission facilities must be allocated to those within the transmission planning region that benefit from those facilities in a manner that is at least roughly commensurate with estimated benefits. See *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, Order No. 1000, 136 FERC ¶ 61,051 at P 622 (2011), order on reh’g, Order No. 1000-A, 139 FERC ¶ 61,132, order on reh’g, Order No. 1000-B, 141 FERC ¶ 61,044 (2012), *aff’d sub nom. South Carolina*, 762 F.3d 41 (D.C. Cir. 2014).
39 April 22 Order at P 72.
briefly noting a production cost analysis of Delaware River-crossing options that PJM performed
during the RTEP evaluation process, the Order states:

As we stated in PJM’s Order No. 1000 compliance order, where a
similar issue was raised, we find that market efficiency analyses
are not the appropriate metric for measuring the benefits of
reliability projects in the PJM region, because such methods do not
capture all of the broad regional benefits. And, as demonstrated by
the results of the solution-based DFAX analysis, the Delmarva
zone will receive significant benefits associated with its use of the
Artificial Island Project.40

Other than this passing reference to the results of PJM’s SBDFAX study, the Order provides no
explanation or evidence, let alone substantial evidence, to support its finding that the Delmarva
Zone will receive benefits from the Artificial Island Project. Rather, the Order simply relies on
the unsurprising fact that energy flows on Delmarva’s transmission system will change once the
Salem-to-Silver Run transmission line is connected to Delmarva’s 230 kV facilities. Other than
the indications of increased power flow on Delmarva Zone facilities, there is nothing in the
record to indicate that these increased flows will translate into actual benefits to the Delmarva
Zone the Artificial Island Project. The only hint of any such benefits came in comments from
PSEG’s representative at the Technical Conference, who claimed (without support) that the
Artificial Island Project would alleviate “chronic” transmission congestion on the Delmarva
Peninsula.41 The Commission appears to have latched onto statements made at the Technical
Conference by PSEG’s representative about congestion on the Delmarva Peninsula. However,
Easton and the Complainants noted in their Post-Conference comments that the claim relied on a
depiction of Delmarva transmission conditions that is outdated and no longer correct.42 The

40 April 22 Order at P 72 (emphasis added).
41 See Second Revised Transcript 44:10 – 45:10 (Khadir) (claiming that a new 230 kV line would improve reliability
for Delmarva customers).
42 See, e.g., Post-Conference Comments of Easton Utilities Commission, at p. 6, n. 5, (filed Mar. 9, 2016), Docket
No. EL15-95-000.
Complainants, for example, showed that: “(1) PJM’s analysis did not indicate at any time a transmission deficiency in the Delmarva Zone; (2) PJM’s analysis did not indicate at any time that any deliverability concerns in the Delmarva Zone contributed in any way to the determined need for the Artificial Island Project; and (3) PJM did not separately determine any NERC violations in the Delmarva Zone that warranted any increase in import capability into the Delmarva Zone.”\textsuperscript{43} The Complainants also demonstrated that:

PSEG appears to overlook the substantial changes to the Delmarva Zone – both in terms of expanded transmission capability and new generation - that have occurred since any portion of the Zone last “price-separated,” which was in the BRA for the 2012-2013 Delivery Year. BRAs have been conducted by PJM for all Delivery Years through and including 2018-2019, and the Delmarva Zone has not price separated for any of those Delivery Years. In fact, the Delmarva Zone as a whole has not price separated for any of the Delivery Years from 2007-2008 to and including 2018-2019. Finally, the limiting facilities for the Delmarva South LDA appear to be the Red Lion-Cedar Creek 230 kV line and the Easton-Trappe Tap 69 kV line. The DPL-South zone begins just south of the Cedar Creek station and is about eight miles south of the proposed tie-in point for the 230 kV line from Artificial Island, which proposes to tap the two 230 kV lines that come into the Cedar Creek station from the north. PSEG’s suggestion that the Delmarva Zone should be saddled with the vast majority of Artificial Island Project costs because substantial capacity price benefits will inure to the Delmarva Zone as a result of the Project is factually incorrect.\textsuperscript{44}

The Order ignores this information.

The Commission’s finding in the April 22 Order rests on an erroneous assumption that increased energy flows over new facilities into a zone (as revealed by the Solution-Based DFAX results) inherently provide significant, guaranteed benefits to that zone. However, there is no evidence to support the conclusion that increased flows yield benefits in all situations, and there is no evidence that increased flows yield benefits in the specific context of the Artificial Island

\textsuperscript{43} Post-Conference Comments of Delaware Public Service Commission, \textit{et al.}, at p. 13.
\textsuperscript{44} See id. at p. 15 (footnote omitted).
Although a cost allocation mechanism built on that view may produce acceptable results when applied to upgrades constructed to resolve thermal or voltage violations, it fails to do so when applied to upgrades that resolve stability and other non-flow based violations.

In fact, the record establishes the opposite — that allocating the costs of stability upgrades in accordance with changes in power flow produces arbitrary and unreasonable results when applied to stability or other non-flow based violations. This is true because, in the context of stability upgrades, there is a fundamental disconnect between the planning driver for the upgrade (i.e., the cause of the generator instability) and the metric (a change in power flow, or “use”) that determines the allocation of the costs. As PJM’s Mr. Herling described this disconnect, “a DFAX calculation that’s based on the use of the solution … is really divorced from the nature of the problem that required the solution.”

The reason Solution-Based DFAX cost allocation produces acceptable results when applied to upgrades that resolve flow-based violations is that, in those cases, there is a clear nexus between the nature of the underlying problem and the use of the upgrade that is built to solve that problem. For thermal criteria violations and voltage issues, the underlying problem is one of insufficient transfer capability between the source of power (real or reactive) and the load being served. The additional source-to-load power flow enabled by the upgrade itself is the solution; the additional flow relieves the thermal overload of existing lines or delivers reactive support where needed. In short, for those upgrades there is a direct nexus between the benefit

45 In fact, there may be instances where increased flows resulting from an upgrade do not provide benefits, or may result in adverse impacts. Indeed, an increase in flow on Delmarva Zone facilities could just as easily be a detriment, if it causes congestion and off-cost operations elsewhere in that zone. The inability of the record to sustain a finding that flows automatically equate to benefits is not entirely surprising when viewed in the context of an upgrade (such as the Artificial Island Project) that is built to address a stability violation.
46 Second Revised Transcript 112:23 – 113:1 (Herling).
47 See Second Revised Transcript 78:5-18 (Herling), 115:17-116:3 (Herling).
of the upgrade (eliminating the violation) and the metric that is used to allocate the upgrade’s costs (the “use” of the upgrade, as measured by the SBDFAX method).

Stability violations, on the other hand, present a very different set of relationships — one in which there no longer is a nexus between the underlying problem and any “use” of the upgrade that is built to resolve that problem. A stability violation results from a lack of strength in the electrical connections between a resource (or cluster of resources) and the surrounding grid. As Mr. Herling pointed out, a stability problem “will have an immediate, physical impact on generating infrastructure” — that is, on the generating unit or units that would become unstable in certain modeled operating conditions. If the generator becomes so unstable as to disconnect from the grid, the impact would be felt most directly in the transmission zone where the generation is located, but the disturbance could propagate further, depending on conditions.

Constructing a new transmission line to provide additional generator outlet capability resolves the underlying stability problem and, in doing so, benefits (at a minimum) the generator and the zone where the generator is located. But particularly where the additional outlet terminates in a different transmission zone, the change in power flows that would appear in a Solution-Based DFAX study have no nexus to the original stability problem or its resolution.

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48 Mr. Herling made the same point, in slightly different terms, during the January 12, 2016 technical conference:

Part of the rationale for solution-based DFAX was that for the vast majority of projects the users of the new facility are very similar to the causers of the initial problem. And if you think about flow from A to B, if you have -- people causing flow from A to B, if there's a violation, when you build a new line it's typically going to be in parallel with A to B and the people who caused the problem from A to B will now use the new facility, so the causers and the users after the fact are largely the same. So for 99 percent of the projects -- whatever the percentage is, I'm just throwing out a number -- we believe, PJM believes, that you're capturing both the causers and the users generally through solution-based DFAX.

Second Revised Transcript 136:6-19 (Herling).


50 Second Revised Transcript 131:7-8 (Herling).

51 See Second Revised Transcript 130:2-23 (Herling).
Rather, the changes in flow that Solution-Based DFAX will measure in such cases are incidental and unrelated to the solution of the original stability problem. In contrast to thermal or voltage violations, where the additional power flow enabled by an upgrade itself is the solution, any change in power flow caused by a stability upgrade plays no role in resolving the underlying problem. What resolves the stability problem is the availability of a greater amount of outlet capability, which in total serves to mitigate the magnitude of angular swing on a generator that would otherwise result from a disturbance elsewhere on the grid. For that reason, where an upgrade that resolves a stability violation is involved, changes in power flow alone may not be the only metric to use for allocating costs to the true beneficiaries of the upgrade in order to produce a just and reasonable result.\footnote{See generally Second Revised Transcript 135:13-137:15 (Herling).}

What this means for the case at hand is that the changes in Delmarva Zone power flows measured by PJM’s SBDFAX study are wholly unrelated either to the cause of the Salem/Hope Creek stability problem or to the resolution of that problem. This conclusion is corroborated by two additional observations established in the record. First, where (as here) the purpose\footnote{The purpose of the AI upgrades was never to address any reliability problems in the Delmarva Zone. The only purpose of the project, and the one PJM’s Board of Managers cited when it approved the project, was to resolve a stability issue that was limiting the ability of the Salem and Hope Creek nuclear units to operate at full real power output when one of the existing 500 kV outlet ties is out of service. See Artificial Island Project Recommendation White Paper (attached as Appendix 2 to the Complaint) at 9-10, 20, available at http://www.pjm.com/~media/committees-groups/committees/teac/postings/artificial-island-project-recommendation.ashx.} of an upgrade is to provide additional outlet capability for clustered generation, there is no single “correct” terminus for the upgrade. At the Technical Conference Mr. Herling commented that given the purpose of the Artificial Island Project, the Salem-Silver Run line could just as easily have terminated in a zone other than the Delmarva Zone. As Mr. Herling explained:

Where that doesn’t quite work is when you have a short circuit problem or a stability problem -- because the users in the case of the solution to Artificial Island, you’re solving the problem by
building one more line, in this case from Artificial Island down on to the Delmarva Peninsula. *You could have also built a line to Philadelphia or you could have built a line to Allentown or you could have built a line to Newark, New Jersey, and you would have solved the stability problem, and the users of that new line would have been noticeably different, okay. None of that use is the entire picture of who caused the problem.*

Clearly, if the Salem/Hope Creek stability problem could have been resolved by a line from Artificial Island to nearly any other location, there is nothing special about the new power flows in the Delmarva Zone that makes those flows the correct (or even *a* correct) basis for allocating Artificial Island Project costs.

Additionally, the basic irrelevance of Solution-Based DFAX results in this context was highlighted by ConEdison’s Mr. Sasson when he noted during the Technical Conference that, according to PJM, “the entire [Bergen-Linden Corridor] project remains necessary with or without the flow” being measured by SBDFAX and used to allocate costs. Like the Artificial Island Project, Bergen-Linden is an upgrade being built to resolve a non-flow based violation, and Mr. Sasson’s point was that the upgrade will resolve that violation regardless of the magnitude of any change in power flows it might cause when completed. The same is true for the Artificial Island Project: the Salem/Hope Creek stability problem will be solved by the availability of the additional generator outlet capability the project will provide, and this will be so even if not a single megawatt-hour flows into the Delmarva Zone when the Salem-to-Silver Run line is energized. In other words, the Artificial Island Project remains necessary for resolving the Salem/Hope Creek stability problem *with or without the additional power flow on Delmarva Zone facilities it may cause.* This fact further reinforces the conclusion that Solution-Based DFAX results are useless for purposes of identifying either the benefits or the

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54 Second Revised Transcript 136:6-137:6 (Herling) (emphasis added).
55 See Second Revised Transcript 21:15-16 (Sasson).
beneficiaries of upgrades that, like the Artificial Island Project, resolve non-flow based violations.

Critically, the Order’s claim that the Delmarva Zone will receive “significant benefits” from the Artificial Island Project suggests that the Commission holds the view that every change in power flow necessarily benefits a zone, regardless of whether that change is intentional, necessary, or even desirable, or whether instead it is simply the laws of physics at work where a new electrical path has been made. Perhaps the Commission believed the erroneous claim by one Technical Conference participant that the Artificial Island Project will alleviate long-standing congestion on the Delmarva Peninsula.56 It is impossible to tell, though, because the April 22 Order never identifies the “significant benefits” the Commission claims the Delmarva Zone will receive; neither does the Order explain how those benefits relate to the Project’s purpose, or show how those benefits are at least roughly commensurate with the costs the Delmarva Zone will bear. There is, in short, no evidence, let alone substantial evidence, that supports the Order’s “significant benefits” finding. By relying on this unsupported finding of

56 The PSEG representative’s reference to “[t]he Delmarva area [being] subject to transmission constraints and congestion” and its reliance on “very old generation” suggests a reference to a situation that affected the Delmarva Peninsula as a whole in the 1990s and early 2000s. See Second Revised Transcript 43:11-16. Prior to 2001, the DPL South voltage limit had frequently isolated as much as 1,100-1,850 MW of load on the Peninsula. Transmission reinforcements undertaken to enhance reactive capability (including the installation of capacitors and static VAR compensators) substantially mitigated the Peninsula-wide voltage limit. See PJM 2001 State of the Market Report, at 28, available at http://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2001/200206-pjmmmusom-2001.pdf). What has remained are small, concentrated load pockets caused by constraints on what are essentially local transmission circuits. Information presented to the Commission in March of this year, for example, shows that the most persistent congestion in the Delmarva Peninsula is on lower voltage facilities (69 kV and 138 kV) in the southern half of the Peninsula. See Figure 6 (Cluster of High Priced Generator and Load Points on the Delmarva Peninsula) in the Commission Staff report titled 2016 Transmission Metrics: Initial Results, presented to the Commission on March 17, 2016 in Docket No. AD15-12-000. PSEG’s representative at the technical conference offered no reason to believe that connecting the Salem-Silver Run line to existing 230 kV facilities at the northernmost end of the Delmarva Peninsula will do anything to alleviate localized congestion on lower-voltage circuits in the southern portion of the Peninsula. Accordingly, there is insufficient information in the record to support a finding by the Commission that the Delmarva Zone will realize any such benefit.
“significant benefits” to the Delmarva Zone, the Order reflects a lack of reasoned decision-making. Its acceptance of PJM’s cost allocation proposal for the Artificial Island Project therefore was arbitrary, capricious, an abuse of discretion and otherwise contrary to law.

In summary, the Order errs in asserting that PJM’s Solution-Based DFAX study demonstrates that the Delmarva Zone will “use” the Artificial Island Project and receive “benefits” from that use. While the study apparently shows some amount of energy flowing onto Delmarva Zone facilities when the Salem-to-Silver Run line is built, those additional flows have nothing to do with either the need for the Project or the efficacy of the Project in resolving the underlying problem. Therefore, in the context of the Artificial Island Project, a change in power flow in the zone where the upgrade terminates is an arbitrary metric for allocating costs, and the allocation of costs that results from use of this metric will not be “commensurate” — roughly or otherwise — with the manner in which the project’s actual and intended benefits are distributed.

4. The Order Errs by Finding That The Analysis of LMP Benefits Conducted by PJM at the Complainants’ Request Was Flawed; To the Contrary, PJM’s Analysis Was Valid, Scalable, and Administrable

The Complainants requested PJM to prepare an analysis of the economic benefits, measured by reductions in LMP, as a result of the Artificial Island Project. Complainants

57 See PJM’s Answer to the Complaint in Docket No. EL15-95-000, at 8-9 (filed October 9, 2015) (emphasis added):

[T]he situation which gave rise to the need for the Artificial Island Project differs from this typical reliability-based upgrade. The identified problem for Artificial Island was a stability problem which impacted the ability to perform maintenance to the connected transmission system from the Salem and Hope Creek nuclear plants under certain conditions. For some time, PJM was addressing this issue through an Operating Protocol that is becoming increasingly complex and difficult to administer. Although the changes in power flows from the Project allow more generation to flow to the Delmarva Peninsula, this was not the driver of the project need. Rather, system stability, it can be argued, provides a larger benefit.

58 See Complaint, EL15-95-000 at Appendix 4.
requested this analysis in order to demonstrate that the cost responsibility assignments calculated under the Solution-Based DFAX method differed significantly from the LMP effects in PJM’s analysis. The April 22 Order found PJM’s study to be “flawed” because it assumed a prolonged outage of a nuclear unit, rather than periodic reductions in the output of the nuclear unit. To the contrary, PJM’s analysis was valid, scalable, and administrable. PJM’s analysis demonstrated the beneficial effect on LMPs that results from increasing power output from the Salem and Hope Creek nuclear units, and shows that such benefits spread to every zone in the PJM Region, save one. Critically, this analysis shows that the reduction in LMPs in the Delmarva Zone, from the increased Salem and Hope Creek output that the Artificial Island Project is intended to produce, is not any greater than would be realized by other zones.

The LMP analysis performed by PJM is reflective of the actual benefits of the Artificial Island Project because the analysis has embedded in its assumptions a system secured to cover contingencies (i.e., the LMP analysis is conducted using actual transmission system limits and power flows). PJM’s analysis, assuming a one-year outage of one Salem unit as compared to the Artificial Island Project outcome, shows that the total annual benefit of the Artificial Island Project would be roughly $169 million. However, this total annual benefit is largely irrelevant to fashioning a just and reasonable cost allocation analysis. The cost allocation analysis depends on how the total annual benefit – of whatever magnitude or outage duration – is shared across the zones in the PJM Region. Importantly, the proportional distribution of the annual benefit is largely unaffected by the size of the benefit or the assumed duration of the generation outage. The proportional distribution of the benefit shows how each zone in PJM would benefit from the enhanced stability of Artificial Island generation, as facilitated by the new transmission outlet

59 April 22 Order at P 72.
60 See Second Revised Transcript 103:13-104:2 (Weishaar).
from that area. This proportional distribution to nearly every other zone in PJM provides a sound basis for allocating the costs of the Artificial Island Project beyond just the Delmarva Zone.\(^6^1\) As to the soundness of the LMP analysis, PJM’s Steve Herling observed that this study provides a “means of identifying certainly the LMP impacts of the stability of the unit.”\(^6^2\) Mr. Herling also stated, with respect to the LMP analysis, that:

> If you look at Artificial Island, the likelihood of one of those units being forced off because of a stability problem is very, very small. So the dollars that would actually be realized over some period of time will be small, *but they are analytically a good way of pointing to the buses and the zones that would be impacted by the stability of the plant.* The further away you get, the less market efficiency benefit would be realized, and coincidently the less impact there would be of the stability of the plant.\(^6^3\)

Consequently, the Order’s finding that the PJM study is “flawed” because it assumed a prolonged outage of a nuclear unit, rather than periodic reductions in the output of the nuclear unit, is simply incorrect. The extent and duration of the outage affects only the total magnitude of the benefits, not the proportional magnitude of the benefits. For cost allocation purposes, the proportional magnitude is what matters and the proportional magnitude is “analytically a good way of pointing to the buses and the zones” that would benefit from the enhanced stability of the nuclear units that is intended to result from the Artificial Island Project. The Order’s finding to the contrary is in error.

The Order also faults the LMP study on the basis that it does not necessarily reflect changes in usage over time. The Order accepts the PJM Transmission Owners’ anecdotal input on changing power flows over time as factual evidence that the costs allocated via application of SBDFAX and any benefits of the Artificial Island Project would align over time.\(^6^4\) This claim

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\(^6^1\) *See* Post-Conference Comments of Delaware Public Service Commission *et al.*, at p. 9-10 (filed Mar. 9, 2016), Docket No. EL15-95-000.

\(^6^2\) Second Revised Transcript 105: 15-17 (Herling).

\(^6^3\) Second Revised Transcript 93:20 – 94:5 (Herling) (emphasis added).

\(^6^4\) *See* April 22 Order at PP 67-68.
was raised by the Transmission Owners for the first time at the Technical Conference. Critically, no factual evidence was presented, either in pre-filed testimony or at the Technical Conference, to demonstrate that load flows would be changing over time to a sufficient degree to require regular updates to a cost allocation outcome in order to confirm that the outcome remains just and reasonable. 65 When asked at the Technical Conference as to whether flows may be significantly different over time, PJM’s Steven Herling responded that flows “may or may not” significantly change. 66 Although Mr. Herling explained that benefits could be measured over time, Mr. Herling did not provide evidence that the recipients of those benefits would change over time. 67 Thus, the Order erred in evaluating the benefits of the Artificial Island Project.

5. The Order Errs By Adopting And Relying On a Finding That No Cost Allocation Method Is Perfect, In Order to Justify Application of the SBDFAX Methodology To Artificial Island Project Costs.

In support of its denial of Complainants’ assertion that the SBDFAX method is unjust, unreasonable, unduly discriminatory, and preferential, the Order invokes appellate case law for the generic proposition that “no cost allocation method can perfectly assign costs to the beneficiaries of a transmission project.” 68 While perfection may not be possible and that benefits need not be calculated to the very last penny, that reality does not absolve FERC of its duty to respect basic and long-standing principles of cost causation. In particular, the Order fails to give effect to the Seventh Circuit’s admonition that the Commission may not rely on a presumption that a transmission project benefits the entire network “to avoid the duty of ‘comparing the costs

65 See Illinois Commerce Commission, v. FERC, 576 F.3d 470, 478 (7th Cir. 2009); see also Midwest ISO, 373 F.3d at 1368.
66 See Second Revised Transcript 91:10-11 (Herling).
67 See generally Second Revised Transcript 135:2-139:7 (Herling and Martin).
68 April 22 Order at P 66 (emphasis added) (citing Illinois Commerce Commission, 576 F.3d at 476-477, and Midwest ISO, 373 F.3d at 1369 (D.C. Cir. 2004)).
assessed against a party to the burdens imposed or benefits drawn by that party.’”\(^{69}\) As the Court explained:

FERC is not authorized to approve a pricing scheme that requires a group of utilities to pay for facilities from which its members derive no benefits, or benefits that are trivial in relation to the costs sought to be shifted to its members. “‘[A]ll approved rates [must] reflect to some degree the costs actually caused by the customer who must pay them.’”\(^{70}\)

In *Illinois Commerce Commission*, the Seventh Circuit remanded the case to FERC, finding that the Commission did not make “a reasoned decision based upon substantial evidence in the record” and, thus, did not satisfy its duty to compare costs assessed to a party with the benefits drawn by or burdens imposed on that party.\(^{71}\) In short, the Seventh Circuit had “no comparable basis on which to affirm the Commission’s decision.”\(^{72}\)

Commissioner LaFleur in her dissent rightly concludes that the record in this case establishes that the application of the Solution-Based DFAX method to a limited and discrete set of transmission projects “produces an anomalous result and does not allocate costs in a manner roughly commensurate with benefits.”\(^{73}\) By failing to allocate to all entities that benefit from the Artificial Island Project a corresponding share of its costs, some consumers that use the lines will be paying a grossly disproportionate share of the costs, while many others that receive material benefits will pay nothing.\(^{74}\) This is the very outcome that the Seventh Circuit found unacceptable in *Illinois Commerce Commission*.

Here, the April 22 Order misapplied appellate case law by ignoring the clear rule of law that all approved rates must reflect the costs actually caused by, or the benefits received by, the

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\(^{69}\) *See Illinois Commerce Commission*, 576 F.3d at 477 (citing *Midwest ISO*, 373 F.3d at 1368).

\(^{70}\) 576 F.3d at 476 (quoting *KN Energy, Inc. v. FERC*, 968 F.2d 1295, 1300 (D.C. Cir. 1992)) (emphasis added).

\(^{71}\) *Illinois Commerce Commission*, 576 F.3d at 478.

\(^{72}\) *Illinois Commerce Commission*, 576 F.3d at 478.

\(^{73}\) *LaFleur Dissent* at p. 2, Docket EL15-95-000; *see Illinois*, 576 F.3d at 477-478.

\(^{74}\) *See LaFleur Dissent* at 2-3.
customer who must pay them.\textsuperscript{75} The April 22 Order errs by falling back on a “nothing’s perfect” rationale as the foundational basis for the Commission’s conclusion that the Complainants did not meet their FPA Section 206 burden. This rationale highlights the Order’s failure to reflect reasoned decision-making.\textsuperscript{76} The Order should have explained why a flow-based cost allocation approach (i.e., SBDFAX) is appropriate for reliability projects that are driven wholly by stability needs. It did not. The Order should have analyzed, or directed PJM to analyze in more detail, the benefits of increased output from the generation located on Artificial Island, which is the primary objective of the Artificial Island Project, to determine which customers in the PJM Region would benefit from the Artificial Island Project. It did not. Rather, the Order relies on the simplistic and demonstrably erroneous notion that, in all circumstances, the results produced by Solution-based DFAX are “close enough.” This falls far short of the reasoned decision-making in which the Commission is required to engage. Rehearing is warranted.

6. In Rejecting Complainants’ Claim That The Solution-Based DFAX Method Yields Arbitrary Results As Applied To The Artificial Island Project, the Order Fails To Reflect Reasoned Decision-Making.

The April 22 Order failed to address Complainants’ contention that the Solution-Based DFAX Method, as applied to a stability-driven project such as the Artificial Island Project, yields arbitrary results. As explained in the Affidavit of John Marczewski:

This gross misalignment of costs and benefits for the Delmarva zone can also be attributed to the somewhat arbitrary nature of where the project selected by PJM connects to the existing system. As evidenced by the multiple proposals received in the Artificial Island solicitation process, there were several ways to solve for the objective of the [Artificial Island] Project, involving several different geographic areas and load zones. If another project concept would have been selected through PJM’s evaluation, and that project connected into a different load zone, then that load zone would likely have seen a disproportionate cost allocation and Delmarva would have been spared. The fact that other zones could have just as easily been


\textsuperscript{76} See ExxonMobil Oil, 487 F.3d at 953.
the "sink" point for the new transmission line underscores the arbitrariness of the cost allocation determinations for the [Artificial Island] Project.\textsuperscript{77}

PJM’s representative at the Technical Conference made this very same point: he stated that “[y]ou could have also built a line to Philadelphia or you could have built a line to Allentown or you could have built a line to Newark, New Jersey, and you would have solved the stability problem, and the users of that new line would have been noticeably different.”\textsuperscript{78}

The April 22 Order cursorily references the Complainants’ contention that other projects could have also addressed Artificial Island stability issues.\textsuperscript{79} However, the Commission does not address the underlying argument: that a different project, of equally sound engineering capability, to solve the same violation, with a different terminus, would result in a substantially different cost allocation under the SBDFAX method.\textsuperscript{80} This truth, by itself, renders the underlying flow-based cost allocation methodology arbitrary and capricious because equally sound solutions\textsuperscript{81} to the same stability violations would have a dramatically different impact on power flows and, thus, under the flow-based SBDFAX approach, would result in widely disparate cost allocation results. The logical consequence of this reality is that the application of SBDFAX to this type of transmission project is arbitrary and capricious. What is needed is a costs allocation approach that reflects the benefits of higher generation output from the nuclear units at Artificial Island, and the only analysis of this impact that is in the record is the PJM LMP

\textsuperscript{77} Complaint, Appendix 7 at P 16; see Post-Conference Comments of Delaware Public Service Commission et al., Docket No. EL15-95-000 (filed Mar. 9, 2016), at p. 14 (quoting Complaint Appendix 7 at P 16).
\textsuperscript{78} Second Revised Transcript 136:25-137:5 (Herling).
\textsuperscript{79} See April 22 Order at P 73.
\textsuperscript{80} The record in this proceeding does not suggest that the Delmarva Zone must be the landing point for the Artificial Island Project or that reliability issues exist with the Delmarva Zone. The Artificial Island Project is driven by the need to deliver excess generation out of the Artificial Island area in order to resolve generation-related stability concerns in that area, not by a need to deliver additional generation into the Delmarva Zone. Post-Conference Comments of Delaware Public Service Commission et al., at p. 14, Docket No. EL15-95-000 (filed Mar. 9, 2016).
\textsuperscript{81} See Artificial Island Project Recommendation White Paper (attached as Appendix 2 to the Complaint) at 9-13, available at \url{http://www.pjm.com/~/media/committees-groups/committees/teac/postings/artificial-island-project-recommendation.ashx}. 
study conducted at the Delaware Commission’s request. That is the only approach – in any of the Artificial Island-related dockets – that is sufficiently insulated from the arbitrariness and capriciousness of the project terminus to be useful for calculating project benefits. The Order’s only response to this truth is that PJM’s selection of the Artificial Island Project, and its terminus in Delaware, was based on sound engineering judgment. But that is beside the point and, even if accepted as true, provides no credible basis for denying the Complainants’ claim. Equally sound engineering judgment could have resulted in the terminus of the line being located anywhere in the relative vicinity of Artificial Island area. Looking only at the terminus of the line – which is a necessary element of the SBDFAX approach – is arbitrary and capricious and anomalous given the range of engineering options for resolving the stability issues at Artificial Island. Commissioner LaFleur in her dissent recognizes that:

[T]he record in this case clearly establishes that there is a discrete and identifiable set of transmission projects as to which [the Solution-based DFAX] methodology produces an anomalous result and does not allocate costs in a manner roughly commensurate with benefits.

The Order errs in ignoring Complainants’ claim that the Solution-Based DFAX method yields arbitrary results in the specific context of the Artificial Island Project. Accordingly, the Order is arbitrary and capricious, and does not reflect reasoned decision-making. Rehearing is warranted.

82 Order at P 73.
84 LaFleur Dissent at p. 2, Docket EL15-95-000.
85 See NorAm Gas Transmission Co. v. FERC, 148 F.3d 1158, 1165 (D.C. Cir. 1998) (citing KN Energy, Inc. v. FERC, 968 F.2d 1295, 1303 (D.C. Cir. 1992)).
7. The Order Misapplies Prior Commission Orders On Transmission Cost Allocation Within The PJM Region And, Thus, Does Not Reflect Reasoned Decision-Making.

A Commission order will be reversed on review if it is arbitrary, capricious, reflects an abuse of discretion, is not otherwise in accordance with law, or is not supported by substantial evidence. While an agency may change its policies and standards, it must justify its actions and departure from past decisions by articulating a reasoned analysis behind the change. An agency’s failure to recognize, address, and distinguish conflicting precedent constitutes “an inexcusable departure from the essential requirement of reasoned decision making.”

For transmission projects, the Commission must approve a cost allocation methodology that yields accurate, non-preferential, non-discriminatory results under the fundamental principle of cost causation to ensure that all rates for all customers are just and reasonable. In this case, the Order states that if 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.” As support, the Order cites the Commission’s order in PJM Interconnection, L.L.C., 154 FERC ¶ 61,096 (Feb, 12, 2016), order granting reh’g, Docket No. ER15-1387-002 (Apr. 11, 2016) (The “February 12 PJM Order”).

Tellingly, the Order identifies no case law supporting this interpretation of the FPA. Contrary to the conclusion in the Order, the FPA explicitly mandates that all rates must be just

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86 South Carolina, 762 F.3d at 55; Sacramento, 616 F.3d at 528.
89 See 18 U.S.C. §§ 824d-824e.
90 April 22 Order at P 66, n. 102 (citing PJM Interconnection, L.L.C., 154 FERC ¶ 61,096) (Feb. 12, 2016), order granting reh’g, Docket No. ER15-1387-002 (Apr. 11, 2016).
91 Rather, the Order cites only to a previous Commission order, which is not definitive or binding because the Commission granted rehearing for purposes of further consideration in the proceeding. See Docket No. ER15-1387-001.
and reasonable, not just most of the rates or a majority of the rates or the rates applicable only to the majority of customers.92 Consequently, the Order’s conclusion that rates that are unjust and unreasonable for some set of customers are permissible under the FPA because the methodology by which they were calculated is accurate most of the time violates FPA Section 206(a)’s mandate that the Commission must not allow any rate found to be unduly discriminatory or preferential to remain in force.93 Ensuring only the cost-causation accuracy and the justness and reasonableness of a majority of the rates mistakenly implies that the Commission can ignore the unjustness and unreasonableness of the remaining rates, thereby violating FPA Section 206(a)’s mandate that the Commission must not allow any rate found to be unduly discriminatory or preferential to remain in force.94

Even if the February 12 PJM Order had any precedential effect, it does not stand for the proposition that a cost allocation method is just and reasonable so long as it is accurate in a high percentage of circumstances. The Commission overlooked a key finding in the February 12 Order that, when properly considered, actually supports Complainants’ arguments and undermines the findings in the April 22 Order. First, the February 12 PJM Order concluded:

[I]t 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… Only if a transmission project is driven solely by an individual transmission owner’s Form 715 local planning criteria is it included in this new category of transmission projects.95

The February 12 PJM Order specifically recognized that there could be a distinct cost allocation methodology for a uniquely tailored set of projects caused by a specific driver (i.e., “driven solely” by a local transmission owner’s application of its Form 715 criteria). Second, the

95 154 FERC ¶ 61,096 at P 13 (emphasis added); cf. April 22 Order at P 66, n. 102.
February 12 PJM Order prescribes the corresponding cost allocation for projects that result from this driver (100% local), specifically endorsing a cost allocation methodology that does not identify or rely on the “changes in usage and flow direction over time.”

The April 22 Order does not reflect reasoned decision-making because it does not address, much less distinguish or provide a solid rationale for departing from, the Commission’s findings in the February 12 PJM Order that “definable” drivers (i.e., Form 715 in that case) require a specific cost allocation outcome - which is exactly the point of the Complaint in this case. The Complainants’ argument that stability-based drivers of the Artificial Island Project warrant a different cost allocation outcome than do reliability projects that result from other drivers is entirely consistent with the Commission’s rationale in the February 12 PJM Order, where it found that the driver of those projects – i.e., Form 715 criteria in that instance – is a critical factor in determining cost allocation outcomes. Accordingly, even if the February 12 PJM Order provided precedent for FERC’s decision here, FERC erred in departing from that precedent without explanation.

Accordingly, the April 22 Order errs by not reflecting reasoned decision-making when applying the Commission’s own orders/precedent to arrive at the conclusion that the Solution-Based DFAX method is just and reasonable.


Section 205 of the Federal Power Act (FPA) provides: “All rates and charges…in connection with the transmission or sale of electric energy subject to the jurisdiction of the Commission, and all rules and regulations affecting or pertaining to such rates or charges shall

96 See April 22 Order at P 69.
be just and reasonable.”97 As to rates found to be “unjust, unreasonable, unduly discriminatory or preferential,” Section 206 of the FPA provides that “the Commission shall determine the just and reasonable rate…to be thereafter observed and in force, and shall fix the same by order.”98 The United States Supreme Court has recently reaffirmed that the Commission has not only the authority but the duty under the FPA to ensure that all rates in connection with the transmission of electric energy are just and reasonable.99

In the context of the allocation of transmission project costs, the Commission’s duty under the FPA encompasses a responsibility to ensure that the costs of transmission projects are “allocated to those who cause the costs to be incurred and reap the resulting benefits.”100 This principle of cost causation requires that all approved rates reflect to some degree the costs actually caused by the customers that must pay them.101 While exact precision need not be achieved, FERC may not approve a cost allocation to customers that is materially out of line with the burdens imposed or benefits received by those customers.102 To ensure just and reasonable rates, FERC is not bound to any one ratemaking formula, but must choose a method that appropriately balances investor and consumer interests103 and does not result in preferential or discriminatory rates.104 With respect to transmission project costs, FERC must approve a cost

97 16 U.S.C. § 824d(a) (emphasis added).
98 16 U.S.C. § 824e(a). “The ‘just and reasonable’ lodestar is no loftier under section 206 than under section 205, and it is only FERC who is required to shoulder the “dual burden” when it institutes a section 206 proceeding.” FirstEnergy Serv. v. FERC, 758 F.3d 346, 353 (D.C. Cir. 2014).
100 South Carolina Pub. Serv. Auth. v. FERC, 762 F.3d 41, 84-85 (D.C. Cir. 2014) (citing Nat'l Ass'n of Regulatory Util. Comm'rs v. FERC, 475 F.3d 1277, 1285 (D.C. Cir. 2007)).
101 Midwest ISO, 373 F.3d at 1368 (citing KN Energy, Inc. v. FERC, 968 F.2d 1295, 1300 (D.C. Cir. 1992)).
102 See Midwest ISO, 373 F.3d at 1368.
103 Morgan Stanley v. Pub. Util. Dist. No. 1, 554 U.S. 527, 532 (2008); see also Cent. Hudson Gas & Elec. v. FERC, 783 F.3d 92, 111 (2nd Cir. 2015) (the FPA requires FERC to balance competing interests); see also New England Powr Generators Ass’n v. FERC, 757 F.3d 283, 293 (D.C. Cir. 2014).
allocation methodology that yields accurate, non-preferential, non-discriminatory results under the fundamental principle of cost causation to ensure that all rates for all customers are just and reasonable.

Under Schedule 12 of the PJM Tariff, and as affirmed by the April 12 Order, the applicable cost allocation method depends on the nature of a particular transmission project as defined by the purpose or “driver” of the project (e.g., economics, reliability, Form 715, 105 and public policy). The driver of the project determines the category into which the transmission project is placed, and various cost allocation methodologies then come into play depending on the category. Examining both the “drivers” of a project and the beneficiaries of a project are necessary steps in the allocation of transmission projects originating in PJM; these steps are necessary in order to ensure that costs are allocated properly.

Here, the April 22 Order errs by finding that a generic cost allocation approach is just and reasonable for allocating the costs of the Artificial Island Project, while dismissing record evidence that the “driver” of the Artificial Island Project clearly places the Project in a category for which no existing cost allocation methodology is capable of producing just and reasonable rates. In this case, a “one size fits all” approach does not ensure just and reasonable rates. The routinely applied Solution-Based DFAX method for transmission cost allocation depends on flow-based benefits and drivers; the Artificial Island Project is materially different – it was not caused by, and does not produce benefits associated with, flows on the transmission system.

The Order’s citation to appellate court decisions provide no cover. Appellate courts have not ruled on the specific use of the Solution-Based DFAX method and have clearly not affirmed

105 The local transmission owner planning criteria are filed with the Commission as part of FERC Form No. 715 and posted on the PJM website. 151 FERC ¶ 61,172 at n. 4 (citing PJM Transmission Owners Transmittal at 3. See PJM, Intra-PJM Tariffs, Operating Agreement, Schedule 6, § 1.2(e) (Conformity with NERC and Other Applicable Reliability Criteria) (2.0.0)).
any prior rulings that Solution-Based DFAX is appropriate across-the-board and in all
circumstances, including for transmission projects that are driven by stability concerns. The
April 22 Order notes, for example, that a D.C. Circuit court has approved FERC’s use of a
beneficiary-based cost allocation method as a logical extension to the principles of cost
causation.106 The Court explained that the cost causation principle is a “basic tenet, which we
have repeatedly embraced,” as costs must be allocated to those who cause the costs and reap the
benefits.107 However, a beneficiary-based cost allocation method is theoretically sound and
supported by the law, so long as the application of that method results in the allocation of costs
to those who actually cause the costs and reap the benefits, thereby yielding a rate outcome that
is just and reasonable.108 When a beneficiary-based cost allocation is no longer a “logical
extension of the cost causation principle,” it is no longer supported by law.109 Here, reliance on
an SBDFAX approach is not a logical extension of the cost causation principle. There is no
dispute that the Artificial Island Project was not driven by flow-based considerations; it was
driven by stability considerations. There is also no dispute that the flows into an area are not the
drivers of the Artificial Island Project. Rather, the Project is driven by a need to enhance flows
out of a particular area – Artificial Island. Because the April 22 Order approves a cost allocation
for the Artificial Island Project that is not a “logical extension” of the cost-causation principle,
the April 22 Order’s reliance on the appellate court precedent to which it cites is misplaced and
the conclusions do not reflect reasoned decision-making.

In a footnote, the April 22 Order also cites to FirstEnergy Serv. v. FERC, 758 F.3d 346
(D.C. 2014) to support the observation that, under the Solution-Based DFAX Method, “entities

106 April 22 Order at P 65, n. 100 (citing South Carolina, 762 F.3d at 85).
107 South Carolina, 762 F.3d at 85.
108 See South Carolina, 762 F.3d at 85; see 16 U.S.C. §§ 824d(a), 824e(a).
109 See South Carolina, 762 F.3d at 85; see 16 U.S.C. §§ 824d(a), 824e(a).
benefit from a transmission project in proportion to their use of the project.”\footnote{April 22 Order at P 65, n. 100 (citing FirstEnergy, 758 F.3d at 353).} This decision does not support the observation for which it is cited. The FirstEnergy court did not expressly claim that any particular beneficiary-based cost allocation is necessarily just and reasonable, or that the costs and benefits in that particular case were sufficiently aligned. Rather, the FirstEnergy court concluded that FERC specifically did not reach the issue of whether the costs are commensurate with the benefits:

However, the Seventh Circuit rejected Schedule 12 on a finding that FERC had not demonstrated that the benefits from transmission projects were "at least roughly commensurate with ... utilities' share of total electricity sales." \emph{Ill. Commerce Comm'n}, 576 F.3d at 477. Although FirstEnergy might have argued before us that the costs and benefits of PJM's regional projects are not commensurate for ATSI, it did not do so and thus \textit{we do not reach that issue}.\footnote{FirstEnergy, 758 F.3d at 353 (citing Illinois Commerce Commission, 576 F.3d at 477).}

Accordingly, the April 22 Order errs in relying on FirstEnergy to support its contention that entities benefit from a transmission project in proportion to their use of the project. The FirstEnergy opinion does not support that proposition.

Furthermore, under appellate precedent, costs and benefits must be reasonably aligned.\footnote{FirstEnergy, 758 F.3d at 353 (citing Illinois Commerce Commission, 576 F.3d at 477).} In the April 22 Order, the Commission found that, “as demonstrated by the results of the solution-based DFAX analysis, the Delmarva zone will receive significant benefits associated with its use of the Artificial Island Project.”\footnote{April 22 Order at P 72.} The record is devoid of evidence to support this conclusion, however. Rather, as discussed more fully above, the Commission simply \textit{presumes} that a change in energy flow is equivalent to “benefit” in all cases. But the cases the Order cites as support provide no foundation for equating “energy flows” and benefits; and, even if the cases could be read as doing so, there is ample proof that the equation breaks down when applied to
upgrades – such as the Artificial Island Project - that resolve reliability violations that are driven by non-flow based considerations, such as stability. The finding that a change in energy flow necessarily produces benefits has no basis in the record. Accordingly, the April 22 Order reaches its conclusion not through reasoned decision-making, but through circular logic, finding that significant benefits depend on energy flows, and only energy flows can be used to measure significant benefits. By doing so, the April 22 Order avoids taking the steps that are necessary under appellate court precedent. Therefore, the April 22 Order erred in applying appellate court precedent to find only that energy flows provide for a valid cost allocation.

9. **The Order Errs By Failing to Allocate Any Portion of the Costs of the Artificial Island Project to the Generating Units that Directly Benefit From the Project.**

Complainants and certain Supporters argued that the Commission should consider directing PJM to allocate a portion of the costs of the Artificial Island Project to the owners of the generating units located in Artificial Island (i.e., the Hope Creek and Salem nuclear generating units). Among the reasons cited for doing so are: (1) the Artificial Island Project is being built to resolve generator stability problems that PJM’s models indicate may affect those generating units during certain operating conditions; (2) one of the principal purposes of the Artificial Island Project is to enable the owners of Salem and Hope Creek to generate greater amounts of real power from those units for sale into the PJM day-ahead and real-time energy markets, which is presumably a financially desirable outcome for those owners; and (3) in PJM, transmission upgrades to resolve generator stability issues typically are handled through the generator interconnection process (rather than through the RTEP), which means an
Interconnection Customer typically is assigned some or all of the cost of eliminating stability problems caused by the connection of its resource.\textsuperscript{114}

In the Order, the Commission states that it “find[s] unpersuasive Complainants’ suggestions that a portion of the costs for the Artificial Island Project should be allocated to the generators that are directly benefiting from the increased output of the new facility.”\textsuperscript{115} The Order cites two reasons for rejecting the allocation of any part of the Artificial Island Project’s costs to the benefited generators. The first reason is that construction of the Artificial Island Project is necessary for load to receive reliable service, so it is appropriate to have load pay the entirety of the cost.\textsuperscript{116} The second reason is that, according to the Order, PJM’s selection of the Artificial Island Project resulted from “reasoned and sound engineering judgment” concerning the options for resolving the Salem/Hope Creek stability problem, and that “[h]aving followed its process for the selection of the Artificial Island Project, we do not find that the assignment of costs for the Artificial Island Project [is] unjust and unreasonable.”\textsuperscript{117} Given the facts in the record regarding the Artificial Island Project, however, neither of these reasons justifies the Commission’s failure to require that a portion of Artificial Island Project costs be borne by the benefited generators.

a. \textbf{That the Artificial Island Project Would Promote Reliable Service to Load is Not a Reason to Absolve the Responsible Generators from Bearing a Share of Artificial Island Project Cost Responsibility.}

In explaining its first reason for rejecting arguments that a share of Artificial Island Project costs should be allocated to the benefited generators, the Commission states as follows:

\textsuperscript{114} See, e.g., Post-Technical Conference Comments on Behalf of the Easton Utilities Commission, at p. 6-8 (filed Mar. 9, 2016); \textit{See also} Second Revised Transcript, 102:23 – 103:12 (Weishaar).
\textsuperscript{115} Id.
\textsuperscript{116} Id. Order at P 73.
\textsuperscript{117} Id.
Under the solution-based DFAX method, cost allocation for reliability projects, such as Artificial Island, is allocated to load based on the projected use of the facility. PJM comments that while stability is a function of the relationship between generators and the strength of the transmission system, the function of the generators is to serve load. The assignment of costs for the Artificial Island Project resulted from a reliability concern that PJM needed to resolve to provide load reliable service. Therefore, allocating costs of transmission projects to serve load is appropriate.\(^{118}\)

The notion that load should always bear the cost of upgrades needed to ensure reliable service, including upgrades necessitated by or that benefit only particular generators, is flawed. Accepting the truism that “function of … generators is to serve load,” the Commission’s reasoning would preclude the direct assignment to interconnection customers of the cost of any facility or upgrade that would not be needed but for the interconnection of a particular generator. Yet, the Commission routinely allows an RTO or ISO to impose the costs of such facilities on a customer seeking to interconnect a new generator or to increase the capability of an existing generator. It does so based on the view that directly assigning the cost to the benefited generator provides more efficient price signals and a more equitable allocation of costs than allocating the costs to load.\(^{119}\)

Here, the case is even clearer for directly assigning a portion of the Artificial Island Project costs to the benefited generators. For example, as compared to a network upgrade that resolves a thermal upgrade identified in an interconnection impact study, the entities that will benefit most directly from the Artificial Island Project can be identified with complete precision. The record here shows that the purpose of the Artificial Island Project is to allow Salem and

\(^{118}\) Order at P 73.  
\(^{119}\) See Order No. 1000 at P 695. The Commission’s comment is in the context of a comparison between the direct assignment of upgrade costs to an interconnection customer (who also would receive transmission rights in return) versus a “crediting” policy in which the interconnection customer pays for an upgrade but the transmission provider credits those payments against transmission service charges. The effect of the latter is to assign the upgrade costs to load, which effectively funds the credits through the payment of transmission service charges.
Hope Creek to “[g]enerate maximum power … without a minimum MVAR requirement,” as well as to resolve stability issues that could affect those units during a given set of operating conditions. Allocating the entirety of Artificial Island Project costs to load rather than assigning a fair share of the costs to the benefited generators is both inequitable and inefficient, because it fails to assign to the owners of Salem and Hope Creek a set of costs directly attributable to the operation of those units. Any benefits that load might be claimed to receive from the Artificial Island Project are wholly incidental and unrelated to the purposes of the project, as specified in the recommendation the PJM Board accepted in authorizing the project’s construction.

The Order appears to assume that the foregoing principles simply do not apply to the Artificial Island Project because “[t]he generators involved were built well before the Commission adopted standards for generator interconnection.” That response has matters backward. The rules adopted in Order No. 2003 are the product of long-standing principles of cost causation and cost allocation, not the other way around. That Salem and Hope Creek were placed in service before Order No. 2003 is no reason not to apply those long-standing principles to the new set of generator interconnection-related costs of the Artificial Island Project. Moreover, there is evidence in the record that the difficulty of applying the Artificial Island Operating Guide — also cited as a factor necessitating construction of the Artificial Island Project — was exacerbated by each of the incremental capability uprates at Salem and Hope

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120 See Artificial Island Project Recommendation White Paper, at p. 9 (July 29, 2015).
121 Id. at 9, 35-38.
Creek that were undertaken by the owners of those stations after PJM assumed its role as the independent regional operator.\textsuperscript{123} It is less clear in the record why, given that PJM treated each of those uprates as a new interconnection service request by the relevant Salem and Hope Creek generator owner(s), PJM did not also hold the owners responsible for the network upgrades needed to reliably integrate the increased output and eliminate the need for the Artificial Island Operating Guide – network upgrades that most likely would have consisted of the Artificial Island Project elements for which the cost allocation is here at issue. Assigning those costs to the generator owners would have been consistent with the long-standing cost causation and cost allocation principles that eventually were made part of the Commission’s regulations in Order No. 2003. Had PJM done so at the time, the instant dispute regarding the allocation of Artificial Island Project costs might never have arisen.

b. PJM’s Adherence to “Its Process” Does Not Render Just and Reasonable an Otherwise Impermissible Cost Allocation Result.

The Order explains the Commission’s second reason for refusing to assign any Artificial Island Project costs to the owners of Salem and Hope Creek as follows:

While commenters state that other projects could have also addressed the Artificial Island Area stability, PJM has stated that

\textsuperscript{123} Easton’s Post-Conference Comments explain that, in November 2000, PSEG Nuclear (the operator of Salem Units 1 and 2) requested NRC authorization to increase the licensed power levels for those units. The NRC requested additional information about, among other things, the effect of the increase in power level on grid operations. PSEG Nuclear responded that PJM had performed a stability analysis of the increase and that, for one of the cases evaluated, “the operating parameters for PSEG Nuclear will require minor changes to the minimum MVAR limits due to the increase in power level.” PSEG Nuclear also stated that the Artificial Island Operating Guide “will be revised to incorporate these changes as part of the implementation plan for the increased power level.” See Post-Technical Conference Comments on Behalf of the Easton Utilities Commission, at p. 6-8 (filed Mar. 9, 2016). The exchange indicates that: (i) the Salem power uprate had been found by PJM to have an adverse impact on the stability of the AI generation, which necessitated a change in the Artificial Island Operating Guide; (ii) now, years later, PJM contends that the Artificial Island Operating Guide has become too difficult to implement, and that an upgrade (the Artificial Island Project) must be built; and (iii) “rather than assigning financial responsibility to the interconnecting entities whose actions gave rise to the stability problem, PJM proposes to apply a cost allocation method that would assign nearly all the cost, not to the owners of the clustered generation, but to the PJM Transmission Zone with the misfortune of being the proposed terminus of the upgrade: the Delmarva Zone.” Id. Easton points to this history as an additional justification for assigning a portion of the Artificial Island Project costs directly to the responsible generators.
PJM’s selection of the Artificial Island Project was based upon reasoned and sound engineering judgment which offered the more efficient or cost effective solution to address the identified system needs. Having followed its process for the selection of the Artificial Island Project, we do not find that the assignment of costs for the Artificial Island Project unjust and unreasonable.\textsuperscript{124}

This reason, like the first, fails as a justification for not allocating some portion of Artificial Island Project costs to the responsible generators. The assumption implicit in the Order is that, as long as PJM followed “its process” for evaluating project alternatives, it is just and reasonable in all cases to allocate the costs to load using the method set forth in Schedule 12 of the PJM Tariff. However, rigid adherence to this assumption without sufficient regard to its outcome does not ensure that the assignment of costs (and thus the ensuing rates) will be just and reasonable.\textsuperscript{125}

The Commission’s reliance on PJM’s adherence to its project evaluation process is inadequate and not supported by reasoned decision-making.\textsuperscript{126} There is no reason why following the process for ranking project alternatives based on their efficiency or cost-effectiveness would (or should) have any bearing on how the costs of the selected option will be allocated. Even if it were assumed that PJM followed to the letter “its process” for evaluating project alternatives, the question of how the costs of the chosen alternative will be allocated remains. The two matters are wholly unrelated. In fact, PJM’s adherence to its process for evaluating project alternatives has no relevance to whether any portion of the costs should be assigned to the generators that created the need for the project and that will benefit most directly and tangibly from its construction.

\textsuperscript{124} Order at P 73.
\textsuperscript{125} See 16 U.S.C. §§ 824d-824e.
\textsuperscript{126} See ExxonMobil, 487 F.3d at 953.
To the extent PJM’s processes have a bearing on how Artificial Island Project costs should be allocated, the pertinent process is the manner in which PJM has handled stability-related upgrades in the past. PJM has stated that the reason Artificial Island presents a “case of first impression” for cost allocation purposes is that all other stability-related upgrades were handled as part of the interconnection process. It therefore may be assumed that, in accordance with Part IV of the PJM Tariff, those upgrades were paid for by the generator presenting the stability problem. Accordingly, the Order fails to provide a reasoned basis for permitting PJM to apply a different cost allocation here.

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127 Mr. Herling stated during the technical conference that “every other stability problem that we have ever identified turned up in a generator impact study to the interconnection process.” See Second Revised Transcript 87:19-25. He described the fact that the Artificial Island stability problem was addressed in the RTEP as “clearly a unique situation” and expressed uncertainty that it would ever happen again. See id.
IV. CONCLUSION

WHEREFORE, the Complainants and Supporters respectfully request that the Commission grant rehearing of the April 22 Order to remedy the errors identified herein, find that the Solution-Based DFAX methodology is not an appropriate cost allocation approach for the stability-based Artificial Island Project, and determine the necessary tariff changes to align Artificial Island costs with the benefits that PJM calculated.

Respectfully submitted,

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Dated: May 23, 2016
CERTIFICATE OF SERVICE

I hereby certify that I have this day served, via first-class mail, electronic transmission, or hand-delivery the foregoing upon each person on the attached service list.

Dated at Washington, D.C. this 23rd day of May, 2016.

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