

161 FERC ¶ 61,005
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;
Cheryl A. LaFleur, and Robert F. Powelson.

PJM Interconnection, L.L.C.	Docket Nos. ER17-718-000
Midcontinent Independent System Operator, Inc.	ER17-721-000
PJM Interconnection, L.L.C.	ER17-729-000
	(Not Consolidated)

ORDER ACCEPTING FILINGS SUBJECT TO CONDITION

(Issued October 3, 2017)

1. On December 30, 2016, PJM Interconnection, L.L.C. (PJM), Midcontinent Independent System Operator, Inc. (MISO) and the MISO Transmission Owners,¹ and PJM on behalf of the PJM Transmission Owners (collectively, Filing Parties), pursuant to section 205 of the Federal Power Act (FPA),² filed proposed revisions to the MISO-PJM Joint Operating Agreement (JOA) to create a new category of interregional transmission projects called Targeted Market Efficiency Projects (TMEPs), as well as a method for allocating the costs of these transmission projects between MISO and PJM.³ The Filing Parties explain that TMEPs are intended to address historical congestion along the MISO-

¹ The MISO Transmission Owners for purposes of this filing are listed in Appendix A.

² 16 U.S.C. § 824d (2012).

³ The Filing Parties also subsequently submitted proposals to establish separate methods for allocating MISO's and PJM's shares of the cost of a TMEP within MISO and PJM, respectively. *See* Docket No. ER17-1406-000 (PJM method for allocating its share of the cost of a TMEP within PJM); Docket No. ER17-2246-000 (MISO method for allocating its share of the cost of a TMEP within MISO). Those filings are accepted by separate orders issued concurrently with this order. *See Midcontinent Independent System Operator, Inc.*, 161 FERC ¶ 61,004 (2017) and *PJM Interconnection, L.L.C.*, Docket No. ER17-1406-000 (2017) (delegated order).

PJM seam that MISO's or PJM's regional transmission planning processes or their joint interregional coordination process would not otherwise address. On June 26, 2017, pursuant to the authority delegated by the Commission's February 3, 2017 Order Delegating Further Authority to Staff in Absence of a Quorum,⁴ the proposed revisions to the JOA were accepted for filing, suspended for a nominal period, to become effective June 28, 2017, as requested, subject to refund and further Commission order.⁵ As discussed below in this further order, we accept the filings, subject to condition, and direct Filing Parties to make a compliance filing within 30 days of the date of this order.

I. Background

A. The MISO-PJM Seam

2. As relevant here, Article IX of the JOA establishes the Regional Transmission Organizations' (RTOs) obligations with regard to coordinated transmission planning along the MISO-PJM seam.⁶ To qualify as an interregional economic transmission project under the JOA,⁷ a transmission project has to meet the criteria set forth in the JOA, as well as both MISO's and PJM's regional criteria.

⁴ *Agency Operations in the Absence of a Quorum*, 158 FERC ¶ 61,135 (2017).

⁵ *Midcontinent Indep. Sys. Operator, Inc.*, 159 FERC ¶ 62,332 (2017) (delegated letter order); *PJM Interconnection, L.L.C.*, 159 FERC ¶ 62,331 (2017) (delegated letter order).

⁶ *PJM Interconnection, L.L.C.*, 155 FERC ¶ 61,008, at P 1 n.3 (2016).

⁷ In Order No. 1000, the Commission defined "interregional transmission facility" as a transmission facility that is physically located in two or more transmission planning regions. *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, Order No. 1000, FERC Stats. & Regs. ¶ 31,323, at P 482 n.374 (2011) (Order No. 1000), *order on reh'g*, Order No. 1000-A, 139 FERC ¶ 61,132 (Order No. 1000-A), *order on reh'g and clarification*, Order No. 1000-B, 141 FERC ¶ 61,044 (2012), *aff'd sub nom. S.C. Pub. Serv. Auth. v. FERC*, 762 F.3d 41 (D.C. Cir. 2014). However, the Commission also permitted transmission planning regions to voluntarily adopt a broader definition of "interregional transmission facility." Under the Commission-approved definition that MISO and PJM adopted in the JOA, an interregional transmission facility also may be located entirely in one transmission planning region if it provides benefits to both regions. *PJM Interconnection, L.L.C.*, 149 FERC ¶ 61,250, at P 188 (2014).

3. The JOA criteria for interregional economic transmission projects include, among other things, evaluation as part of the Coordinated System Plan or joint study process and qualifying as both a PJM regional economic transmission project under the terms of the PJM Regional Transmission Expansion Plan and as a MISO Market Efficiency Project or a Multi-Value Project as part of the MISO Transmission Expansion Plan.⁸ The RTO-specific criteria include, among other things, a requirement that the transmission project operate above 100 kV.⁹

4. Filing Parties state that, in 2014 and 2015, MISO and PJM engaged in a joint study to identify near-term, high-value interregional economic transmission projects that would alleviate historical congestion at flowgates¹⁰ on the MISO-PJM seam (Quick Hit Study). In contrast to the economic analyses that MISO and PJM perform in their respective regional transmission planning processes, which rely on forward-looking production cost models, the Quick Hit Study employed a simplified approach based on actual historical day-ahead and real-time congestion.¹¹ Filing Parties explain that studying actual historical congestion allowed the RTOs to identify transmission constraints that result from the “unique congestion coordination protocol” used to manage the MISO-PJM seam and that are not identified in the forward-looking production cost models.¹² As a result, Filing Parties explain, the transmission solutions identified in the Quick Hit Study were not—and generally would not be—identified in MISO’s and PJM’s regional transmission planning processes. According to Filing Parties, MISO and PJM did not pursue the transmission solutions identified in the Quick

⁸ JOA § 9.4.4.1.3.

⁹ *See, e.g.*, MISO, FERC Electric Tariff, Attachment FF, Transmission Expansion Planning Protocol, § II.B.

¹⁰ A flowgate is, generally speaking, one or more transmission lines, transformers, or other transmission facilities monitored for overload during normal operations or contingencies. TMEPs are targeted at addressing historical congestion on known Reciprocal Coordinated Flowgates, *see* Proposed JOA § 9.3.7.2(c), which is a defined term in the JOA for flowgates subject to reciprocal coordination under the JOA or other Reciprocal Coordination Agreement. JOA § 2.2.54; *see also* JOA § 2.2.24 (defining “Flowgate” as “a representative modeling of facilities or groups of facilities that may act as significant constraint points on the regional system”). Filing Parties report that, currently, there are approximately 300 Reciprocal Coordinated Flowgates that they actively monitor along the seam. MISO Transmittal at 8 n.28.

¹¹ MISO Transmittal at 4-5; PJM Transmittal at 5-6.

¹² MISO Transmittal at 10; PJM Transmittal at 13.

Hit Study, however, because they did not meet the then-applicable voltage¹³ and cost¹⁴ threshold criteria for selection as interregional economic transmission projects through the MISO-PJM interregional transmission coordination process.¹⁵ Therefore, Filing Parties state, following the Quick Hit Study, MISO and PJM began working with their stakeholders to design a process to address historical congestion on the MISO-PJM seam.¹⁶

B. The TMEP Filings

5. Filing Parties propose to create a new category of interregional transmission projects—TMEPs—using narrowly defined criteria that will “fill the gap left by the Interregional Market Efficiency Project process” and will complement, rather than displace, the RTOs’ Order No. 1000 interregional transmission coordination processes.¹⁷ To qualify as a TMEP, a potential transmission project must meet the five criteria outlined below.¹⁸ Filing Parties state that these criteria were designed to capture

¹³ In 2013, Northern Indian Public Service Company (NIPSCO) filed a complaint against MISO and PJM seeking various changes to the interregional transmission planning process outlined in the JOA (NIPSCO Complaint). In its order on the NIPSCO Complaint, the Commission required MISO to lower the voltage threshold above which a transmission project must operate to qualify as an interregional economic transmission project from 345 kV to 100 kV. *N. Ind. Pub. Serv. Co. v. Midcontinent Indep. Sys. Operator, Inc.*, 155 FERC ¶ 61,058, at P 129 (2016) (*NIPSCO*).

¹⁴ Prior to the NIPSCO Complaint, the JOA required an interregional economic transmission project to cost at least \$20 million. While the complaint was pending, MISO and PJM filed, and the Commission accepted, a proposal to remove that \$20 million threshold from the JOA. *NIPSCO*, 155 FERC ¶ 61,058 at P 95 n.156 (citing *PJM Interconnection, L.L.C.*, 154 FERC ¶ 61,083 (2016)). In its order on the NIPSCO Complaint, the Commission also required MISO to remove from its tariff the requirement that a Market Efficiency Project cost at least \$5 million, meaning that there is no longer any cost threshold for potential interregional economic transmission projects in MISO and PJM. *See id.* P 129.

¹⁵ MISO Transmittal at 5; PJM Transmittal at 6.

¹⁶ MISO Transmittal at 5; PJM Transmittal at 6.

¹⁷ MISO Transmittal at 6-7, 13; PJM Transmittal at 7-8, 17.

¹⁸ Proposed JOA § 9.4.4.1.5(i)-(v).

transmission projects that would not otherwise be identified in the RTOs' regional transmission planning processes.¹⁹ Specifically, a TMEP must:

- (i) Be evaluated as part of a Coordinated System Plan or joint study process under the MISO-PJM JOA and be demonstrated to have an expectation for substantial relief of identified historical market efficiency congestion issues;
- (ii) Have an estimated in-service date by the third summer from the year in which the project is approved;
- (iii) Have an estimated installed cost (in study year dollars) of less than \$20 million;
- (iv) Have a four-year payback period in terms of expected future congestion relief (i.e., the cost of the project cannot exceed the expected congestion savings over its first four years in operation); and
- (v) Be recommended by MISO and PJM as a TMEP and approved by each RTO's Board of Directors.

6. To identify potential TMEPs, Filing Parties propose to revise the JOA to state that, as part of the Coordinated System Plan Study process,²⁰ MISO and PJM²¹ may perform a Targeted Market Efficiency Project study of the historical congestion on Reciprocal Coordinated Flowgates on the MISO-PJM seam.²² This study will also consider, among other things, whether the congestion identified through that study is persistent—i.e.,

¹⁹ MISO Transmittal at 6; PJM Transmittal at 7.

²⁰ A Coordinated System Plan Study is a coordinated planning analysis performed by the RTOs as set forth in JOA § 9.3.7.2(a)-(b); *see also* Proposed JOA § 9.3.7.2(c). A Coordinated System Plan Study may include targeted studies of particular areas, needs, or potential expansions, and may also include longer duration studies involving joint model development to address reliability, market efficiency, or public policy needs. JOA § 9.3.7.2(a)(vi)-(vii). The Coordinated System Plan Study process allows for the formation of an *ad hoc* study group to perform targeted studies to, among other things, ensure the coordinated efficiency of the RTOs' systems. JOA § 9.3.7.2(b)(iii).

²¹ This planning will be performed by the Joint Regional Planning Committee, which is made up of representatives from both RTOs. For simplicity, this order describes the planning as performed by MISO and PJM.

²² Proposed JOA § 9.3.7.2(c).

whether it will be alleviated by planned transmission projects or is caused by short-term outages as opposed to persistent operational considerations.²³

7. MISO and PJM will post the results of that study and solicit proposals for transmission projects that meet the TMEP criteria outlined above and that would address persistent congestion.²⁴ MISO and PJM will then evaluate proposed TMEPs and conduct a stakeholder process to discuss those potential transmission projects.²⁵ Following this process, MISO and PJM will recommend certain potential TMEPs directly to their respective boards of directors for approval.

8. Filing Parties state that, in 2015 and 2016, MISO and PJM conducted a study to identify potential TMEPs and presented the results to stakeholders in late 2016. Filing Parties explain that the study identified 13 potential TMEPs. Filing Parties state that, if the Commission approves the instant TMEP proposal, MISO and PJM intend to recommend five of those 13 transmission projects to their respective boards of directors. They further state that those five transmission projects would collectively have a total estimated installed cost of \$17.25 million and avoid approximately \$100 million in congestion costs over their first four years in service.²⁶

9. Filing Parties also propose to establish a method for allocating between the RTOs the cost of a TMEP that receives approval from both MISO's and PJM's boards of directors. Specifically, they propose to allocate the costs of a TMEP to each RTO in proportion to each RTO's share of the expected future congestion relief identified by the TMEP study discussed above, adjusted to account for market-to-market settlement payments between the RTOs.²⁷ They explain that their proposal "ensures that the costs of TMEPs are allocated to each region in proportion to the direct congestion benefits received" by that region.²⁸

²³ *Id.* § 9.3.7.2(c)(i).

²⁴ *Id.* § 9.3.7.2(c)(ii).

²⁵ *Id.* § 9.3.7.2(c)(iii)-(v).

²⁶ PJM Transmittal at 8-9; MISO Transmittal at 7.

²⁷ MISO Transmittal at 14-15; PJM Transmission Owners Transmittal at 3-4.

²⁸ MISO Transmittal at 15; PJM Transmission Owners Transmittal at 4.

10. Filing Parties explain that the proposed TMEP planning process is independent of their Order No. 1000-compliant interregional transmission coordination process.²⁹ They explain that, because TMEPs would not be identified through the RTOs' regional transmission planning processes, Order No. 1000's requirement that interregional transmission projects must first be identified in the regional processes before being submitted for consideration in the interregional processes is inapt.³⁰

11. Nevertheless, Filing Parties contend that the TMEP planning process is consistent with the four elements of interregional transmission coordination identified in Order No. 1000: (i) coordination, (ii) evaluation, (iii) data exchange, and (iv) transparency.³¹ In particular, they explain that, as part of the TMEP planning process, MISO and PJM will identify and jointly evaluate potential TMEPs, presenting the resulting information to and soliciting input from the Inter-Regional Planning Stakeholder Advisory Committee, which "is open to all MISO and PJM stakeholders."³² They contend this process is transparent and provides for the exchange of data consistent with the requirements of Order No. 1000.

12. Filing Parties also contend that the proposed method for allocating the cost of an approved TMEP between the RTOs is consistent with the six interregional cost allocation principles in Order No. 1000. In particular, they note that the proposed method allocates costs consistently with estimated benefits because the costs of a TMEP are allocated in proportion to each RTO's estimated future congestion relief.³³ They note also that there is no involuntary cost allocation between the RTOs because a TMEP must be approved by both RTOs' boards of directors and that, although a TMEP may be physically located entirely in one of the two RTOs, the Commission has previously determined that such arrangements are consistent with the Order No. 1000 interregional cost allocation

²⁹ MISO Transmittal at 13; PJM Transmittal at 8. *See PJM Interconnection, L.L.C.*, Docket Nos. ER13-1944-005 *et al.* (Jan. 9, 2017) (delegated letter order accepting PJM's Order No. 1000 compliance filing regarding MISO-PJM interregional transmission coordination processes); *Midcontinent Indep. Sys. Operator, Inc.*, Docket No. ER 13-1943-006 (Jan. 9, 2017) (delegated letter order accepting MISO's Order No. 1000 compliance filing regarding MISO-PJM interregional transmission coordination processes).

³⁰ MISO Transmittal at 13; PJM Transmittal at 17.

³¹ MISO Transmittal at 13; PJM Transmittal at 17.

³² MISO Transmittal at 14 & n.45.

³³ MISO Transmittal at 15-16; PJM Transmission Owners Transmittal at 4-5.

principles.³⁴ Filing Parties also contend that the proposed method is transparent because the benefits of a TMEP are readily quantifiable and those benefits, along with the accompanying costs, are identified through a transparent planning process conducted by the RTOs with input from stakeholders through the Inter-Regional Planning Stakeholder Advisory Committee.³⁵

C. Interventions, Comments, and Protests

1. Interventions

13. The following entities filed timely motions to intervene in all three captioned proceedings: American Electric Power Service Corporation (AEP);³⁶ American Municipal Power, Inc.; American Transmission Company LLC; American Wind Energy Association; Dominion Resources Services, Inc. (Dominion);³⁷ Duke Energy Corporation (Duke);³⁸ EDP Renewables North America LLC (EDP); EDF Renewable Energy, Inc. (EDF); E.ON Climate & Renewables North America, LLC (E.ON); Exelon Corporation; ITC Mid-Atlantic Development LLC; Mid-Atlantic Renewable Energy Coalition; NIPSCO; North Carolina Electric Membership Corporation; NRG Power Marketing LLC and GenOn Energy Management LLC; Southwest Power Pool, Inc.; Wabash Valley Power Association, Inc.; and Wind on the Wires.

14. Mid-Atlantic MCN LLC, the MISO Transmission Owners, Old Dominion Electric Cooperative, Public Service Electric and Gas Company, and PPL Electric Utilities

³⁴ MISO Transmittal at 16-17; PJM Transmission Owners Transmittal at 5-6 (both citing *PJM Interconnection, L.L.C.*, 149 FERC ¶ 61,250 at P 188).

³⁵ MISO Transmittal at 17-18; PJM Transmission Owners Transmittal at 6.

³⁶ AEP intervened on behalf of its affiliates Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company, Wheeling Power Company, AEP Appalachian Transmission Company, AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, and Transource Energy, LLC.

³⁷ Dominion intervened on behalf of Virginia Electric and Power Company.

³⁸ Duke intervened on behalf of its affiliates Duke Energy Ohio, Inc.; Duke Energy Kentucky, Inc.; Duke Energy Indiana, LLC; Duke Energy Carolinas, LLC; and Duke Energy Progress, LLC.

Corporation filed timely motions to intervene in Docket Nos. ER17-718-000 and ER17-729-000. Alliant Energy Corporate Services, Inc. filed a timely motion to intervene in Docket Nos. ER17-718-000 and ER17-721-000. Apex Clean Energy Management, LLC and MISO filed timely motions to intervene in Docket No. ER17-718-000. Consumers Energy Company, Cooperative Energy, Midcontinent MCN LLC, Wisconsin Electric Power Company and Wisconsin Public Service Corporation filed timely motions to intervene in Docket No. ER17-721-000. Entergy Services, Inc.³⁹ and FirstEnergy Service Company (FirstEnergy)⁴⁰ filed timely motions to intervene in Docket No. ER17-729-000.

15. Notices of intervention were filed in all three captioned proceedings by the Council of the City of New Orleans, the Illinois Commerce Commission, the Indiana Utility Regulatory Commission, the Louisiana Public Service Commission, the Organization of MISO States (OMS), the Mississippi Public Service Commission. The Arkansas Public Service Commission and the Missouri Public Service Commission filed notices of intervention in Docket No. ER17-721-000.

16. Indianapolis Power and Light Company moved to intervene out of time in all three captioned proceedings. FirstEnergy moved to intervene out of time in Docket Nos. ER17-718-000 and ER17-721-000.

2. Comments

17. The following parties filed comments on the TMEP filings: NIPSCO, the Indiana Utility Regulatory Commission, Exelon Corporation, OMS, a group of organizations supporting wind generation (Wind Parties),⁴¹ ITC Mid-Atlantic Development LLC, and a group of renewable energy generators (Generation Group).⁴² In general, these comments

³⁹ Entergy Services, Inc. intervened on behalf of Entergy Arkansas, Inc.; Entergy Louisiana, LLC; Entergy Mississippi, Inc.; Entergy New Orleans, Inc.; and Entergy Texas, Inc.

⁴⁰ FirstEnergy intervened on behalf of its affiliates American Transmission Systems, Incorporated; Jersey Central Power & Light Company; Metropolitan Edison Company; Pennsylvania Electric Company; West Penn Power Company; The Potomac Edison Company; and Monongahela Power Company.

⁴¹ Wind Parties consist of American Wind Energy Association, Mid-Atlantic Renewable Energy Coalition, and Wind on the Wires.

⁴² Generation Group consists of EDF, EDP, and E.ON. Generation Group styled their pleading as comments or, in the alternative, a protest. We discuss that protest in the following section.

described the TMEP process as a laudable effort to address persistent congestion along the MISO-PJM seam. For example, NIPSCO, which describes itself as “the party arguably most affected by the MISO-PJM seam,” contends that “TMEPs will help customers both in MISO and PJM by providing low cost, quick payback upgrades.”⁴³ Similarly, OMS states that it supports this type of interregional cooperation and encourages MISO and PJM to continue to identify opportunities to benefit customers through transmission expansions along the MISO-PJM seam.⁴⁴

18. OMS states, however, that because the allocation of the cost of an approved TMEP within each RTO is an issue of utmost importance to state regulators, the Commission should not issue a final order on the TMEP proposals until it has reviewed the RTOs’ proposals for allocating the cost of an approved TMEP within each RTO and is prepared to rule simultaneously on those filings.⁴⁵ Wind Parties state that they also support the TMEP process, though they have concerns regarding the \$20 million cost cap on TMEPs. Wind Parties explain that there may be transmission projects that similarly address historical congestion related to operational conditions, but that cost more than \$20 million, and that these projects should also have the prospect of being developed through an efficient process similar to the TMEP process.⁴⁶

3. Protests

19. A group of state regulators from the southern part of MISO (MISO South Regulators)⁴⁷ protests the TMEP filings. MISO South Regulators contend primarily that the TMEP proposal does not ensure that the customers who will pay for TMEPs benefit from those transmission projects because Filing Parties do not propose to consider revenues from congestion hedging—for example, through the use of Financial Transmission Rights (FTRs) or Auction Revenue Rights (ARRs)—in calculating the

⁴³ NIPSCO Comments at 6; *see* Exelon Corporation Comments at 4-5.

⁴⁴ OMS Comments at 3.

⁴⁵ *Id.* at 4.

⁴⁶ Wind Parties Comments at 2-3.

⁴⁷ The MISO South Regulators consist of the Arkansas Public Service Commission, the Louisiana Public Service Commission, the Mississippi Public Service Commission, the Public Utility Commission of Texas, and the Council of the City of New Orleans. The Public Utility Commission of Texas did not participate in the MISO South Regulators’ protest in the instant proceedings.

benefits of a TMEP.⁴⁸ They explain that FTRs and ARR are financial instruments that can provide their owners with a financial hedge against congestion costs. They further explain that, if the revenue stream from FTRs and ARRs is matched to their holder's transmission injection and transmission withdrawal points, then the owner will be essentially indifferent to the associated congestion charges.⁴⁹

20. MISO South Regulators state that, because the proposed benefit calculation for TMEPs does not consider congestion hedging revenues, the development of a TMEP could increase costs for some customers. They explain that, if a load-serving entity has sufficient FTRs to fully hedge its congestion costs, then it has no exposure to congestion costs and is no better off after the construction of a TMEP. In other words, MISO South Regulators explain, if congestion levels decrease as a result of a TMEP, the value of a load-serving entity's FTRs and ARRs will likewise decrease, offsetting, at least in part, the benefit that a hedged party receives in the form of reduced congestion. MISO South Regulators maintain that if the Commission does not require MISO and PJM to consider congestion hedging revenues when calculating the benefits of a potential TMEP, hedged customers may still be required to pay for all or part of the TMEP in question.⁵⁰

21. MISO South Regulators assert that during the stakeholder processes, MISO and PJM were willing to consider long-term FTR congestion hedging revenue in the TMEP benefits analysis, but that the RTOs ultimately elected not to do so because it "would require additional analysis and could add error in benefits calculations."⁵¹ MISO South Regulators contend that the Commission should direct the RTOs "to address any uncertainty in this calculation, . . . so that congestion hedging revenues may be reasonably quantified and applied in the benefits formula to ensure that approved TMEPs actually provide net benefits."⁵²

22. In addition, MISO South Regulators raise concerns that the TMEP proposal is "creating a new federal right of first refusal . . . in violation of Order No. 1000."⁵³ They

⁴⁸ MISO South Regulators Protest at 2.

⁴⁹ *Id.* at 3, 5-6. MISO South Regulators also observe that Commission policy has consistently been "to manage congestion, not eradicate it." *Id.* at 5 (footnote omitted).

⁵⁰ *Id.* at 6.

⁵¹ *Id.*

⁵² *Id.*

⁵³ *Id.* at 7.

request that the Commission clarify whether TMEPs must be subject to an Order No. 1000-compliant competitive transmission development process. They state that Commission policy is clear that transmission projects that are subject to regional cost allocation are required to be subject to a competitive transmission development process, and that the absence of such a requirement in the TMEP filings is inconsistent with that policy.⁵⁴ They contend that the fact that TMEPs are not selected for purposes of cost allocation in a regional transmission plan is a “distinction without a difference” because each RTO’s share of the cost of a TMEP will still be allocated regionally.⁵⁵ In addition, MISO South Regulators further contend that TMEPs do not fit into any of the “exemptions” from competition that the Commission recognized in Order No. 1000.⁵⁶

23. Generation Group argues that the TMEP project category should include facilities that operate at voltage levels as low as 69 kV, as the Quick Hit Study included such projects. Generation Group asserts that the TMEP proposal does not address whether there is a minimum voltage threshold to qualify as a TMEP and that the Commission should require the RTOs to make clear that projects operating as low as 69 kV can qualify as TMEPs.⁵⁷ Generation Group further asserts that “[i]f the goal is to relieve uneconomic congestion, there should be no voltage limiter for [TMEPs].”⁵⁸

24. Generation Group also contends that the TMEP planning process is not clear from the filings. Generation Group therefore protests the filings insofar as the RTOs do not intend to include the specific steps and timing for developing a TMEP in the JOA.⁵⁹

⁵⁴ *Id.* at 7-8.

⁵⁵ *Id.* at 8.

⁵⁶ *Id.* at 8-10. MISO South Regulators also contend that it is “unfortunate” that the term “targeted market efficiency project” is so similar to “market efficiency project,” which is the term MISO uses for economic transmission projects selected for purposes of cost allocation in its regional transmission plan. *Id.* at 10-11. MISO South Regulators request that the Commission clarify that those classes of projects are different and do not overlap.

⁵⁷ Generation Group Comments and Protest at 4.

⁵⁸ *Id.*

⁵⁹ *Id.* at 5.

Generation Group asserts that the Commission recently required similar detail in an order on the NIPSCO Complaint, which also involved the JOA.⁶⁰

25. Generation Group urges the Commission to require Filing Parties to revise the JOA to state that, if an individual Flowgate experiences congestion equal to or greater than \$1 million in the two-year period preceding a TMEP study, then the Flowgate will be evaluated as part of the study. Generation Group states that this threshold is consistent with statements in a presentation given by MISO. Generation Group states that making this threshold explicit in the JOA would remove uncertainty.⁶¹ In addition, Generation Group urges the Commission to require that Filing Parties revise the JOA to explain how the RTOs will determine whether identified congestion is “persistent.”⁶² Similarly, Generation Group argues that the standards to be used in evaluating whether a potential TMEP “will work” to address congestion on a Flowgate are unclear.⁶³ Generation Group urges the Commission to require MISO and PJM to “delineate the criteria and standards that will be applied to determine if there is a ‘workable’ fix” for a given Flowgate.⁶⁴

26. Generation Group also notes that Filing Parties state that they intend to recommend five of the 13 potential TMEPs to the RTOs’ boards of directors but do not explain why they do not intend to recommend the other eight potential transmission projects. Generation Group urges the Commission to require Filing Parties to explain why they do not intend to recommend the other eight potential TMEPs to the boards of directors.⁶⁵

27. Generation Group also suggests that the process for proposing a potential TMEP is not open. Generation Group supports that contention with two examples of unsuccessful proposals submitted by EDF to the Inter-Regional Planning Stakeholder Advisory Committee.⁶⁶ Finally, Generation Group argues that there are gaps in the RTOs’ review

⁶⁰ *Id.* (citing *N. Indiana Pub. Serv. Co. v. Midcontinent Indep. Sys. Operator, Inc.*, 158 FERC ¶ 61,049, at PP 75-78 (2017)).

⁶¹ Generation Group Post-Workshop Comments at 2.

⁶² *Id.* at 4.

⁶³ *Id.* at 2-3.

⁶⁴ *Id.* at 4.

⁶⁵ Generation Group Comments and Protest at 5-6.

⁶⁶ Generation Group Post-Workshop Comments at 5-8.

of congested Flowgates and analysis of solutions to address them. Generation Group urges the Commission to institute a separate proceeding to examine the need for further modifications to the JOA to address congestion on Flowgates for which the RTOs are not yet prepared to recommend a TMEP to their boards of directors, as well as other potential solutions to reduce congestion, such as JOA revisions to require that non-transmission alternatives be evaluated as solutions for congested Flowgates.⁶⁷

D. Answers

28. MISO South Regulators reiterate their contention that the Commission should require Filing Parties to consider congestion hedging revenues as part of the TMEP benefits calculation.⁶⁸ In addition, MISO South Regulators express their support for OMS's request that the Commission not issue an order on these filings until it has received and considered Filing Parties' proposals for allocating the cost of an approved TMEP within each respective RTO. Finally, MISO South Regulators oppose Generation Group's suggestion that there should not be a minimum voltage threshold for TMEPs. MISO South Regulators state that the TMEP proposal and related analyses have focused on transmission projects operating above 138 kV and that there is "no reasonable rationale to use an interregional planning process to evaluate upgrades at voltages below 100 kV that offer geographically-limited benefits."⁶⁹ They further state that the Commission's order in the *NIPSCO* proceeding, discussed above,⁷⁰ neither contemplates nor requires the development of transmission facilities operating below 100 kV along the MISO-PJM seam. MISO South Regulators urge the Commission not to broaden the application of the TMEP proposal in a manner that could supplant or undermine the existing Commission-approved regional transmission planning processes.⁷¹

29. MISO and PJM filed a joint answer addressing MISO South Regulators' and Generation Group's protests. Regarding MISO South Regulators' protest that the TMEP benefits calculation must incorporate congestion hedging revenues, MISO and PJM explain that the purpose of a TMEP is to improve joint market coordination by addressing actual historical congestion on Reciprocal Coordinated Flowgates—facilities that cannot be efficiently controlled solely by either RTO—through a transmission project that

⁶⁷ *Id.* at 8-11.

⁶⁸ MISO South Regulators Answer at 6-7.

⁶⁹ *Id.* at 4.

⁷⁰ *See supra* note 13.

⁷¹ MISO South Regulators Answer at 5-6.

benefits both RTOs, where the production cost benefits to either RTO alone may not support a major construction project. They assert that their proposed metric for evaluating TMEPs, which compares total installed costs of a TMEP project to the value of eliminated historical congestion over a four-year period, is conservative because considering only four years of benefits accounts for only a portion of the projects' full potential benefits. In addition, they contend that the "simple metric" considering only historical congestion is appropriate because "TMEPs are selected based on the[ir] total coordination benefits to the combined markets, not [their] net benefits to any particular market participant."⁷²

30. MISO and PJM contend that the MISO South Regulators' arguments do require the consideration of congestion hedging revenues in the TMEP benefit calculation and that it is reasonable not to include those congestion hedges given the limited parameters of the TMEP proposal. MISO and PJM explain that those financial hedges are intended to address congestion-cost uncertainty associated with long-term transmission service. As such, it may make sense to consider congestion hedges when planning long-term transmission projects, such as those planned through MISO's regional transmission planning process. TMEPs, by contrast, "look backward" to address historical congestion.⁷³ They maintain that TMEPs do not affect the ability of congestion hedges to offset possible future congestion, and that market participants can modify their hedges to account for anticipated changes to congestion on the system.⁷⁴

31. Regarding Generation Group's protest, MISO and PJM explain that there is no minimum voltage threshold to qualify as a TMEP and, therefore, it is not necessary to add clarifying language to the JOA as Generation Group suggests.⁷⁵ In addition, MISO and PJM respond to Generation Group's argument that there must be a transparent and clearly defined process by which TMEPs are considered in each RTO regional transmission planning process and then jointly under the JOA process and then approved by each RTO's board of directors. MISO and PJM assert that the TMEP process is not intended to be a three-part process and that such a requirement would not be appropriate for TMEPs because their limited nature makes them "amenable to a single joint analysis" by the RTOs.⁷⁶ Finally, MISO and PJM contend that Generation Group is incorrect in

⁷² MISO-PJM Answer at 5.

⁷³ *Id.* at 6.

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ *Id.* at 7.

asserting that the RTOs have not explained why eight of the 13 potential TMEPs are not slated for recommendation to their respective boards of directors. MISO and PJM state that information regarding each transmission project was “thoroughly vetted” at Inter-Regional Planning Stakeholder Advisory Committee meetings in August and October 2016.⁷⁷

E. Commission Staff-led Workshop

32. On June 13, 2017, Commission Staff held a workshop (Workshop) to discuss the TMEP filings.⁷⁸ At the Workshop, which was transcribed, interested parties had the opportunity to make statements, respond to questions, and provide additional information regarding issues that were timely raised in these proceedings.⁷⁹

II. Discussion

A. Procedural Matters

33. Pursuant to Rule 214 of the Commission’s Rules of Practice and Procedure,⁸⁰ the notices of interventions and the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

34. Pursuant to Rule 214(d) of the Commission’s Rules of Practice and Procedure,⁸¹ the Commission will grant the late-filed motions to intervene of Indianapolis Power and Light Company and FirstEnergy, given their interests in the proceedings, the early stage of the proceedings, and the absence of undue prejudice or delay.

⁷⁷ *Id.*

⁷⁸ See Notice of Staff Workshop, Docket No. ER17-718-000, *et al.* (May 19, 2017); Notice of Staff Workshop, Docket No. ER17-718-000, *et al.* (June 2, 2017).

⁷⁹ See Transcript of June 13, 2017 Staff Workshop, Docket No. ER17-718-000, *et al.* (issued July 31, 2017). At the Workshop, MISO, MISO Transmission Owners, NIPSCO, and EDF submitted written materials for the record. On June 23, 2017, Generation Group submitted comments in response to the written workshop materials of MISO and the MISO Transmission Owners. These comments were summarized in the preceding description of the filings in this proceeding.

⁸⁰ 18 C.F.R. § 385.214 (2017).

⁸¹ *Id.* § 385.214(d).

35. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure⁸² prohibits an answer to a protest or an answer to an answer unless otherwise ordered by the decisional authority. We accept MISO South Regulators' and MISO and PJM's answers because they have provided information that assisted us in our decision-making process.

B. Substantive Matters

36. We accept the TMEP filings, subject to condition, as discussed below.⁸³

1. Identification and Evaluation of Potential TMEPs

37. We find that, subject to the conditions outlined below, Filing Parties have met their burden to demonstrate that the TMEP planning process is just and reasonable and not unduly discriminatory or preferential. In particular, we conclude that the proposed TMEP planning process is consistent with the openness, coordination, and transparency principles that the Commission outlined in Order No. 890.⁸⁴ Generally, the proposed transmission planning process for TMEPs is transparent and provides opportunities for stakeholder involvement and input. As noted, Filing Parties explain that MISO and PJM will post the results of any TMEP study performed as part of a Coordinated System Plan Study under the JOA "for input from the [Inter-Regional Planning Stakeholder Advisory Committee]."⁸⁵ Filing Parties further explain that MISO and PJM will present the results of their analysis of the benefits of proposed TMEPs to, and solicit input from, the Inter-Regional Planning Stakeholder Advisory Committee.⁸⁶ Filing Parties state that MISO and PJM will recommend potential TMEPs to their respective boards of directors if they meet the first four TMEP criteria, which are set forth in Filing Parties' proposed revisions to the JOA.

38. Order No. 890's openness principle "require[s] that transmission planning meetings be open to all affected parties including, but not limited to, all transmission and

⁸² *Id.* § 385.213(a)(2).

⁸³ The Court of Appeals for the District of Columbia Circuit has held that, in certain circumstances, the Commission has "authority to propose modifications to a utility's [FPA section 205] proposal *if the utility consents to the modifications.*" *NRG Power Mktg., LLC v. FERC*, 862 F.3d 108, 114-15 (D.C. Cir. 2017).

⁸⁴ *See* Order No. 890, FERC Stats. & Regs. ¶ 31,241 at PP 444, 451, 460, and 471.

⁸⁵ Proposed JOA § 9.3.7.2(c)(ii).

⁸⁶ *Id.* § 9.3.7.2(c)(ii).

interconnection customers, state commissions and other stakeholders.”⁸⁷ The TMEP planning process is consistent with this principle. At the Workshop, Filing Parties explained that the opportunities for stakeholder involvement in the TMEP planning process will flow through the existing Inter-Regional Planning Stakeholder Advisory Committee process, as set out in the JOA.⁸⁸ As the Commission has previously explained, the Inter-Regional Planning Stakeholder Advisory Committee is made up of members from both RTOs’ regional planning committees and is also open to other stakeholders.⁸⁹ As the TMEP proposal relies upon the Inter-Regional Planning Stakeholder Advisory Committee process, which the Commission has previously found is “a committee open to stakeholders from both regions,”⁹⁰ we find that the TMEP planning process is consistent with Order No. 890’s openness principle because it is open to all affected parties.

39. Order No. 890’s coordination principle requires the “opening [of] appropriate lines of communication between transmission providers, their transmission-providing neighbors, affected state authorities, customers, and other stakeholders.”⁹¹ The TMEP planning process is consistent with this principle. As noted, the TMEP planning process will rely on the existing Inter-Regional Planning Stakeholder Advisory Committee process, through which the RTOs meet regularly with stakeholders. At the Workshop, MISO and PJM explained that they will use the regular Inter-Regional Planning Stakeholder Advisory Committee meetings to provide stakeholders with updates regarding any TMEP planning that has taken place since the previous Inter-Regional Planning Stakeholder Advisory Committee meeting and that, if necessary, the RTOs could hold extra meetings or calls with the Inter-Regional Planning Stakeholder Advisory Committee membership.⁹² MISO and PJM also clarified that, following Inter-Regional Planning Stakeholder Advisory Committee meetings, stakeholders will have

⁸⁷ Order No. 890, FERC Stats. & Regs. ¶ 31,241 at PP 455, 460.

⁸⁸ Tr. 32:13-21.

⁸⁹ *PJM Interconnection, L.L.C.*, 123 FERC ¶ 61,163, at P 76 (2008).

⁹⁰ *NIPSCO*, 155 FERC ¶ 61,058 at P 30.

⁹¹ Order No. 890, FERC Stats. & Regs. ¶ 31,241 at PP 451-452.

⁹² Tr. 49:14-21 (McGlynn) (explaining that “each step in the [TMEP planning] process would certainly be covered and reviewed with stakeholders at an [Inter-Regional Planning Stakeholder Advisory] meeting); *see id.* at 39:10-15 (Moser), 43:11-14 (McGlynn); MISO-PJM Answer at 7 & n. 14 (citing to presentations to Inter-Regional Planning Stakeholder Advisory Committee).

opportunities to provide feedback on any information presented at the meetings.⁹³ We find that the Inter-Regional Planning Stakeholder Advisory Committee process provides an appropriate channel of communication and, therefore, that the TMEP proposal is consistent with Order No. 890's coordination principle.

40. Order No. 890's transparency principle requires that "transmission providers . . . disclose to all customers and other stakeholders the basic criteria, assumptions, and data that underlie their transmission system plans"—information that "should enable customers, other stakeholders, or an independent third party to replicate the results of planning studies and thereby reduce the incidence of after-the-fact disputes regarding whether planning has been conducted in an unduly discriminatory fashion."⁹⁴ We find that, subject to the compliance obligations outlined below, the TMEP proposal is consistent with the transparency principle, because it provides stakeholders with an explanation of how the needs underlying potential transmission projects will be identified and evaluated in order to forestall after-the-fact disputes over whether the TMEP planning process was conducted in an unduly discriminatory or preferential fashion. As noted, Filing Parties explain that they will identify the potential for a TMEP by analyzing "persistent" historical congestion—i.e., congestion that is not expected to be substantially alleviated by system changes planned in the next five years and is not the result of system outages—occurring during the two years preceding a TMEP study. Filing Parties further explain that, following a TMEP study, they will present that information to the Inter-Regional Planning Stakeholder Advisory Committee and that Inter-Regional Planning Stakeholder Advisory Committee members may provide feedback on the information.

41. We find, however, that, as proposed, the TMEP proposal is not entirely consistent with Order No. 890's transparency principle because it does not ensure that stakeholders will receive a sufficient explanation about why MISO and PJM recommend or do not recommend a potential TMEP to their respective boards of directors. In particular, the proposal does not require MISO and PJM to explain to their stakeholders (1) why MISO and PJM did not evaluate whether a potential TMEP could economically address congestion on a particular congested Reciprocal Coordinated Flowgate and (2) why a potential TMEP that MISO and PJM did evaluate was not recommended to the RTOs' respective boards of directors. We find that stakeholders must have this information in order to play a meaningful role in the TMEP planning process and to allow them to monitor and provide feedback on how MISO and PJM are planning transmission projects to alleviate the congestion that is the subject of a TMEP study. In addition, we find that failure to present this information to stakeholders may lead to more frequent after-the-fact disputes regarding the TMEP planning process.

⁹³ Tr. 32:13-21.

⁹⁴ Order No. 890, FERC Stats. & Regs. ¶ 31,241 at PP 461, 471.

42. At the Workshop, MISO and PJM acknowledged that they possess information regarding how they progressed from identifying a certain number of congested Reciprocal Coordinated Flowgates to identifying five potential TMEPs to be recommended to their boards and that they reviewed this information with stakeholders at Inter-Regional Planning Stakeholder Advisory Committee meetings.⁹⁵ Specifically, MISO and PJM explained that some of the congestion observed on certain Reciprocal Coordinated Flowgates was deemed likely to be alleviated by a transmission project being developed through one of the RTOs' regional transmission planning processes.⁹⁶ Similarly, MISO and PJM explained that they determined that other examples of congestion were found to be the product of a temporary system outage.⁹⁷ Because this kind of information is essential to stakeholders' ability to meaningfully participate in the TMEP planning process, we direct Filing Parties to submit a compliance filing, within 30 days of the date of this order, to revise the JOA to require that MISO and PJM will provide to the Inter-Regional Planning Stakeholder Advisory Committee for input an explanation of (1) why MISO and PJM did not evaluate whether a potential TMEP could economically address congestion on a particular congested Reciprocal Coordinated Flowgate and (2) why a potential TMEP that MISO and PJM did evaluate was not recommended to the RTOs' respective boards of directors.

43. Similarly, we find that MISO and PJM must provide stakeholders with additional information regarding how they evaluate whether a potential TMEP is a viable solution to address the identified congestion. Generation Group requests that the Commission require MISO and PJM to "delineate the criteria and standards that will be applied to determine if there is a 'workable' fix" for a given Flowgate."⁹⁸ The information that Generation Group argues should be included in the JOA is most analogous to the planning criteria that underlie the RTOs' regional transmission planning processes or the local transmission planning processes. As noted, Order No. 890 requires that transmission owners disclose the criteria underlying a transmission plan to stakeholders, but the Commission did not require that criteria to be included in the transmission owners' tariff.⁹⁹ We find that a similar balance is appropriate here. Accordingly, we direct Filing Parties to revise the JOA, as part of the same compliance filing required

⁹⁵ Tr. 59:3-60:3 (McGlynn), 60:4-61:19, 63:7 (Liebold), 62:16-23 (Thoms); *see also* MISO-PJM Answer at 7.

⁹⁶ *E.g.*, Tr. 59:4-25 (McGlynn), 60:4-60:9, (Liebold).

⁹⁷ *E.g.*, Tr. 59:14-:19 (McGlynn); 71:19-23 (Thoms).

⁹⁸ Generation Group Post-Workshop Comments at 4.

⁹⁹ Order No. 890, FERC Stats. & Regs. ¶ 31,241 at P 471.

above, to clarify that the RTOs will provide to stakeholders any additional criteria¹⁰⁰ used to evaluate potential TMEP solutions, as well as the criteria used to evaluate whether congestion is likely to be persistent and when in the process this criteria will be provided to stakeholders. We do not, however, require that any such criteria be delineated in the JOA.

44. Contrary to Generation Group's assertions that the TMEP planning process is not clear, we find that the TMEP proposal provides adequate detail regarding the timing of specific steps in the planning process. The proposal adequately explains how the RTOs will conduct a TMEP study, present the information of that study to stakeholders, and then identify potential TMEPs for further evaluation and potential recommendation to the RTOs' respective boards. In addition, at the Workshop, MISO explained that the TMEP study and review process moves rapidly and continuously, so that the TMEP study process can be completed in less than a year.¹⁰¹ As a result, the steps in the TMEP planning process do not necessarily align with specific Inter-Regional Planning Stakeholder Advisory Committee meetings or any of the RTOs' other planning milestones, and tying the steps in the TMEP planning process to Inter-Regional Planning Stakeholder Advisory Committee meetings would not meaningfully improve the TMEP planning process.¹⁰²

45. The Commission's conclusions in the *NIPSCO* proceeding do not require a contrary conclusion.¹⁰³ In that proceeding, the Commission concluded that the JOA did not adequately explain how the interregional transmission coordination process conducted as part of the Coordinated System Plan would interact with MISO's and PJM's separate regional transmission planning processes. The TMEP planning process, however, is separate from the RTOs' regional transmission planning processes. It was developed because certain types of transmission projects needed to address persistent congestion along the MISO-PJM seam were not being identified in the RTOs' regional transmission planning processes. We find that, given these circumstances, the Filing

¹⁰⁰ We note, however, that these criteria need not necessarily include the criteria that Generation Group proposes. *See, e.g.*, Generation Group Post-Workshop Comments at 4. Instead, the RTOs must provide the Inter-Regional Planning Stakeholder Advisory Committee with whatever criteria they propose to use in evaluating the feasibility of potential TMEPs and the persistence of identified congestion.

¹⁰¹ Tr. 50:19-51:8 (Liebold).

¹⁰² Tr. 45:2-7 (McGlynn), 49:14-21 (McGlynn).

¹⁰³ Generation Group Limited Protest at 5 (citing *N. Ind. Pub. Serv. Co.*, 158 FERC ¶ 61,049 at PP 75-78).

Parties' proposed revisions to the JOA provide sufficient detail regarding the TMEP planning process. Accordingly, the Commission's determination that greater specificity was needed regarding the three transmission planning processes at issue in the *NIPSCO* proceeding¹⁰⁴ does not require similar specificity with regard to the TMEP planning process.

46. Generation Group also requests that the Commission require Filing Parties to revise the JOA to include the threshold that MISO and PJM discussed at the Workshop—namely, that, if an individual Flowgate experiences congestion equal to or greater than \$1 million in the two-year period preceding a TMEP study, the Flowgate will be evaluated as part of the study. We find that such JOA revisions are not necessary. Specifically, the \$1 million threshold provides a parameter for determining which Reciprocal Coordinated Flowgates will be studied in detail as part of a TMEP study. Order No. 890's transparency principle requires transmission planners to disclose to stakeholders the criteria used to plan the system,¹⁰⁵ but the Commission did not require that that criteria be memorialized in tariff provisions. Filing Parties have disclosed the \$1 million threshold—both in the stakeholder process when developing the TMEP proposal and again in these proceedings.¹⁰⁶ We find that this satisfies the Commission's transparency requirements.

47. Generation Group also suggests that the process for proposing a potential TMEP is not open to all stakeholders. Generation Group supports that contention with two examples of unsuccessful proposals submitted by EDF to the Inter-Regional Planning Stakeholder Advisory Committee: (1) a proposal to expand the definition of Flowgate, and (2) a proposal regarding a potential solution for a 138 kV transmission line.¹⁰⁷ We find Generation Group's comments to be outside the scope of this proceeding, which does not include whether the Inter-Regional Planning Stakeholder Advisory Committee adequately considered a proposal to revise the definition of Flowgate. In any case, the outcome of Generation Group's proposal regarding the definition of Flowgate does not indicate that the TMEP planning process is not open. Likewise, it appears that

¹⁰⁴ In *NIPSCO*, the Commission found that it was unclear how the Coordinated System Plan Study in the JOA interacts and aligns with the MISO Transmission Expansion Plan and the PJM Regional Transmission Expansion Plan, leading to disagreements over whether and how those three processes interact. *NIPSCO*, 155 FERC ¶ 61,058 at P 56.

¹⁰⁵ Order No. 890, FERC Stats. & Regs. ¶ 31,241 at P 471.

¹⁰⁶ *E.g.*, Tr. 25:22-25 (Thoms).

¹⁰⁷ Generation Group Post-Workshop Comments at 5-8.

Generation Group did not suggest the 138 kV solution as part of the TMEP planning process, and, as Generation Group acknowledges, MISO provided an explanation about why the proposed solution was not being considered at that time in the separate interregional transmission coordination process under the JOA.¹⁰⁸ Therefore, Generation Group's comment about its proposed 138 kV project does not suggest that the process for proposing a TMEP is not open to all stakeholders and, in any event, because the project was proposed outside the TMEP process, is outside of the scope of this proceeding.

48. Finally, we disagree with Generation Group that we should institute a separate proceeding to examine the need for further modifications to the JOA to address congestion on Flowgates for which the RTOs are not yet prepared to recommend a TMEP to their boards of directors, as well as other potential solutions to reduce congestion, such as JOA revisions to require that non-transmission alternatives be evaluated as solutions for congested Flowgates. Those revisions are outside the scope of this proceeding, which is limited to evaluating whether the TMEP proposal is just and reasonable. Nevertheless, we note that, as discussed in the April 21, 2016 order on the NIPSCO Complaint, the Commission encourages MISO and PJM to work with interested parties to identify and implement solutions to the persistent issues along the MISO-PJM seam.¹⁰⁹

2. Selection Criteria

49. As noted, Filing Parties propose five criteria that a potential transmission project must satisfy to qualify as a TMEP. Specifically, a TMEP must: (i) be evaluated as part of a joint study under the JOA and be expected to provide for substantial relief of congestion on identified Reciprocal Coordinated Flowgates; (ii) have an estimated in-service date by the third-summer from the year in which the project is approved; (iii) have an estimated installed cost (in study year dollars) of less than \$20 million; (iv) have a four-year payback period in terms of expected congestion relief; and (v) be recommended by MISO and PJM as a TMEP and approved by each RTO's board.¹¹⁰

50. We find that Filing Parties have shown that these criteria are just and reasonable and not duly discriminatory or preferential. As an initial matter, we find that the proposed method for determining the benefits of a potential TMEP is just and reasonable. As noted, Filing Parties propose to measure those benefits based on the *persistent* historical congestion that the transmission project would be expected to alleviate. This

¹⁰⁸ *Id.* at 6-7.

¹⁰⁹ *NIPSCO*, 155 FERC ¶ 61,058 at PP 93, 188.

¹¹⁰ Proposed JOA § 9.3.7.2(c).

requirement ensures that the identified congestion is unlikely to be otherwise remedied by, for example, the development of a new transmission facility or the return to service of infrastructure that was previously offline.¹¹¹ As a result, the RTOs can reasonably expect that the congestion would continue but for the development of the TMEP.

51. Furthermore, the requirement that a TMEP have an estimated payback period of four or fewer years ensures that only highly beneficial transmission projects will be considered as TMEPs.¹¹² Under this requirement, TMEPs must demonstrate a benefit-to-cost ratio that is no less than 1.0 over a period of only four years.¹¹³ Given that TMEPs are likely to continue providing significant benefits beyond their fourth year of operation, the benefits of these transmission projects are likely to far exceed their costs over the useful life of the transmission facilities.¹¹⁴

52. In its protest, Generation Group requests that the Commission require MISO and PJM to explain why only five of the 13 potential TMEPs evaluated by the RTOs were slated for recommendation.¹¹⁵ At the Workshop, MISO and PJM addressed this issue, explaining that a project that meets the first four TMEP criteria will be recommended to the RTOs' boards of directors, unless another transmission project that was evaluated for the same Reciprocal Coordinated Flowgate provides greater value.¹¹⁶ MISO and PJM explained, therefore, that the reason the eight projects were not selected is that they did not satisfy the first four TMEP criteria.¹¹⁷ We find that this explanation sufficiently addresses Generation Group's concerns.

¹¹¹ PJM Transmittal at 10 n.29.

¹¹² The five potential TMEPs that the RTOs intend to recommend to their respective boards of directors bear this out. Four of the five projects have benefit-to-cost ratios, calculated using the TMEP method, of at least four to one and one has a benefit-to-cost ratio of nearly 100. PJM Transmittal at 14.

¹¹³ That four-year period is considerably shorter than the 15-year period used to measure the benefits of economic transmission projects developed through the RTOs' respective regional transmission planning processes.

¹¹⁴ PJM Transmittal at 14.

¹¹⁵ *See* Generation Group Protest at 5-6.

¹¹⁶ Tr. 71:7, 72:20-73:9 (McGlynn); 71:8-14, 72:11-16 (Moser); 71:15-23.

¹¹⁷ Tr. 62:16-23 (Thoms).

53. In addition, we find that Wind Parties' statement that transmission projects that cost more than \$20 million should have access to a similarly efficient transmission planning process does not indicate that the proposed \$20 million threshold for TMEPs is unjust and unreasonable or unduly discriminatory or preferential.

3. Congestion Hedging Revenues

54. As noted, MISO South Regulators contend that the Commission should require Filing Parties to revise their proposed calculation of the benefits of a TMEP to account for congestion hedging revenues. They assert that, without such a modification, the RTOs' boards may approve a TMEP and eventually allocate its costs to transmission customers that do not benefit from that project.¹¹⁸

55. We are not persuaded to require the Filing Parties to consider congestion hedging revenues in the TMEP benefit calculation. Instead, we find the proposed cost allocation method to be just and reasonable and not unduly discriminatory or preferential. TMEPs are relatively small transmission projects that address persistent congestion on Reciprocal Coordinated Flowgates that is not identified in the analyses performed as part of either RTO's regional transmission planning process, but that affects both RTOs' ability to efficiently dispatch generation resources along the MISO-PJM seam. As Filing Parties explained, Reciprocal Coordinated Flowgates are the focus of the TMEP planning proposal at issue in this proceeding because they pose unique interregional coordination challenges that cannot be efficiently controlled by either RTO and, therefore, impair each RTO's ability to operate its system efficiently.¹¹⁹ At the Workshop, Filing Parties further explained that by reducing congestion at the seams, TMEPs help to improve the dispatch economics along the seam as well as the overall reliability of the system by enabling more power to move back and forth between the RTOs, especially "in times of emergencies."¹²⁰

56. Given these effects, we find that it is just and reasonable and not unduly discriminatory or preferential to consider the overall benefits to both RTOs' markets in the form of reduced congestion when determining whether to develop a TMEP, rather than only the net benefits to particular transmission customers within the RTOs. Moreover, a TMEP will likely yield benefits to the RTOs in excess of those considered

¹¹⁸ MISO South Regulators Protest at 6. MISO South Regulators further assert that certain customers may see a net increase in costs because their share of the costs of the TMEP could exceed the benefits that they derive from that TMEP. *Id.*

¹¹⁹ MISO-PJM Answer at 5.

¹²⁰ Tr. 97:9-14 (Moser).

in the TMEP benefit calculation. That is because a TMEP will likely yield benefits over a period longer than the four-year payback period considered in the TMEP benefit calculation and may yield additional non-economic benefits, such as improved overall system reliability.¹²¹

57. In addition, we note that revising the TMEP benefit calculation to consider congestion hedging revenues could actually make the benefit determination less precise. MISO explained at the Workshop that because the ARR and FTRs do not align with particular Flowgates, the RTOs would have to make assumptions about the extent to which an ARR or FTR provides a congestion hedge at a particular Reciprocal Coordinated Flowgate addressed by a TMEP.¹²² Such assumptions could introduce greater error and uncertainty into the benefits calculation, making it a less reliable measure of the extent to which a potential TMEP benefits the two RTOs.

4. Method for Allocating the Costs of an Approved TMEP between the RTOs

58. We find that the Filing Parties have met their burden to demonstrate that their proposed method of allocating the costs of an approved TMEP between MISO and PJM is just and reasonable and not unduly discriminatory or preferential. The proposed method allocates the costs of a TMEP between the RTOs based on each RTO's share of the expected benefits from the transmission project—i.e., each RTO's share of the total avoided congestion, as modified by market-to-market settlements.¹²³ We find that this method allocates the costs between the RTOs in a manner that is roughly commensurate with the benefits received.¹²⁴ Accordingly, we find that the Filing Parties' proposed

¹²¹ Tr. 97:9-14 (Moser).

¹²² Tr. 79:13-22 (Moser). MISO explained that an FTR or ARR is based on a particular path between a generation source and a load sink, but that such a path does not necessarily align with any particular Flowgate or Flowgates. As a result, transmission planners must perform an analysis to estimate how much congestion hedging any particular FTR or ARR would have on a particular Flowgate. Tr. 78:9-21 (Solomon).

¹²³ Proposed JOA § 9.4.4.1.5.1.

¹²⁴ See *Ill. Commerce Comm'n v. FERC*, 576 F.3d 470, 476-77 (7th Cir. 2009) (holding that, under the FPA, costs allocated to a beneficiary must be at least roughly commensurate with the benefits that are expected to accrue to it); see also *Midwest ISO Transmission Owners v. FERC*, 373 F.3d 1361, 1369 (D.C. Cir. 2004) (stating that “we have never required a ratemaking agency to allocate costs with exacting precision”).

method of allocating the costs of a TMEP between MISO and PJM is just and reasonable and not unduly discriminatory or preferential.

5. Other Issues

59. We turn now to the remaining issues raised in this proceeding. We find that MISO South Regulators' concerns that the TMEP proposal creates a new federal right of first refusal contrary to Order No. 1000, and is inconsistent with the Commission's Order No. 1000 policy that "transmission projects subject to regional cost allocation should be competitively bid,"¹²⁵ are misplaced. Order No. 1000's regional transmission planning, interregional transmission coordination and regional/interregional cost allocation requirements do not apply to TMEPs because (1) the TMEP planning process is separate from MISO's and PJM's Order No. 1000-compliant processes; and (2) the TMEPs are not well-suited to the RTOs' regional transmission planning processes and interregional transmission coordination processes, especially given that TMEPs are projects that cannot exceed \$20 million in costs and that have a forecasted in-service date within three years. As Filing Parties explained, studying actual historical congestion allowed the RTOs to identify transmission constraints that result from the "unique congestion coordination protocol" used to manage the MISO-PJM seam and that are *not* identified in the RTOs' Order No. 1000 processes that use forward-looking production cost models.¹²⁶ Thus, the transmission solutions identified in the Quick Hit Study were not—and generally would not be—identified in MISO's and PJM's regional transmission planning processes and interregional transmission coordination processes. We emphasize that the TMEP planning process facilitates the development of transmission projects that would not otherwise be identified and selected in the regional transmission planning processes and the interregional transmission coordination processes. Thus, we find that the TMEP planning process is not inconsistent with Order No. 1000 and is an appropriate complement to the RTOs' existing Order No. 1000 regional transmission planning processes and the interregional transmission coordination processes.

60. MISO South Regulators ask the Commission to clarify that a TMEP cannot be a Market Efficiency Project in MISO.¹²⁷ The distinctions between a TMEP and a Market Efficiency Project are set forth in Filing Parties' proposed revisions to the JOA, including the fact that a Market Efficiency Project must be selected in MISO's regional transmission plan for purposes of cost allocation while a TMEP is not eligible to be so

¹²⁵ MISO South Regulators Protest at 7-8.

¹²⁶ MISO Transmittal at 10; PJM Transmittal at 13.

¹²⁷ MISO South Regulators Protest at 10-11.

selected. Accordingly, it is already clear that a “TMEP is not and cannot be a . . . [Market Efficiency Project].”¹²⁸ No further clarification is needed.

61. Finally, MISO South Regulators assert that “[t]he TMEP process has not contemplated nor demonstrated that below 100 kV projects can create the level of congestion relief necessary to be eligible for interregional cost sharing” and, therefore, the TMEP category should not include transmission projects that operate below 100 kV.¹²⁹ MISO South Regulators have not demonstrated that the lack of a voltage threshold is unjust and unreasonable. The TMEP process is designed to identify and evaluate transmission projects that could alleviate historical congestion on Reciprocal Coordinated Flowgates along the MISO-PJM seam—including the types of projects identified in the Quick Hit Study, which considered and evaluated transmission solutions operating as low as 69 kV.¹³⁰ Accordingly, we find that it is just and reasonable to consider transmission solutions operating below 100 kV in the TMEP planning process.

The Commission orders:

(A) Filing Parties’ filings are hereby accepted, subject to condition, effective June 28, 2017, as requested, as discussed in the body of this order.

(B) Filing Parties are hereby directed to submit a compliance filing, within 30 days of the date of this order, as discussed in the body of this order.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

¹²⁸ *Id.* at 11.

¹²⁹ MISO South Regulators Response at 2 (responding to Generation Group’s argument that there should be no voltage threshold).

¹³⁰ *N. Ind. Pub. Serv. Co. v. Midcontinent Indep. Sys. Operator, Inc.*, Joint Response to Notice of Request for Comments on Behalf of PJM Interconnection, L.L.C. and the Midcontinent Independent System Operator, Inc., Docket No. EL13-88-000, at 2 and 4 (Aug. 14, 2015).

Appendix A**Participating MISO Transmission Owners**

Ameren Services Company, as agent for Union Electric Company, Ameren Illinois Company; Arkansas Electric Cooperative Corporation; Big Rivers Electric Corporation; Central Minnesota Municipal Power Agency; City Water, Light & Power (Springfield, IL); Cleco Power, LLC; Cooperative Energy; Dairyland Power Cooperative; Duke Energy Corporation for Duke Energy Indiana, Inc.; East Texas Electric Cooperative; Entergy Arkansas, Inc.; Entergy Louisiana, LLC; Entergy Mississippi, Inc.; Entergy New Orleans, Inc.; Entergy Texas, Inc.; Great River Energy; Hoosier Energy Rural Electric Cooperative, Inc.; Indiana Municipal Power Agency; Indianapolis Power & Light Company; International Transmission Company; ITC Midwest LLC; Michigan Public Power Agency ; MidAmerican Energy Company; Minnesota Power (and its subsidiary Superior Water, L&P); Missouri River Energy Services; Montana-Dakota Utilities Co.; Northern Indiana Public Service Company; Northern States Power Company, a Minnesota corporation, and Northern States Power Company, a Wisconsin corporation, subsidiaries of Xcel Energy Inc.; Northwestern Wisconsin Electric Company; Otter Tail Power Company; Prairie Power Inc.; Southern Illinois Power Cooperative; Southern Indiana Gas & Electric Company; Southern Minnesota Municipal Power Agency; Wabash Valley Power Association, Inc.; Wolverine Power Supply Cooperative, Inc.