

169 FERC ¶ 61,221
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

Midcontinent Independent System Operator, Inc. Docket Nos. ER19-1823-001
ER19-1960-000

ORDER ON COMPLIANCE FILINGS

(Issued December 20, 2019)

1. On May 10, 2019, as amended on May 21, 2019, in Docket No. ER19-1823-001, and on May 22, 2019 in Docket No. ER19-1960-000, Midcontinent Independent System Operator, Inc. (MISO) submitted proposed revisions to its Open Access Transmission, Energy, and Operating Reserve Markets Tariff (Tariff) in compliance with the requirements of Order Nos. 845 and 845-A,¹ which amended the Commission's *pro forma* Large Generator Interconnection Agreement (LGIA) and *pro forma* Large Generator Interconnection Procedures (LGIP).² As discussed below, we find that MISO's filings partially comply with the requirements of Order Nos. 845 and 845-A. Accordingly, we accept MISO's compliance filings, effective as of the date of this order, and direct MISO to submit a further compliance filing within 60 days of the date of this order.

I. Background

2. On April 19, 2018, the Commission issued Order No. 845, which revised the Commission's *pro forma* LGIA and the *pro forma* LGIP to improve certainty for

¹ *Reform of Generator Interconnection Procedures and Agreements*, Order No. 845, 163 FERC ¶ 61,043 (2018), *errata notice*, 167 FERC ¶ 61,123, *order on reh'g*, Order No. 845-A, 166 FERC ¶ 61,137 (2019), *errata notice*, 167 FERC ¶ 61,124, *order on reh'g*, Order No. 845-B, 168 FERC ¶ 61,092 (2019).

² The *pro forma* LGIP and *pro forma* LGIA establish the terms and conditions under which public utilities that own, control, or operate facilities for transmitting energy in interstate commerce must provide interconnection service to large generating facilities. Order No. 845, 163 FERC ¶ 61,043 at P 6.

interconnection customers, promote more informed interconnection decisions, and enhance the interconnection process. The Commission stated that it expects that these reforms will provide interconnection customers better information and more options for obtaining interconnection service, and as a result, there will be fewer overall interconnection requests and fewer interconnection requests failing to reach commercial operation. The Commission also stated that it expects that, as a result of these reforms, transmission providers will be able to focus resources on those interconnection requests most likely to reach commercial operation.³ In Order No. 845-A, the Commission generally upheld the reforms it required in Order No. 845 but granted certain requests for rehearing and clarification.

3. In Order No. 845, the Commission adopted 10 different reforms in three categories to improve the interconnection process. First, in order to improve certainty for interconnection customers, the Commission: (1) removed the limitation that interconnection customers may exercise the option to build the transmission provider's interconnection facilities⁴ and stand alone network upgrades⁵ only in instances when the transmission provider cannot meet the dates proposed by the interconnection customer;⁶ and (2) required that transmission providers establish interconnection dispute resolution procedures that allow a disputing party unilaterally to seek non-binding dispute resolution.⁷

³ *Id.* P 2; Order No. 845-A, 166 FERC ¶ 61,137 at P 1.

⁴ Transmission provider's interconnection facilities are "all facilities and equipment owned, controlled or operated by the Transmission Provider from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the Standard Large Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Transmission Provider's Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades." *Pro forma* LGIA art. 1 (Definitions).

⁵ Stand alone network upgrades are "Network Upgrades that an Interconnection Customer may construct without affecting day-to-day operations of the Transmission System during their construction. Both the Transmission Provider and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Standard Large Generator Interconnection Agreement." *Pro forma* LGIA art. 1 (Definitions).

⁶ Order No. 845, 163 FERC ¶ 61,043 at P 85.

⁷ *Id.* P 3.

4. Second, to promote more informed interconnection decisions, the Commission: (1) required transmission providers to outline and make public a method for determining contingent facilities;⁸ (2) required transmission providers to list the specific study processes and assumptions for forming the network models used for interconnection studies; (3) revised the definition of “Generating Facility” to explicitly include electric storage resources; and (4) established reporting requirements for aggregate interconnection study performance.⁹

5. Third, the Commission adopted reforms to enhance the interconnection process by: (1) allowing interconnection customers to request a level of interconnection service that is lower than their generating facility capacity; (2) requiring transmission providers to allow for provisional interconnection agreements that provide for limited operation of a generating facility prior to completion of the full interconnection process; (3) requiring transmission providers to create a process for interconnection customers to use surplus interconnection service¹⁰ at existing points of interconnection; and (4) requiring transmission providers to set forth a procedure to follow when assessing and, if necessary, studying an interconnection customer’s technology changes without affecting the interconnection customer’s queue position.¹¹

II. MISO’s Compliance Filings

6. To comply with the Commission’s directives in Order Nos. 845 and 845-A, MISO proposes revisions to the MISO Generator Interconnection Procedures (GIP) contained in Attachment X of its Tariff, including revisions to its *pro forma* Generator Interconnection Agreement (GIA) in Appendix 1 to Attachment X of its Tariff. On May 10, 2019, in

⁸ Contingent facilities are “those unbuilt Interconnection Facilities and Network Upgrades upon which the Interconnection Request’s costs, timing, and study findings are dependent, and if delayed or not built, could cause a need for Re-Studies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing.” *Pro Forma* LGIP § 1 (Definitions).

⁹ Order No. 845, 163 FERC ¶ 61,043 at P 4.

¹⁰ Order No. 845 added a definition for “Surplus Interconnection Service” to section 1 of the *pro forma* LGIP and article 1 of the *pro forma* LGIA, defining the term as “any unused portion of Interconnection Service established in a Large Generator Interconnection Agreement, such that if Surplus Interconnection Service is utilized the Interconnection Service limit at the Point of Interconnection would remain the same.” *Id.* P 459.

¹¹ *Id.* P 5.

Docket No. ER19-1823-000, MISO submitted a filing to comply with the Commission's directives related to surplus interconnection service (May 10 Filing), which it amended on May 21, 2019 in Docket No. ER19-1823-001 (May 21 Amendment Filing). MISO subsequently submitted a filing in Docket No. ER19-1960-000 (May 22 Filing) to comply with the rest of the Commission's directives in Order No. 845. MISO requests independent entity variations regarding Order No. 845 directives related to the option to build, dispute resolution, interconnection study deadlines and reporting, interconnection service below generating facility capacity, provisional interconnection service, advanced technologies, and surplus interconnection service.¹² In addition, MISO proposes what it characterizes as minor, less substantive changes to its GIP and *pro forma* GIA that it believes generally follow the Commission's directives but incorporate revisions to align with MISO's existing Tariff terminology or the structure of MISO's GIP and *pro forma* GIA.¹³ MISO states that it believes these minor changes do not require an independent entity variation, as they comply with the *pro forma* LGIP and *pro forma* LGIA; however, if the Commission disagrees, MISO also requests an independent entity variation for these proposed changes.¹⁴

7. MISO requests that its proposed Tariff revisions become effective as of a date to be established in the Commission's order accepting its compliance filings, which date will be no earlier than the issuance date of such order.¹⁵ MISO also commits to making a subsequent filing pursuant to section 205 of the Federal Power Act¹⁶ to update its Tariff to reflect the most up-to-date version of the Tariff as of the effective date granted in the

¹² May 10 Filing, Transmittal Letter at 7; May 22 Filing, Transmittal Letter at 4.

¹³ For example, MISO has a single GIP and a single GIA rather than separate procedures for large and small generators; MISO proposes minor deviations from the Commission's *pro forma* LGIP and *pro forma* LGIA language throughout its compliance filings in order to reference MISO's GIP and *pro forma* GIA.

¹⁴ May 22 Filing, Transmittal Letter at 4.

¹⁵ *Id.* at 51. In the May 10 Filing, MISO requested an effective date of May 20, 2019 for all proposed Tariff revisions related to surplus interconnection service. *See* May 10 Filing, Transmittal Letter at 2. However, in the May 21 Amendment Filing, MISO proposed to revise the requested effective date, asking the Commission to establish an effective date in its order on MISO's compliance filing. *See* May 21 Amendment Filing, Transmittal Letter at 2.

¹⁶ 16 U.S.C. § 824d (2018).

instant proceeding.¹⁷ MISO states that this update filing will be submitted as soon as possible after issuance of the Commission's compliance order accepting its proposed Tariff provisions and establishing the effective date of those Tariff provisions.

III. Notices and Responsive Pleadings

8. Notice of MISO's May 10 Filing in Docket No. ER19-1823-000 was published in the *Federal Register*, 84 Fed. Reg. 22,491 (2019), with interventions and protests due on or before May 31, 2019. Notice of MISO's May 21 Amendment Filing in Docket No. ER19-1823-001 was published in the *Federal Register*, 84 Fed. Reg. 24,770 (2019), with interventions and protests due on or before June 11, 2019.

9. Notice of MISO's May 22 Filing in Docket No. ER19-1960-000 was published in the *Federal Register*, 84 Fed. Reg. 25,251 (2019), with interventions and protests due on or before June 12, 2019. On May 31, 2019, the American Wind Energy Association (AWEA) filed a motion to extend the comment period to July 3, 2019.¹⁸ On June 6, 2019, the Commission extended the comment period in Docket No. ER19-1960-000 until and including June 26, 2019.¹⁹

10. Apex Clean Energy Management, LLC filed a timely motion to intervene in Docket No. ER19-1823-000. Timely motions to intervene in Docket No. ER19-1960-000 were filed by: American Transmission Company LLC; Ameren Services Company; Avangrid Renewables, LLC; EDP Renewables North America LLC; Madison Gas and Electric Company and WPPI Energy; Electric Power Supply Association; and Renewable Energy Systems Americas, Inc.

11. Timely motions to intervene in Docket Nos. ER19-1823-000 and ER19-1960-000 were filed by: Consumers Energy Company; Alliant Energy Corporate Services, Inc.; MidAmerican Energy Company; NextEra Energy Resources, LLC; WEC Energy Group, Inc., on behalf of its subsidiaries Wisconsin Electric Power Company, Wisconsin Public Service Corporation, and Upper Michigan Energy Resources Corporation; American Municipal Power, Inc.; and the Energy Storage Association.

¹⁷ May 22 Filing, Transmittal Letter at 51.

¹⁸ AWEA Motion for Extension of Time, Docket No. ER19-1949-000, et al., at 1 (filed May 31, 2019).

¹⁹ Notice Granting Extension of Time, Docket Nos. ER19-1949-000, ER19-1950-000, ER19-1951-000, ER19-1952-000, ER19-1954-000, ER19-1958-000, and ER19-1960-000 (June 7, 2019).

12. Timely motions to intervene and comments were filed in Docket Nos. ER19-1823-000 and ER19-1823-001 by: AWEA and the Clean Grid Alliance (AWEA/CGA) and MISO Transmission Owners.²⁰

13. Timely motions to intervene and comments were filed in Docket No. ER19-1960-000 by: AWEA, CGA, and the Solar Council (collectively, the Clean Energy Entities) and MISO Transmission Owners.²¹ Generation Developers²² filed a timely motion to intervene and protest in Docket No. ER19-1960-000.

14. On July 11, 2019, MISO and MISO Transmission Owners filed answers to the comments and protests in Docket No. ER19-1960-000. On August 15, 2019 and

²⁰ MISO Transmission Owners for Docket Nos. ER19-1823-000 and ER19-1823-001 consist of: Ameren Services Company, as agent for Union Electric Company, Ameren Illinois Company, and Ameren Transmission Company of Illinois; American Transmission Company LLC; Big Rivers Electric Corporation; Central Minnesota Municipal Power Agency; City Water, Light & Power (Springfield, IL); Cleco Power LLC; Dairyland Power Cooperative; Duke Energy Business Services, LLC for Duke Energy Indiana, LLC; East Texas Electric Cooperative; Entergy Arkansas, LLC; Entergy Louisiana, LLC; Entergy Mississippi, LLC; Entergy New Orleans, LLC; 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; Lafayette Utilities System; Michigan Electric Transmission Company, LLC; 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 LLC; 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.; and Wolverine Power Supply Cooperative, Inc.

²¹ MISO Transmission Owners for Docket No. ER19-1960-000 consist of the same entities comprising the MISO Transmission Owners that intervened in Docket Nos. ER19-1823-000 and ER19-1823-001, with the addition of Cooperative Energy.

²² Generation Developers are EDF Renewables, Inc., E.ON Climate & Renewables North America, LLC, and Enel Green Power North America, Inc.

August 16, 2019, respectively, Clean Energy Entities and Generation Developers filed answers to the answers in Docket No. ER19-1960-000.

IV. Discussion

A. Procedural Matters

15. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2019), the timely, unopposed motions to intervene serve to make the entities that filed them parties to the proceeding in which they sought intervention.

16. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2019), prohibits an answer to a protest or an answer unless otherwise ordered by the decisional authority. We accept the answers filed in this proceeding because they have provided information that assisted us in our decision-making process.

B. Substantive Matters

17. As discussed below, we find that MISO's filings partially comply with the requirements of Order Nos. 845 and 845-A. Accordingly, we accept MISO's compliance filings, effective as of the date of this order, and direct MISO to submit a further compliance filing within 60 days of the date of this order.

1. Proposed Variations

18. As discussed further below, MISO has requested certain variations from the Commission's requirements in Order Nos. 845 and 845-A. The Commission explained in Order No. 845 that such variations would be reviewed under the same standard allowed by Order No. 2003. In Order No. 2003, the Commission permitted Regional Transmission Organizations/Independent System Operators (RTOs/ISOs) to seek "independent entity variations" for pricing and non-pricing provisions, and that RTOs/ISOs "shall have greater flexibility to customize [their] interconnection procedures and agreement to fit regional needs."²³ The Commission stated that this approach recognizes that an RTO/ISO is less likely to act in an unduly discriminatory manner than a transmission provider that is a

²³ *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, 104 FERC ¶ 61,103, at P 826 (2003), *order on reh'g*, Order No. 2003-A, 106 FERC ¶ 61,220, *order on reh'g*, Order No. 2003-B, 109 FERC ¶ 61,287 (2004), *order on reh'g*, Order No. 2003-C, 111 FERC ¶ 61,401 (2005), *aff'd sub nom.*, *Nat'l Ass'n of Regulatory Util. Comm'rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007).

market participant.²⁴ The Commission has granted independent entity variations from rulemakings where an RTO/ISO demonstrates that the proposed variation: (1) is just and reasonable, and not unduly discriminatory or preferential; and (2) accomplishes the purposes of the final rule. It is not a sufficient justification to state that a variation conforms to current RTO/ISO practices or to the RTO's/ISO's tariff definitions and terminology.²⁵ Even if the transmission provider is an RTO/ISO, it must still justify its variations in light of the Commission's *pro forma* LGIP and/or *pro forma* LGIA.²⁶ We will evaluate MISO's proposed variations from the requirements of Order Nos. 845 and 845-A accordingly.

2. Interconnection Customer's Option to Build

19. In Order No. 845, the Commission revised articles 5.1, 5.1.3, and 5.1.4 of the *pro forma* LGIA to allow interconnection customers to unilaterally exercise the option to build stand alone network upgrades and the transmission provider's interconnection facilities, regardless of whether the transmission provider can complete construction of such facilities by the interconnection customer's proposed in-service date, initial synchronization date, or commercial operation date.²⁷ Prior to Order No. 845, this option to build was available to an interconnection customer only if the transmission provider did not agree to the interconnection customer's preferred construction timeline.²⁸ The Commission stated in Order No. 845 that this reform of the option to build will "benefit the interconnection process by providing interconnection customers more control and certainty during the design and construction phases of the interconnection process."²⁹

²⁴ Order No. 2003, 104 FERC ¶ 61,103 at P 827.

²⁵ See, e.g., *ISO New England, Inc.*, 164 FERC ¶ 61,222, at P 9 (2018) (citing Order No. 2003, 104 FERC ¶ 61,103 at PP 26, 827); *Midcontinent Indep. Sys. Operator, Inc.*, 154 FERC ¶ 61,247, at P 20 (2016); *California Indep. Sys. Operator Corp.*, 140 FERC ¶ 61,070, at P 44 (2012)).

²⁶ See *PJM Interconnection, L.L.C.*, 108 FERC ¶ 61,025, at P 16 (2004), *order on reh'g*, 110 FERC ¶ 61,099 (2005).

²⁷ Order No. 845, 163 FERC ¶ 61,043 at PP 85-87.

²⁸ Order No. 2003, 104 FERC ¶ 61,103 at P 353; see also *pro forma* LGIP § 5.1.3.

²⁹ Order No. 845, 163 FERC ¶ 61,043 at P 85.

20. In Order No. 845-A, the Commission granted rehearing and clarification of certain aspects of the revised option to build. Specifically, the Commission revised the definition of stand alone network upgrade in the *pro forma* LGIP and *pro forma* LGIA to: (1) state that, when there is a disagreement, the transmission provider must provide the interconnection customer a written technical explanation outlining why the transmission provider does not consider a specific network upgrade to be a stand alone network upgrade;³⁰ and (2) clarify that the option to build does not apply to stand alone network upgrades on affected systems.³¹ The Commission also made revisions to article 5.2 of the *pro forma* LGIA to allow transmission providers to recover oversight costs related to the interconnection customer's option to build.³² In addition, the Commission clarified that the revised option to build provisions apply to all public utility transmission providers, including those that reimburse the interconnection customer for network upgrades.³³

a. MISO's Compliance Filings

21. MISO proposes revisions to its *pro forma* GIA that allow interconnection customers the ability to unilaterally exercise the option to build stand alone network upgrades and the transmission provider's interconnection facilities.³⁴ MISO requests an independent entity variation for certain of its proposed changes and also proposes what it asserts are minor adjustments to adapt the language to MISO's Tariff, as discussed below.

22. MISO requests an independent entity variation for its proposed revisions to the definition of stand alone network upgrades in its GIP and *pro forma* GIA.³⁵ MISO states that the proposed language mirrors the language adopted by Order No. 845-A, with the exception that MISO's definition provides that the obligation to provide the interconnection customer with a written technical explanation applies to both MISO and the transmission

³⁰ Order No. 845-A, 166 FERC ¶ 61,137 at P 68.

³¹ *Id.* P 61.

³² *Id.* P 75.

³³ *Id.* P 33.

³⁴ May 22 Filing, Transmittal Letter at 6-9, *proposed* MISO Tariff, att. X, app. 6 (GIA), arts. 5.1 (Options), 5.1.3 (Option to Build), 5.1.4 (Negotiated Option), and 5.2(12) (General Conditions Applicable to Option to Build) (65.0.0).

³⁵ *Id.*, Transmittal Letter at 9.

owner if either party disagrees with the interconnection customer that a network upgrade is a stand alone network upgrade. MISO explains that, under its current definition of stand alone network upgrade, both the transmission owner and MISO must agree with the interconnection customer that a network upgrade is a stand alone network upgrade. MISO explains that, given the role of all three parties in the current definition, requiring the party that disagrees with the interconnection customer about whether a network upgrade is a stand alone network upgrade to provide written technical information better comports with the intent of Order No. 845's reform. MISO believes that its proposed variation is just and reasonable because it ensures that the party with a disagreement will provide the interconnection customer with a technical explanation, thus promoting transparency and aiding in the resolution of disputes.³⁶

23. In addition, MISO requests an independent entity variation that it states is necessary to reconcile the Commission's option to build requirements under the Commission's *pro forma* LGIA with the MISO transmission owners' right to provide initial funding for network upgrades.³⁷ According to MISO, its Tariff provides MISO transmission owners with two options for recovering network upgrade costs from interconnection customers. Under these options, either: (1) the interconnection customer funds the cost of network upgrades prior to construction, and the transmission owner does not refund the non-reimbursable portion³⁸ of this capital (interconnection customer initial funding); or (2) the transmission owner may unilaterally choose to pay up-front for the construction of network upgrades and then recover the interconnection customer's portion of these costs over time through periodic network upgrade charges that includes a return of capital and a return on capital investment (transmission owner initial funding).³⁹

24. MISO explains that, in 2015, the Commission found that transmission owner initial funding could result in higher costs to interconnection customers and directed MISO to revise its Tariff to remove the ability of a transmission owner to unilaterally

³⁶ *Id.* at 9-10.

³⁷ *Id.* at 10.

³⁸ Under Attachment FF of the Tariff, MISO directly assigns to interconnection customers 90 percent of the costs for network upgrades rated 345 kV and above (with the remaining 10 percent recovered on a system-wide basis) and 100 percent of the costs for network upgrades rated below 345 kV. MISO Tariff, att. FF (Transmission Expansion Planning Protocol), § III.A.2.d (66.0.0).

³⁹ May 22 Filing, Transmittal Letter at 10.

elect transmission owner initial funding.⁴⁰ However, in 2018, the U.S. Court of Appeals for the D.C. Circuit (D.C. Circuit) vacated and remanded the Commission's decisions, acknowledging the MISO transmission owners' concerns that, pursuant to interconnection customer initial funding, MISO transmission owners would have to "assume certain costs that are never compensated" such as "liability for insurance deductibles and all sorts of litigation, including environmental and reliability claims" as managers of "potentially large non-profit appendages" to their transmission system.⁴¹ MISO notes that the Commission, on remand, reversed its prior determination and required MISO to reinstate transmission owner initial funding.⁴²

25. MISO notes that, in Order No. 845-A, the Commission recognized MISO's concerns related to the compatibility of the Commission's option to build directives with transmission owner initial funding under MISO's Tariff, but denied the requests for rehearing and clarification of Order No. 845 and stated that MISO should raise such concerns in its compliance filing.⁴³

26. MISO states that the option to build, as revised by Order Nos. 845 and 845-A and applied to stand alone network upgrades under its Tariff, would trigger similar concerns to those that the D.C. Circuit acknowledged regarding interconnection customer initial funding.⁴⁴ MISO explains that, if an interconnection customer chooses the option to build and pays for stand alone network upgrades, there is no capital for the transmission

⁴⁰ *Id.* (citing Order No. 845-A, 166 FERC ¶ 61,137 at PP 12-13). *See also* *Midcontinent Indep. Sys. Operator, Inc.*, 151 FERC ¶ 61,220 (2015); *Otter Tail Power Co. v. Midcontinent Indep. Sys. Operator, Inc.*, 153 FERC ¶ 61,352 (2015); *Otter Tail Power Co. v. Midcontinent Indep. Sys. Operator, Inc.*, 156 FERC ¶ 61,099 (2016).

⁴¹ May 22 Filing, Transmittal Letter at 10-11 (citing Order No. 845-A, 166 FERC ¶ 61,137 at PP 14-15; *Ameren Services Co. v. FERC*, 880 F.3d 571 (D.C. Cir. 2018) (*Ameren*)).

⁴² *Id.* at 11 (citing *Midcontinent Indep. Sys. Operator, Inc.*, 164 FERC ¶ 61,158 (2018) (*Ameren Remand Order*)). The Commission subsequently accepted MISO's compliance filing in Docket No. ER18-2513-000 to reinstate transmission owner initial funding in its Tariff. *See Midcontinent Indep. Sys. Operator, Inc.*, 169 FERC ¶ 61,233, at P 150 (2019).

⁴³ May 22 Filing, Transmittal Letter at 11 (citing Order No. 845-A, 166 FERC ¶ 61,137 at PP 20-21).

⁴⁴ *Id.* at 11-15.

owner to recover the cost of, and hence, no capital to earn a return on.⁴⁵ MISO states that, nonetheless, the transmission owner would still have to assume control of, operate and maintain, and assume liability for the stand alone network upgrades, even though it could not recover a return on such costs from the interconnection customer.⁴⁶ Thus, MISO argues, if the interconnection customer exercises the option to build, it would contravene *Ameren* by requiring transmission owners to accept, operate, and maintain stand alone network upgrades as non-profit appendages to their transmission systems.⁴⁷

27. To address this issue, MISO requests an independent entity variation and proposes to add an additional provision applicable to the option to build in article 5.2(13) of MISO's *pro forma* GIA.⁴⁸ Under this proposed condition, if an interconnection customer exercises the option to build and the transmission owner elects to exercise transmission owner initial funding, the interconnection customer will invoice the transmission owner for the construction of the stand alone network upgrades, and the transmission owner will reimburse the interconnection customer the full invoiced amount prior to the date specified in Appendix B (Milestones) of MISO's *pro forma* GIA when the interconnection customer transfers the stand alone network upgrades to the transmission owner. The proposed language also requires that, after transferring ownership of the stand alone network upgrade to the transmission owner, the interconnection customer shall make payments to the transmission owner for the facilities pursuant to an agreement between and among the parties.

28. MISO contends that these changes would allow interconnection customers greater control over their initial construction costs and construction schedules, as required by Order No. 845, while allowing transmission owners to earn a return of, and on, stand alone network upgrades that they must operate and maintain, as required by *Ameren*.⁴⁹ MISO claims that its proposal preserves the benefits of any cost savings incurred through the option to build because MISO's additional proposed condition sets the base amount that the transmission owner reimburses and subsequently charges back pursuant to an

⁴⁵ *Id.* at 11.

⁴⁶ *Id.* at 11-12.

⁴⁷ *Id.* at 12 (citing Order No. 845-A, 166 FERC ¶ 61,137 at PP 14-15; *Ameren*, 880 F.3d at 580-81)).

⁴⁸ *Id.*, proposed MISO Tariff, att. X, app. 6, art. 5.2(13) (General Conditions Applicable to Option to Build) (65.0.0).

⁴⁹ *Id.*, Transmittal Letter at 13-15.

agreement at the amount of the invoiced costs from the interconnection customer.⁵⁰ MISO provides an example to illustrate the continued cost savings to the interconnection customer.⁵¹ In its example, MISO starts with the assumption that a transmission owner would charge \$20 million to construct a stand alone network upgrade in 16 months. MISO states that the transmission owner could exercise transmission owner initial funding, pay for the costs of construction, and recover the \$20 million from the interconnection customer plus a return on that expenditure over a period of time through a facilities service agreement. Alternatively, MISO states that an interconnection customer might be able to build the same stand alone network upgrade for \$17 million and complete construction in 14 months. MISO states that, under its proposal, the interconnection customer would build the upgrade on its shorter timeframe, invoice the transmission owner for the \$17 million, and then be charged a return of and on that lower amount.

29. Additionally, MISO proposes to add two milestones to MISO's *pro forma* GIA to reflect the dates when the interconnection customer invoices the transmission owner and transfers ownership of the stand alone network upgrades to the transmission owner.⁵² The first proposed milestone, Milestone 9, proposes that the parties would agree to a specific deadline for the interconnection customer to invoice the transmission owner for expenses related to the construction of transmission owner's interconnection facilities and stand alone network upgrades for which the interconnection customer has exercised the option to build and the transmission owner has elected transmission owner initial funding.⁵³

30. The second proposed milestone, Milestone 9a, proposes that the parties agree to a date for the transfer of ownership of the transmission owner's interconnection facilities and stand alone network upgrades from the interconnection customer to the transmission owner if the interconnection customer has exercised the option to build.⁵⁴ MISO explains that the deadline for this milestone would be subject to the parties' agreement and would be no later than the date of energization or three days prior to the initial synchronization

⁵⁰ *Id.* at 13-14, *proposed* MISO Tariff, att. X, app. 6, art. 5.2(13) (General Conditions Applicable to Option to Build) (65.0.0).

⁵¹ *Id.*, Transmittal Letter at 14.

⁵² *Id.* at 12-13.

⁵³ *Id.*, *proposed* MISO Tariff, att. X, app. 6, app. B, Milestone 9 (65.0.0).

⁵⁴ *Id.*, *proposed* MISO Tariff, att. X, app. 6, app. B, Milestone 9a (65.0.0).

date, whichever is earlier.⁵⁵ According to MISO, because proposed Milestone 9a would provide a specific date for the existing obligation in its *pro forma* GIA to transfer the facility's ownership, MISO also proposes to add a reference to the existing obligation in the General Conditions Applicable to Option to Build article of its *pro forma* GIA to reference proposed Milestone 9a.⁵⁶

31. MISO asserts that its proposed milestones are just, reasonable, and consistent with the goals of Order No. 845 and are necessary to provide certainty to the parties regarding the timing of payments and the transfer of facilities.⁵⁷ MISO claims that incorporating the proposed Milestones into the GIA balances providing certainty for the timing of billing, payment, and ownership transfer with flexibility for the parties to tailor a schedule to the project.⁵⁸

32. Finally, MISO proposes what it characterizes as minor changes, including the replacement of the term "Transmission Provider" with "Transmission Owner," where appropriate, to maintain consistency with the roles of the transmission owner and transmission provider in the currently effective language of MISO's *pro forma* GIA.⁵⁹ MISO also proposes, when referring to the dates selected by the interconnection customer related to its construction schedule,⁶⁰ to add a reference to the section of MISO's *pro forma* GIA requiring the interconnection customer to select dates related to its construction schedule, which MISO explains will provide clarity while not substantively impacting the proposed language.⁶¹

⁵⁵ *Id.*, Transmittal Letter at 12-13.

⁵⁶ *Id.* at 13, *proposed* MISO Tariff, att. X, app. 6, art. 5.2(9) (General Conditions Applicable to Option to Build) (65.0.0).

⁵⁷ *Id.*, Transmittal Letter at 14.

⁵⁸ *Id.* at 14-15.

⁵⁹ *Id.* at 6-9, *proposed* MISO Tariff, att. X, app. 6, arts. 5.1 (Options), 5.1.4 (Negotiated Options), and 5.2 (General Conditions Applicable to Option to Build) (65.0.0).

⁶⁰ *See id.*, *proposed* MISO Tariff, att. X, app. 6, art. 5.1.4 (Negotiated Options) (65.0.0).

⁶¹ *Id.*, Transmittal Letter at 8.

b. Protests/Comments

33. MISO Transmission Owners ask the Commission to accept MISO's proposed Tariff provisions addressing the option to build, noting that the bulk of the revisions simply implement the requirements of Order No. 845.⁶² MISO Transmission Owners state that MISO's proposed independent entity variation in article 5.2(13) of MISO's *pro forma* GIA should be accepted because it is consistent with: (1) the existing provisions of the MISO Tariff that allow a transmission owner to unilaterally choose transmission owner initial funding; (2) *Ameren* and the *Ameren Remand Order*, because the proposed variation allows transmission owners to earn a return on network upgrades that will become part of their system; and (3) the Commission's recognition that MISO's cost allocation provisions for network upgrades are a unique variation from the Order No. 2003 crediting policy, because the proposed variation assigns most or all of the network upgrade costs to the interconnection customer.⁶³ MISO Transmission Owners contend that the requested independent entity variation does not prevent the interconnection customer from exercising the option to build or from establishing an expeditious construction schedule, as it merely relates to the payment for upgrades.⁶⁴ MISO Transmission Owners do not object to MISO's decision not to apply the requested independent entity variation to transmission owner's interconnection facilities, but reserve their right to seek to have the same option available for transmission owner's interconnection facilities in future proceedings.⁶⁵

34. Clean Energy Entities object to MISO's proposed independent entity variation in article 5.2(13) of the *pro forma* GIA. They note that MISO's proposed variation to the option to build would provide that, after the interconnection customer pays for and builds a stand alone network upgrade, including the oversight costs charged by the transmission owner as permitted in Order No. 845-A, the transmission owner can then exercise the right to provide initial funding for the stand alone network upgrade.⁶⁶ Clean Energy Entities argue that this would force a loan onto an interconnection customer that has already taken on the financial and construction liability risks required to initiate and complete construction of the upgrade. Clean Energy Entities state that this would negate all the savings achieved by the exercise of the option to build and drive up

⁶² MISO Transmission Owners Comments, Docket No. ER19-1960-000 at 9.

⁶³ *Id.* at 10-11.

⁶⁴ *Id.* at 12.

⁶⁵ *Id.* at 13.

⁶⁶ Clean Energy Entities Comments, Docket No. ER19-1960-000 at 5.

interconnection costs, which goes against the purpose of Order No. 845.⁶⁷ Clean Energy Entities claim that MISO justifies its proposal because the transmission owner must pay maintenance fees on the new network upgrade, and Clean Energy Entities dispute that justification.⁶⁸ Clean Energy Entities contend that the cost of maintenance on a network upgrade that is used to provide transmission service is collected from transmission customers who are using the upgrade.⁶⁹

35. Generation Developers also object to MISO's proposed independent entity variation in article 5.2(13) of the *pro forma* GIA. They contend that MISO's option to build proposal does not preserve its crediting policy, whereby the interconnection customer is reimbursed for 10 percent of the cost of network upgrades rated at 345 kV or higher, because the proposed Tariff revisions say nothing about this 10 percent reimbursement.⁷⁰ Generation Developers also disagree with MISO's assertion that the option to build under Order No. 845 is in conflict with *Ameren*. Generation Developers note that the option to build has existed in MISO's Tariff since the issuance of Order No. 2003. Generation Developers further argue that there is no discussion in the complaint that led to *Ameren*, nor in the court decision or any of the pleadings in that docket, of a right to extend a MISO transmission owner's ability to provide initial funding for network upgrades to the option to build; therefore, Generation Developers argue, there is nothing in *Ameren* to harmonize with the option to build as expanded in Order No. 845.

36. Generation Developers also contend that the right to earn a return on network upgrades is related to risk.⁷¹ They assert that the interconnection customer exercising the option to build bears all risk of funding, developing, and constructing the stand alone network upgrades, and thus there is no basis for the MISO transmission owner to earn a return on the investment undertaken by the interconnection customer. Generation Developers disagree with MISO's statement that the proposal will not undermine any scheduling expediency gained by the interconnection customer exercising the option to build; Generation Developers argue that the purpose of the option to build revisions in Order No. 845 was to achieve cost savings and that MISO's proposal will negate any

⁶⁷ *Id.* at 5-6.

⁶⁸ *Id.* at 6.

⁶⁹ *Id.* at 6-7.

⁷⁰ Generation Developers Protest, Docket No. ER19-1960-000 at 3.

⁷¹ *Id.* at 4.

such intended savings.⁷² Generation Developers further take issue with MISO's proposal to require the interconnection customer to invoice the transmission owner for the amount expended on stand alone network upgrades, and they argue that MISO should provide for the interconnection customer to invoice the transmission owner if it desires.⁷³

c. Answers

37. MISO clarifies that its proposed independent entity variation to preserve a transmission owner's right to transmission owner initial funding has no impact on MISO's crediting policy, under which an interconnection customer would receive a 10 percent reimbursement for stand alone network upgrades rated at 345 kV or higher.⁷⁴

38. MISO and MISO Transmission Owners rebut arguments that MISO's proposed independent entity variation is not properly before the Commission because, protesters argue, *Ameren* and the related Commission proceeding did not discuss the option to build. MISO and MISO Transmission Owners note that, in Order No. 845-A, the Commission directed MISO to include in its compliance filing any request to preserve transmission owner initial funding in the context of the option to build.⁷⁵

39. MISO and MISO Transmission Owners disagree with arguments that there is no need to harmonize *Ameren* with the option to build as expanded in Order No. 845.⁷⁶ MISO reiterates that the interconnection customer's exercise of the option to build, which would allow the interconnection customer to fund and construct stand alone network upgrades, would deprive the transmission owner of its right to initially fund the network upgrades and would contravene *Ameren* by requiring the transmission owner to accept, operate, and maintain network upgrades as non-profit appendages to its transmission system with no compensatory incremental return, which could impact the transmission

⁷² *Id.* at 4-6.

⁷³ *Id.* at 7.

⁷⁴ MISO Answer, Docket No. ER19-1960-000 at 4 n.10.

⁷⁵ *Id.* at 4-5; MISO Transmission Owners Answer, Docket No. ER19-1960-000 at 12-13 (both citing Order No. 845-A, 166 FERC ¶ 61,137 at P 21).

⁷⁶ MISO Answer, Docket No. ER19-1960-000, at 6; MISO Transmission Owners Answer, Docket No. ER19-1960-000 at 10-12.

owner's ability to attract new capital.⁷⁷ MISO Transmission Owners argue that these concerns stated by the court in *Ameren* apply with equal force regardless of whether the transmission owner or the interconnection customer constructs the network upgrades, as the MISO transmission owner in either case faces the same risk in owning, operating, and maintaining the constructed network upgrades, including liability for insurance deductibles and litigation.⁷⁸ MISO asserts that *Ameren* has not been overturned and that MISO cannot use Order No. 845 compliance to circumvent the transmission owner's right to provide initial funding for network upgrades and earn a return.⁷⁹

40. Further, MISO and MISO Transmission Owners disagree with arguments that MISO's proposed independent entity variation would drive up costs and cause interconnection customers to lose all benefits from exercising the option to build.⁸⁰ They state that an interconnection customer might select the option to build because it can construct the stand alone network upgrades itself for less money than the transmission owner could; thus, even though the interconnection customer would still have to pay a return on those upgrades to the transmission owner, it would be paying a return on a lower initial amount.⁸¹ They assert that MISO's proposal allows MISO to deliver the benefits intended by Order No. 845 without abrogating a transmission owner's right to provide initial funding for and earn a return on network upgrades.⁸²

41. MISO Transmission Owners also refute Generation Developers' argument that MISO has not provided legal support for its proposal to require an interconnection customer to invoice the transmission owner for the costs expended to construct stand alone network upgrades.⁸³ MISO Transmission Owners state that the transmission owner

⁷⁷ MISO Answer, Docket No. ER19-1960-000 at 7 (citing *Ameren*, 880 F.3d at 580-81).

⁷⁸ MISO Transmission Owners Answer, Docket No. ER19-1960-000 at 11, 14.

⁷⁹ MISO Answer, Docket No. ER19-1960-000 at 9.

⁸⁰ *Id.*; MISO Transmission Owners Answer, Docket No. ER19-1960-000 at 14-17.

⁸¹ MISO Answer, Docket No. ER19-1960-000 at 10; MISO Transmission Owners Answer, Docket No. ER19-1960-000 at 15.

⁸² MISO Answer, Docket No. ER19-1960-000, at 11; MISO Transmission Owners Answer, Docket No. ER19-1960-000 at 16-17.

⁸³ MISO Transmission Owners Answer, Docket No. ER19-1960-000 at 17.

will provide the means and the necessary contractual arrangement for the interconnection customer to invoice the transmission owner for the appropriate costs.

42. Generation Developers and Clean Energy Entities reiterate that transmission owner initial funding does not extend to the option to build because the option to build was never mentioned in any pleadings leading up to *Ameren*, by the D.C. Circuit in *Ameren*, or by the Commission in the *Ameren* Remand Order.⁸⁴ Clean Energy Entities state that MISO recently filed Tariff changes to incorporate transmission owner initial funding and did not propose to apply that funding to the option to build.⁸⁵ Generation Developers argue that MISO's filing is improper because it goes beyond incorporating the Commission's requirements in Order Nos. 845 and 845-A; rather, they argue, MISO has introduced an entirely new concept, i.e., applying transmission owner initial funding to the option to build.⁸⁶ Generation Developers contend that it is of no consequence that the Commission told MISO that the issue could be considered on compliance, as the Commission's statement does not make MISO's proposal procedurally viable.⁸⁷

43. Generation Developers and Clean Energy Entities argue that MISO's proposal is not just and reasonable and does not accomplish the purposes of the underlying order because it would increase costs for stand alone network upgrades and shut down use of the option to build, as well as potentially cause generation resources to withdraw from the queue.⁸⁸ Generation Developers and Clean Energy Entities contend that neither MISO nor MISO Transmission Owners have provided evidence demonstrating that a transmission owner faces an inability to attract capital or operate as a non-profit entity if transmission owner initial funding is not extended to the option to build.⁸⁹ Generation Developers point to the fact that MISO has not extended transmission owner initial funding to transmission owner's interconnection facilities as a clear indication that MISO

⁸⁴ Generation Developers Answer, Docket No. ER19-1960-000 at 2-3; Clean Energy Entities Answer, Docket No. ER19-1960-000 at 5.

⁸⁵ Clean Energy Entities Answer, Docket No. ER19-1960-000 at 5 (citing MISO's filings in Docket Nos. ER18-1964-000 and ER18-1965-000).

⁸⁶ Generation Developers Answer, Docket No. ER19-1960-000 at 3.

⁸⁷ *Id.* at 4.

⁸⁸ *Id.* at 6; Clean Energy Entities Answer, Docket No. ER19-1960-000 at 3-4.

⁸⁹ Generation Developers Answer, Docket No. ER19-1960-000 at 7; Clean Energy Entities Answer, Docket No. ER19-1960-000 at 5.

transmission owners do not suffer any harms; Generation Developers contend that either there is harm from accepting interconnection customer-funded facilities or there is not.⁹⁰

d. Commission Determination

44. We find that MISO's proposed revisions to its GIP and *pro forma* GIA implement the requirements to allow interconnection customers to unilaterally exercise the option to build stand alone network upgrades and the transmission provider's interconnection facilities; accordingly, we find that MISO's proposed Tariff revisions comply with the requirements of Order Nos. 845 and 845-A, with one exception, as discussed below. Specifically, the proposed language in articles 5.1, 5.1.3, 5.1.4, and 5.2(12) of MISO's *pro forma* GIA matches the language the Commission adopted in Order Nos. 845 and 845-A, with terminology adjustments to reflect definitions and sections specific to MISO's Tariff. MISO also requests two independent entity variations. As discussed further below, we accept MISO's request for an independent entity variation to adjust the definition of stand alone network upgrade in MISO's GIP and *pro forma* GIA. We also accept MISO's proposed independent entity variation in article 5.2(13) of the *pro forma* GIA to reconcile the option to build with transmission owner initial funding, subject to MISO making a further compliance filing. Accordingly, as further discussed below, we direct MISO to file, within 60 days of the date of this order, a further compliance filing to address the requirements described herein.

45. We accept MISO's request for an independent entity variation to adjust the definition of stand alone network upgrade to require that both MISO and the transmission owner have the obligation to provide a written technical explanation to the interconnection customer if either party disagrees with the interconnection customer about whether a network upgrade is a stand alone network upgrade. Although Order No. 845-A applied this requirement only to the transmission provider,⁹¹ MISO's Tariff requires both the transmission owner and MISO to agree with the interconnection customer that a network upgrade is a stand alone network upgrade. Therefore, we agree with MISO that this change is just and reasonable and accomplishes the purpose of Order No. 845-A because it will promote transparency and aid in the resolution of disputes.

46. We accept MISO's proposed independent entity variation in article 5.2(13) of the *pro forma* GIA to reconcile the option to build with transmission owner initial funding, subject to a further compliance filing, as discussed below. As an initial matter, we agree with MISO that *Ameren* has implications for the option to build within MISO. We find that stand alone network upgrades are not different in any meaningful way from the MISO network upgrades that were the focus of the *Ameren* proceeding; they are network

⁹⁰ Generation Developers Answer, Docket No. ER19-1960-000 at 8.

⁹¹ Order No. 845-A, 166 FERC ¶ 61,137 at P 68.

upgrades that, although they do not affect day-to-day operations of the transmission system, will nevertheless become part of the MISO transmission owner's system and will be owned, operated, and maintained by the MISO transmission owner. The D.C. Circuit in *Ameren* noted that this ownership carries some risk, such as liability for insurance and litigation, as well as the risk that the inability of the transmission owner to earn a return on significant network upgrades on its system could detract from the transmission owner's ability to attract future capital.⁹² Due to these concerns, on remand from *Ameren*, the Commission reinstated transmission owner initial funding for all network upgrades into the *pro forma* GIA in MISO's Tariff.⁹³

47. We find that MISO transmission owners should similarly have the right to provide up-front funding for, and earn a return on, stand alone network upgrades. We agree with MISO that the option to build under Order No. 845, which would allow the interconnection customer to unilaterally elect to construct and pay for stand alone network upgrades, would not allow MISO transmission owners to receive compensation for the risk of owning, operating, and maintaining those facilities.

48. We disagree with protesters' arguments that *Ameren* does not apply to stand alone network upgrades because the option to build was not mentioned in the proceedings that led to *Ameren* or by the D.C. Circuit. While *Ameren* did not specifically contemplate the existing option to build provisions, it did contemplate the financing mechanism for network upgrades. This financing mechanism applies equally to all types of network upgrades, including stand alone network upgrades, which are simply a subset of the "Network Upgrades" contemplated under article 11.3 of MISO's *pro forma* GIA.⁹⁴

49. We reject arguments that MISO's independent entity variation does not accomplish the purposes of Order Nos. 845 and 845-A because the proposal increases costs and negates potential savings. Protesters compare the cost of MISO's proposed option to build, under which a transmission owner would earn a return of and on the cost of the stand alone network upgrades, with the costs of the option to build if the transmission owner did not earn such a return. However, as explained above, MISO transmission owners have the right to elect to provide the initial funding for stand alone network upgrades and earn a return on those upgrades. As MISO noted, an interconnection customer might select the option to build because it can construct the stand alone network upgrades itself for less money than the transmission owner could. Thus, even though the interconnection customer would still have to pay a return on the cost of those upgrades to the transmission owner, it would be paying a return on a lower

⁹² *Ameren*, 880 F.3d at 580-82.

⁹³ *Ameren Remand Order*, 164 FERC ¶ 61,158 at P 33.

⁹⁴ MISO Tariff, Module A, § 1.S, "Stand Alone Network Upgrade" (111.0.0).

initial amount. In addition, the interconnection customer might choose the option to build because it can construct the stand alone network upgrades more quickly than the transmission owner, a benefit that is unaffected by whether or not the interconnection customer pays a return on those upgrades to the transmission owner. We find that MISO's proposed language in article 5.2(13) of its *pro forma* GIA accomplishes the purposes of Order No. 845 by giving the interconnection customer the option to construct stand alone network upgrades on its own timeline while preserving the rights of transmission owners to earn a return on network upgrades.

50. We disagree with Generation Developers' argument that MISO's decision not to seek to extend transmission owner initial funding to transmission owner's interconnection facilities is a clear indication that MISO's transmission owners do not suffer any harms. MISO's treatment of transmission owner's interconnection facilities is not relevant to the fact that the court's decision in *Ameren* implicates stand alone network upgrades, which requires MISO to reconcile the option to build as applied to those upgrades with transmission owner initial funding. MISO's proposal seeks consistent treatment of network upgrades under its Tariff.

51. However, we find that MISO's proposal is unclear as to when the transmission owner will reimburse an interconnection customer for the costs of any stand alone network upgrades the interconnection customer constructs after exercising the option to build. Specifically, in Milestone 9 of MISO's GIA, MISO proposes that the parties will agree to a specific deadline for the interconnection customer to invoice the transmission owner for expenses related to an interconnection customer's construction of stand alone network upgrades; proposed article 5.2(13) states that the transmission owner must reimburse the interconnection customer for the full amount of such invoiced costs prior to an agreed-upon date. We are concerned that, if transmission owner reimbursement for the cost of these facilities occurs after the stand alone network upgrades are completed, there will be a misalignment of the risks with the rate of return that the transmission owner receives. As discussed further below, MISO's proposed funding arrangement could require the interconnection customer exercising the option to build to take on the risk of financing and constructing the stand alone network upgrades, while allowing the transmission owner to earn the same rate of return the transmission owner would have earned if it had constructed and provided initial funding for the stand alone network upgrades. Thus, MISO's proposal could allow transmission owners to avoid the risks of providing initial financing for, and constructing, stand alone network upgrades while retaining benefits as if they incurred some of those risks and costs.

52. The Commission previously found a similar network upgrade funding option to be unjust and unreasonable and directed MISO to remove it from its Tariff. Under this option, termed "Option 1" funding: (1) the interconnection customer provided up-front funding for any network upgrades required to accommodate the interconnection request; (2) the transmission owner provided a 100 percent refund of the cost of network upgrades

to the interconnection customer upon completion of the network upgrades; and (3) the transmission owner assessed the interconnection customer a monthly network upgrade charge to recover the cost of the non-reimbursable portion of the network upgrade costs over time based on a formula contained in Attachment GG⁹⁵ of the MISO Tariff. The Commission found Option 1 funding unjust and unreasonable and ordered MISO to remove this funding option from the MISO Tariff, effective March 22, 2011.⁹⁶ The Commission reasoned that Option 1 funding allowed transmission owners to avoid many of the risks and costs associated with financing a new construction project, while retaining benefits as if they did incur some of those risks and costs.⁹⁷ The Commission explained that the interconnection customer must first obtain the financing necessary to fund the construction of network upgrades up-front (and bear the financing costs up-front), and then essentially pay for the transmission owner to refinance such costs and bear the transmission owner's capital costs and income tax allowance over a prescribed time period. The Commission found that Option 1 funding increased the costs directly assigned to the interconnection customer without any increase in the level of service provided to that interconnection customer. Table 1 below illustrates the similarities between Option 1 funding and MISO's option to build proposal.

⁹⁵ Attachment GG (Network Upgrade Charge) of the MISO Tariff includes in the calculation of the network upgrade charge a return on capital investment, income taxes, depreciation expense, operating and maintenance expense (O&M), administrative and general expense, and other direct and indirect costs.

⁹⁶ *E.ON Climate & Renewables North America, LLC v. Midwest Indep. Transmission Sys. Operator, Inc.*, 137 FERC ¶ 61,076, at P 43 (2011) (*E.ON*), order on reh'g, 142 FERC ¶ 61,048, at P 39 (2013), order on reh'g, 151 FERC ¶ 61,264 (2015).

⁹⁷ *E.ON*, 137 FERC ¶ 61,076 at P 37.

<u>Table 1</u>		
	Option 1 Funding	MISO's Option to Build Proposal
Funding	The interconnection customer provides up-front funding to the transmission owner (for all necessary network upgrades). ⁹⁸	The interconnection customer pays (for stand alone network upgrades). ⁹⁹
Who Constructs	transmission owner ¹⁰⁰	interconnection customer ¹⁰¹
Refunds	The transmission owner refunds the interconnection customer 100 percent of the costs of network upgrades. ¹⁰²	The transmission owner refunds the interconnection customer 100 percent of the costs of stand alone network upgrades. ¹⁰³
When Refunds Provided	After construction of network upgrades is completed. ¹⁰⁴	By an agreed-upon date specified in Appendix B of the GIA prior to the date for the transfer of upgrades to the transmission owner. ¹⁰⁵
Subsequent Charges	The transmission owner charges the interconnection customer a return of and on capital over time through a Facilities Service Agreement. ¹⁰⁶	The transmission owner charges the interconnection customer a return of and on capital over time through a Facilities Service Agreement. ¹⁰⁷

⁹⁸ *Id.*

⁹⁹ May 22 Filing, *proposed* MISO Tariff, att. X, app. 6, art. 5.2(13) (General Conditions Applicable to Option to Build) (65.0.0).

¹⁰⁰ *E.ON*, 137 FERC ¶ 61,076 at P 37.

¹⁰¹ May 22 Filing, *proposed* MISO Tariff, att. X, app. 6, art. 5.2(13) (General Conditions Applicable to Option to Build) (65.0.0).

¹⁰² *E.ON*, 137 FERC ¶ 61,076 at P 37.

¹⁰³ May 22 Filing, *proposed* MISO Tariff, att. X, app. 6, art. 5.2(13) (General

53. We find that MISO's proposed funding arrangement for stand alone network upgrades is similar to Option 1 funding for network upgrades that the Commission found to be unjust and unreasonable in *E.ON*, and we therefore reject it. Like Option 1 funding, MISO's proposed funding arrangement may allow the refund of costs by the transmission owner to occur after construction has completed,¹⁰⁸ in which case the transmission owner would avoid the risks and costs associated with financing and constructing a new construction project while retaining benefits as if they incurred those risks and costs. Therefore, in the compliance filing due within 60 days from the date of this order, we direct MISO to submit Tariff revisions providing that the transmission owner will pay the interconnection customer's invoice for the estimated stand alone network upgrade construction costs before the date the interconnection customer must make any construction payment, and true-up any over- or underpayment after construction is completed and actual construction costs are known. It is reasonable to shift the risk for initial financing to the transmission owner because the transmission owner will then be able to collect a return of and on capital.

Conditions Applicable to Option to Build) (65.0.0).

¹⁰⁴ *E.ON*, 137 FERC ¶ 61,076 at P 37.

¹⁰⁵ May 22 Filing, *proposed* MISO Tariff, att. X, app. 6, art. 5.2(13) (General Conditions Applicable to Option to Build), app. B, Milestone 9 (65.0.0).

¹⁰⁶ *E.ON*, 137 FERC ¶ 61,076 at P 37.

¹⁰⁷ May 22 Filing, *proposed* MISO Tariff, att. X, app. 6, art. 5.2(13) (General Conditions Applicable to Option to Build) (65.0.0).

¹⁰⁸ Proposed Milestone 9 states that the interconnection customer will invoice the transmission owner for construction expenses at an agreed-upon date. Proposed article 5.2(13) of MISO's *pro forma* GIA states that "Interconnection Customer shall invoice the Transmission Owner *for the amount expended by the Interconnection Customer to construct* any Stand Alone Network Upgrades for which the Interconnection Customer has exercised its Option to Build in accordance with Appendix B. The Transmission Owner shall be required *to reimburse* Interconnection Customer for the full amount of such invoiced costs *prior to the date* specified in Appendix B *for the Interconnection Customer to transfer such Stand Alone Network Upgrades* to the Transmission Owner." (emphasis added).

54. Finally, we require MISO to remove the proposed reference to “Transmission Owner’s Interconnection Facilities” in Milestone 9 of the *pro forma* GIA, which reads:

Invoice Transmission Owner for the amount expended by the Interconnection Customer to construct any Transmission Owner’s Interconnection Facilities and Stand Alone Network Upgrades for which the Interconnection Customer has exercised its Option to Build if the Transmission Owner has elected to Self Fund (GIA 5.2.13).

We find that MISO has provided no justification for including the additional variation that would require the interconnection customer to invoice the transmission owner for the costs of transmission owner’s interconnection facilities. Interconnection customers in MISO pay directly for the costs associated with all interconnection facilities – the transmission owner does not provide any funding for these facilities.¹⁰⁹

3. Dispute Resolution

55. In Order No. 845, the Commission revised the *pro forma* LGIP by adding new section 13.5.5, which establishes generator interconnection dispute resolution procedures that allow a disputing party to unilaterally seek non-binding dispute resolution.¹¹⁰ The Commission established these new procedures because dispute resolution was previously unavailable when the parties did not mutually agree to pursue a binding arbitration under section 13.5 of the pre-Order No. 845 *pro forma* LGIP. The Commission further explained that participation in the new non-binding dispute resolution process in *pro forma* LGIP section 13.5.5 does not preclude disputing parties from pursuing binding arbitration after the conclusion of the non-binding dispute resolution process if they seek a binding result.¹¹¹

a. MISO’s Compliance Filing

56. MISO requests several independent entity variations to establish a non-binding dispute resolution process separate from the existing dispute resolution procedures in its

¹⁰⁹ MISO Tariff, att. X, app. 6 (Generator Interconnection Agreement), arts. 11.1 and 11.2 (66.0.0).

¹¹⁰ Order No. 845, 163 FERC ¶ 61,043 at P 133; *see also pro forma* LGIP § 13.5.5.

¹¹¹ Order No. 845, 163 FERC ¶ 61,043 at P 139.

Tariff and to accommodate features applicable to its generator interconnection process.¹¹² MISO states that, while the existing dispute resolution provisions contained in Attachment HH of its Tariff address the Commission's primary concern that dispute resolution be available where there is no mutual agreement to pursue arbitration,¹¹³ MISO proposes the addition of a new section 13.5.2 to its GIP that, it asserts, will provide a more efficient, flexible dispute resolution alternative to the existing Attachment HH process.¹¹⁴ MISO states that, consistent with this view, it does not propose to replicate within section 13.5.2 of its GIP the detailed procedures of the Attachment HH dispute resolution process. Instead, MISO states that proposed section 13.5.2 establishes the outer parameters of the process, with details such as the number of meetings and the timing of any interim steps to be developed through the stakeholder process and incorporated into its Generator Interconnection Business Practices Manual (BPM No. 15), with such rules serving as default rules that parties may modify by agreement. MISO asserts that allowing parties to tailor the dispute process is appropriate given the wide variation in the type and scope of disputes that may arise in the interconnection context.¹¹⁵

57. While the language proposed by MISO in section 13.5.2 largely conforms to the language in section 13.5.5 of the Commission's *pro forma* LGIP, MISO proposes some key variations. MISO proposes modifications to the *pro forma* language permitting parties to make a request for non-binding dispute resolution, pursuant to the arbitration process detailed in section 13.5 of the LGIP, without first seeking mutual agreement. MISO proposes instead to establish that the process set forth in section 13.5.2 shall serve as an alternative to, and not a replacement of, the Attachment HH dispute resolution process, and that a request to pursue non-binding dispute resolution pursuant to section 13.5.2 shall not require the agreement of any other party to proceed. MISO states that this is appropriate because section 13.5 of its GIP does not contain dispute resolution procedures. MISO also proposes to include language specifying that the non-binding dispute resolution procedures pursuant to section 13.5.2 shall adhere to any procedural and timing requirements set forth in the BPM, although parties may agree to modify such rules.¹¹⁶ MISO also proposes to include references to its *pro forma* Facilities

¹¹² May 22 Filing, Transmittal Letter at 17-20.

¹¹³ *Id.* at 16 (citing Order No. 845, 163 FERC ¶ 61,043 at P 139).

¹¹⁴ *Id.* at 19.

¹¹⁵ *Id.* at 20.

¹¹⁶ *Id.* at 19, *proposed* MISO Tariff, att. X, § 13.5.2 (Non-binding Dispute Resolution) (112.0.0).

Construction Agreement (FCA) and *pro forma* Multi-Party Facilities Construction Agreement (MPFCA) within section 13.5.2,¹¹⁷ as interconnection disputes in its region may arise from the GIP, GIAs, FCAs, and/or MPFCAs.

58. MISO states that proposed section 13.5.2 of its GIP establishes a non-binding arbitration process, which MISO asserts accomplishes the goals of Order No. 845 by providing a dispute resolution process that any party, including interconnection customers, may seek unilaterally.¹¹⁸ MISO states that its proposed language adheres to the requirements and timeframes for non-binding dispute resolution established by Order No. 845 and is integrated within a single section of the GIP for ease of reference. Additionally, MISO states that its proposed language does not discriminate between parties and is expressly made an alternative to, rather than a replacement of, MISO's other Commission-accepted dispute resolution processes.

b. Commission Determination

59. We find that MISO's Tariff provisions comply with the requirements of Order Nos. 845 and 845-A. MISO's proposed Tariff language in GIP section 13.5.2 offers non-binding dispute resolution procedures that disputing parties can seek to implement unilaterally, as required by Order No. 845.¹¹⁹ We further find that the non-binding arbitration process proposed in section 13.5.2 of MISO's GIP adheres to the requirements and timeframes for non-binding dispute resolution procedures established by Order No. 845, does not discriminate among parties, and provides a useful alternative to, rather than a replacement of, MISO's existing dispute resolution processes. Further, we find that the independent entity variations that MISO requests reflect the specific definitions and terminology in MISO's Tariff, make explicit a party's unilateral access to a dispute resolution mechanism, and clarify that the processes outlined in GIP section 13.5.2 serve as an alternative to MISO's other dispute resolution procedures.¹²⁰ In addition, we find that MISO's proposal to include certain procedural or timing rules in its BPM is consistent with the Commission's "rule of reason" policy as permitted by Order No. 845.¹²¹ As a result, we find that MISO's proposed independent entity variations are

¹¹⁷ *Id.*, Transmittal Letter at 18 (citing MISO Tariff, att. X, apps. 8 and 9 respectively).

¹¹⁸ *Id.* at 20 (citing Order No. 845, 163 FERC ¶ 61,043 at P 139).

¹¹⁹ Order No. 845, 163 FERC ¶ 61,043 at PP 123, 132, 139.

¹²⁰ May 22 Filing, Transmittal Letter at 18-19.

¹²¹ Order No. 845, 163 FERC ¶ 61,043 at P 200.

just and reasonable, not unduly discriminatory or preferential, and accomplish the purposes of the final rule by ensuring that a disputing party has unilateral access to non-binding dispute resolution.¹²² Accordingly, we accept MISO's proposed Tariff revisions.

4. Identification and Definition of Contingent Facilities

60. In Order No. 845, the Commission added a new definition to section 1 of the *pro forma* LGIP, providing that contingent facilities shall mean those unbuilt interconnection facilities and network upgrades upon which the interconnection request's costs, timing, and study findings are dependent, and if delayed or not built, could cause a need for restudies of the interconnection request or a reassessment of the interconnection facilities and/or network upgrades and/or costs and timing.¹²³ The Commission also added new section 3.8 to the *pro forma* LGIP, which requires transmission providers to include, within section 3.8, a method for identifying the contingent facilities that they will provide to the interconnection customer at the conclusion of the system impact study and include in the interconnection customer's generator interconnection agreement.¹²⁴ The Commission specified that the method must be sufficiently transparent to determine why a specific contingent facility was identified and how it relates to the interconnection request.¹²⁵ The Commission stated that this transparency will ensure that the method is applied on a non-discriminatory basis.¹²⁶ The Commission further required that transmission providers provide, upon the interconnection customer's request, the estimated network upgrade costs and estimated in-service completion date associated with each identified contingent facility when this information is readily available and not commercially sensitive.¹²⁷

a. MISO's Compliance Filing

61. MISO proposes revisions to its GIP to incorporate the definition of contingent facilities directed by the Commission in Order No. 845, with a variation, and to add a new GIP section 3.8 that provides MISO's method for identifying contingent facilities.

¹²² *Id.* P 133.

¹²³ *Id.* P 218; *see also pro forma* LGIP § 1 (Definitions).

¹²⁴ Order No. 845, 163 FERC ¶ 61,043 at P 199.

¹²⁵ *Id.*; *see also pro forma* LGIP § 3.8.

¹²⁶ Order No. 845, 163 FERC ¶ 61,043 at P 200.

¹²⁷ *Id.* P 199; *see also pro forma* LGIP § 3.8.

Specifically, MISO proposes to add to the definition of contingent facilities those facilities identified in the MISO Transmission Expansion Plan (MTEP) that could impact the timing of an interconnection request.¹²⁸ Additionally, MISO proposes to include in new GIP section 3.8 three methods that together identify all contingent facilities for an interconnection request: (1) a review of network upgrades identified through the system impact studies of higher-queued projects; (2) a distribution factor analysis for planned MTEP network upgrades based on impact criteria in its BPM;¹²⁹ and (3) a review of any contingent facilities identified through affected system studies based on their respective criteria.¹³⁰

62. MISO proposes to document the list of contingent facilities in Appendix A of its *pro forma* GIA, including their estimated network upgrade costs and in-service completion time when this information is readily available and not commercially sensitive.¹³¹ MISO states that exhibit A10 of its *pro forma* GIA already lists the contingent facilities, the study assumptions used to identify the contingent facilities, and the expected completion date for any contingent facilities associated with an interconnection request.¹³² MISO further explains that the costs of any interconnection facilities and network upgrades associated with the interconnection request are also already provided in Appendix A, in exhibit A6-1 (for the transmission owner's facilities), exhibit A6-2 (for the network facilities), and exhibit A-8 (for the customer's facilities).

b. Protests/Comments

63. Generation Developers contend that MISO has not adequately addressed Order No. 845's contingent facilities requirements.¹³³ Generation Developers argue that MISO's proposed language does not establish a method for identifying contingent

¹²⁸ May 22 Filing, Transmittal Letter at 23, *proposed* MISO Tariff, att. X, § 1.C, "Contingent Facilities" (112.0.0).

¹²⁹ MISO notes that the relevant BPM relating to contingent facilities is MISO BPM No. 15. *Id.*, Transmittal Letter at 24.

¹³⁰ *Id.* at 23, *proposed* MISO Tariff, att. X, § 3.8 (Identification of Contingent Facilities) (112.0.0).

¹³¹ *Id.*, Transmittal Letter at 24, *proposed* MISO Tariff, att. X, § 3.8 (Identification of Contingent Facilities) (112.0.0).

¹³² *Id.*, Transmittal Letter at 24.

¹³³ Generation Developers Protest, Docket No. ER19-1960-000, at 7-9.

facilities that have electric relevance to an interconnection request, as such a method must include the study basis (i.e., standards and scope) used.¹³⁴ Furthermore, Generation Developers allege that MISO has previously identified, as contingent facilities, facilities that have no electrical relevance to a particular interconnection request.¹³⁵ In addition, Generation Developers argue that MISO's proposal to list study criteria in its BPM is at odds with the Commission's requirements to publish such information in the GIP.

64. In its comments, Clean Energy Entities state that MISO's proposal offers a good example of a clear and consistent process for identifying contingent facilities.¹³⁶

c. Answer

65. MISO contends that its three proposed methods for identifying contingent facilities are sufficiently detailed and transparent.¹³⁷ MISO contends that a "method" is simply the procedure or technique MISO will use to identify contingent facilities and that Generation Developers' view of a "method" is unduly expansive.¹³⁸ MISO argues that, for each of its three methods, it will disclose both the source and the manner in which potential contingent facilities are identified.¹³⁹ Specifically, MISO explains that: (1) for method one, higher-queued interconnection customers are the source of contingent facilities, and the system impact study is the manner in which they are identified; (2) for method two, the list of planned MTEP network upgrades that are not yet in service is the source of contingent facilities, and a distribution factor analysis is the manner in which they are identified; and (3) for method three, affected system studies are the source of contingent facilities, and the affected system's criteria is the manner in which they are identified. MISO states that these methodologies are included directly in the Tariff, with

¹³⁴ *Id.* at 8.

¹³⁵ *Id.* at 9 (citing Petition for Rulemaking of the American Wind Energy Association to Revise Generator Interconnection Rules and Procedures, Docket No. RM15-21-000, at 25-27 (filed June 19, 2015)).

¹³⁶ Clean Energy Entities Comments, Docket No. ER19-1960-000 at 12.

¹³⁷ MISO Answer, Docket No. ER19-1960-000 at 20-24.

¹³⁸ *Id.* at 21.

¹³⁹ *Id.* at 22-23.

only specific calculations and percentages to be applied in conducting distribution factor analysis included in its BPM No. 15.¹⁴⁰

d. Commission Determination

66. We find that MISO's proposed revisions identifying and describing MISO's methods for determining contingent facilities partially comply with the requirements of Order Nos. 845 and 845-A. As specified in Order No. 845, transmission providers must include a method for determining contingent facilities. The Commission required that this method must provide sufficient transparency to determine why a specific contingent facility was identified and how it relates to the interconnection request. Order No. 845 also states that a transmission provider's method to identify contingent facilities should be transparent enough to ensure that it will be applied on a non-discriminatory basis.¹⁴¹ We find that MISO's proposal to coordinate with affected system parties to determine what contingent facilities have been identified through affected system studies based on their respective criteria is a sufficiently transparent method to identify these types of contingent facilities.

67. With regard to MISO's proposal to review planned MTEP network upgrades using a distribution factor analysis based on impact criteria located in its BPM No. 15, we note that decisions as to whether an item should be included in a tariff or in a business practice manual are guided by the Commission's rule of reason policy, under which provisions that "significantly affect rates, terms, and conditions" of service, are readily susceptible of specification, and are not generally understood in a contractual agreement must be included in a tariff.¹⁴² Because the specific criteria used to identify contingent facilities will determine the potential cost exposure for the interconnection customer, we find that these criteria significantly affect the rates, terms, and conditions of service. Therefore, we direct MISO to file, within 60 days of the date of this order, a further compliance filing to include Tariff language describing the impact criteria MISO uses in its distribution factor analysis to determine which MTEP projects constitute contingent facilities.

¹⁴⁰ MISO BPM No. 15, § 6.2.4 (Conditions to GIA (app. A10)) (r20).

¹⁴¹ Order No. 845, 163 FERC ¶ 61,043 at P 200.

¹⁴² *Energy Storage Ass'n v. PJM Interconnection, L.L.C.*, 162 FERC ¶ 61,296, at P 103 (2018); *see also City of Cleveland, Ohio v. FERC*, 773 F.2d 1368, at 1376 (D.C. Cir. 1985) (finding that utilities must file "only those practices that affect rates and service significantly, that are reasonably susceptible of specification, and that are not so generally understood in any contractual arrangement as to render recitation superfluous").

68. We also find that MISO's proposal to review network upgrades identified through the system impact studies of higher-queued projects lacks the requisite transparency required by Orders Nos. 845 and 845-A because the proposed Tariff revisions do not detail the specific technical screens or analyses and the specific thresholds or criteria that MISO will use to review higher-queued projects as part of its method to identify contingent facilities.¹⁴³ Without this information, an interconnection customer will not understand how MISO will evaluate potential contingent facilities to determine their relationship to an individual interconnection request.¹⁴⁴ Further, including provisions regarding specific thresholds or criteria in MISO's GIP will ensure that MISO's technical screens or analyses will be applied to interconnection requests on a consistent, not unduly discriminatory or preferential basis. Accordingly, we direct MISO to file, within 60 days of the date of this order, a further compliance filing to include Tariff language describing the specific thresholds or criteria MISO uses to determine which network upgrades from higher-queued projects constitute contingent facilities.

69. We also find that MISO's proposal does not comply with Order Nos. 845 and 845-A's requirement that transmission providers present the contingent facilities list at the conclusion of the system impact study, because the proposed Tariff language states only that the GIA will include the contingent facilities list. MISO's interconnection study process uses a three-phase group study approach to queue processing, known as the Definitive Planning Phase (DPP), which includes three sequential system impact studies: the preliminary, revised, and final system impact studies (in DPP Phases I, II, and III, respectively). The DPP process also includes a decision point before DPP Phase II and DPP Phase III (Decision Points I and II, respectively), wherein an interconnection customer can review the updated system impact study results and decide to: (1) remain in the queue and proceed to the next phase by making the appropriate milestone payment; (2) remain in the queue and proceed to the next phase while reducing the size of the interconnection request and making the appropriate milestone payment; or (3) withdraw and receive a refund of its previous milestone payment.¹⁴⁵

¹⁴³ Order No. 845 declined to implement a standard threshold or criteria, such as a specific distribution factor threshold, because different thresholds may be more appropriate for different queue types and geographical footprints. Order No. 845, 163 FERC ¶ 61,043 at P 220.

¹⁴⁴ See *pro forma* LGIP § 3.8 ("The method shall be sufficiently transparent to determine why a specific Contingent Facility was identified").

¹⁴⁵ The Commission recently accepted revisions to MISO's milestone payment structure. An interconnection customer that withdraws at Decision Point I receives a refund of 50 percent of its first milestone payment; the remaining 50 percent is at-risk, such that the interconnection customer will forfeit the milestone payment if it

70. We find that the start of Decision Point II, before the beginning of DPP Phase III, is an appropriate point to provide a list of contingent facilities to interconnection customers. Order No. 845 requires that transmission providers present the contingent facilities list at the conclusion of the system impact study, because this timing allows interconnection customers to access contingent facility information early enough in the process to better understand their potential risk exposure and to expedite decisions on queue withdrawal. At Decision Point II, the interconnection customer has received the revised system impact study, which accounts for any project withdrawals after DPP Phase I. Decision Point II is also a pre-existing point in the interconnection process, allowing interconnection customers 15 business days to decide whether to proceed to the next phase or withdraw from the queue. Finally, Decision Point II is the last opportunity for interconnection customers to withdraw from the interconnection queue prior to the facilities study. Therefore, we find that providing interconnection customers with a list of contingent facilities at the start of Decision Point II will allow interconnection customers to use the contingent facilities information to better understand their potential risk exposure and expedite decisions on queue withdrawal. Accordingly, we direct MISO to file, within 60 days of the date of this order, a further compliance filing to either (a) revise its Tariff to provide an initial list of contingent facilities to interconnection customers at the start of Decision Point II, in addition to the final list of contingent facilities provided in Appendix A of MISO's GIA, or (b) explain how providing a list of contingent facilities at a different point during the interconnection process would accomplish the purposes of Order No. 845.

5. Transparency Regarding Study Models and Assumptions

71. In Order No. 845, the Commission revised section 2.3 of the *pro forma* LGIP to require transmission providers to maintain network models and underlying assumptions on either an Open Access Same-Time Information System (OASIS) site or a password-protected website. If the transmission provider posts this information on a password-protected website, a link to the information must be provided on its OASIS site. Revised *pro forma* LGIP section 2.3 also requires that “network models and underlying assumptions reasonably represent those used during the most recent interconnection study and be representative of current system conditions.” In addition, the Commission revised *pro forma* LGIP section 2.3 to allow transmission providers to require interconnection customers, OASIS site users, and password-protected website users to sign a

subsequently withdraws its interconnection request and its withdrawal harms remaining interconnection customers. An interconnection customer that withdraws at Decision Point II receives a refund of its second milestone payment, but 100 percent of its first milestone payment remains at-risk. See *Midcontinent Indep. Sys. Operator, Inc.*, 169 FERC ¶ 61,173 (2019).

confidentiality agreement before the release of commercially sensitive information or critical energy infrastructure information (CEII).¹⁴⁶

72. In Order No. 845-A, the Commission reiterated that neither the Commission's CEII regulations nor Order No. 845 precludes a transmission provider from taking necessary steps to protect information within its custody or control to ensure the safety and security of the electric grid.¹⁴⁷ The Commission also clarified that, to the extent any party would like to use the Commission's CEII regulations as a model for evaluating entities that request network model information and assumptions (prior to signing a non-disclosure agreement), it may do so.¹⁴⁸ The Commission further clarified that the phrase "current system conditions" does not require transmission providers to maintain network models that reflect current real-time operating conditions of the transmission provider's system. Instead, the network model information should reflect the system conditions currently used in interconnection studies.¹⁴⁹

a. MISO's Compliance Filing

73. MISO states that proposed section 2.3 of its GIP replicates the language required by Order Nos. 845 and 845-A, with what it characterizes as three minor exceptions.¹⁵⁰ First, MISO's proposed Tariff requires MISO to include base power flow, short circuit and stability databases, contingency lists, and network models and underlying assumptions used for interconnection studies "on a password-protected website" that will be linked on its OASIS site, rather than on either the "OASIS site or a password-protected website," as stated in *pro forma* LGIP section 2.3.¹⁵¹ MISO states that this change merely reflects MISO's choice of the options provided in the *pro forma* LGIP. Second, MISO's proposed Tariff language requires that interconnection customers and password-protected website users execute a confidentiality agreement before MISO will release commercially sensitive information or CEII in the base case data, a requirement

¹⁴⁶ Order No. 845, 163 FERC ¶ 61,043 at P 236; *see also pro forma* LGIP § 2.3.

¹⁴⁷ Order No. 845-A, 166 FERC ¶ 61,137 at P 84 (citing Order No. 845, 163 FERC ¶ 61,043 at P 241).

¹⁴⁸ *Id.* P 85 (citing 18 C.F.R. § 388.113(g)(5)(i)).

¹⁴⁹ *Id.* P 88.

¹⁵⁰ May 22 Filing, Transmittal Letter at 21.

¹⁵¹ *Id.* at 22.

that Order No. 845 permits.¹⁵² Finally, MISO proposes a clarifying revision in its proposed LGIP section 2.3 to replace the term “applicable authority” with “MISO Board” because MISO states that its applicable authority is its Board.

b. Commission Determination

74. We find that MISO’s proposed Tariff language generally complies with the requirements of Order Nos. 845 and 845-A, with adjustments to the Commission’s *pro forma* LGIP language to reflect the specific terminology in MISO’s Tariff. However, in Order No. 845, the Commission made the following revision to section 2.3 of the *pro forma* LGIP: “Transmission Provider shall maintain ~~provide~~-base power flow, short circuit and stability databases, including all underlying assumptions, and contingency lists”¹⁵³ In its proposed GIP section 2.3, without explanation, MISO retained the word “provide” instead of using the word “maintain.” This is an important distinction, as the word “maintain” indicates that the transmission provider should continually update the information, rather than provide it upon request. Accordingly, we direct MISO to file, within 60 days of the date of this order, a further compliance filing to revise section 2.3 of its GIP to change the word “provide” to “maintain.”

6. Definition of Generating Facility

75. In Order No. 845, the Commission revised the definition of “Generating Facility” to include electric storage resources and to allow electric storage resources to interconnect pursuant to the Commission-jurisdictional large generator interconnection processes. Specifically, the Commission revised the definition of “Generating Facility” in the *pro forma* LGIP and *pro forma* LGIA as follows:

Generating Facility shall mean Interconnection Customer’s device for the production *and/or storage for later injection* of electricity identified in the Interconnection Request, but shall not include the interconnection customer’s Interconnection Facilities.¹⁵⁴

¹⁵² *Id.* (citing Order No. 845, 163 FERC ¶ 61,043 at P 236).

¹⁵³ *See pro forma* LGIP § 2.3 (emphasis added).

¹⁵⁴ Order No. 845, 163 FERC ¶ 61,043 at P 275 (additions italicized); *see also pro forma* LGIP § 1.

The Commission found that this definitional change will reduce a potential barrier to large electric storage resources with a generating facility capacity above 20 MW that wish to interconnect pursuant to the terms in the *pro forma* LGIP and *pro forma* LGIA.¹⁵⁵

a. MISO's Compliance Filing

76. MISO states that the existing definitions of “Generating Facility” in its GIP and *pro forma* GIA replicate the language from the Commission’s *pro forma* LGIP.¹⁵⁶

b. Commission Determination

77. We find that MISO’s current Tariff is in compliance with the revised definition of a “Generating Facility” established in Order Nos. 845 and 845-A.

7. Interconnection Study Deadlines

78. In Order No. 845, the Commission modified the *pro forma* LGIP to add sections 3.5.2 and 3.5.3, which require transmission providers to calculate and maintain on their OASIS sites or public websites summary statistics related to the timing of the transmission provider’s processing of interconnection studies, including the number of interconnection requests withdrawn and interconnection studies completed and delayed, the proportion of studies completed within tariff timeframes, and the average time to complete a study, and to update those statistics on a quarterly basis.¹⁵⁷ The Commission also revised the *pro forma* LGIP to add section 3.5.4 to require transmission providers to file informational reports with the Commission if a transmission provider exceeds its interconnection study deadlines for more than 25 percent of any study type for two consecutive calendar quarters.¹⁵⁸ In adopting these reporting requirements, the Commission found that the reporting requirements strike a reasonable balance between providing increased transparency and information to interconnection customers and not unduly burdening transmission providers.¹⁵⁹ In Order No. 845-A, the Commission revised

¹⁵⁵ Order No. 845, 163 FERC ¶ 61,043 at P 275.

¹⁵⁶ May 22 Filing, Transmittal Letter at 25.

¹⁵⁷ Order No. 845, 163 FERC ¶ 61,043 at P 305; *see also pro forma* LGIP § 3.5.2 and 3.5.3.

¹⁵⁸ Order No. 845, 163 FERC ¶ 61,043 at P 305; *see also pro forma* LGIP § 3.5.4.

¹⁵⁹ Order No. 845, 163 FERC ¶ 61,043 at P 307.

pro forma LGIP section 3.5.3 to clarify that the data reporting and retention requirements begin in the first calendar quarter of 2020.¹⁶⁰

a. MISO's Compliance Filing

79. MISO proposes several revisions to its GIP to implement the interconnection study deadline requirements of Order Nos. 845 and 845-A and requests several independent entity variations that, MISO claims, are necessary to align Order No. 845's study metric reporting requirements with its GIP.¹⁶¹ MISO first describes its interconnection study process, the DPP, which is a sequential three-phase group study approach to queue processing that features three system impact studies and two facilities studies.¹⁶² In DPP Phase I, MISO performs a preliminary system impact study to identify the impact of proposed interconnection requests and any identified upgrades required for the reliability and safety of the MISO bulk power system. In DPP Phase II, MISO performs a revised system impact study and a facilities study and, in DPP Phase III, MISO performs a final system impact study and a facilities study, which provide final cost and time estimates for building necessary network upgrades for a customer's project.

80. MISO asserts that its DPP does not include feasibility studies; as such, MISO requests an independent entity variation in order to omit reporting on interconnection feasibility studies.¹⁶³

81. MISO requests an independent entity variation from Order No. 845's requirement that the start date for each interconnection study included in the performance reporting metrics is the date the transmission provider receives a fully executed study agreement.¹⁶⁴ MISO explains that, unlike the Commission's *pro forma* LGIP, MISO does not begin its interconnection studies upon the execution of a study agreement; rather, MISO processes interconnection requests in DPP cycles, and within the three phases of each DPP cycle, it performs interconnection studies for specific groups of interconnection requests. MISO states that an interconnection customer's submission of an interconnection request allows the interconnection customer to join the next DPP cycle and be studied in a group, and there will be a passage of time between when an interconnection customer submits an

¹⁶⁰ Order No. 845-A, 166 FERC ¶ 61,137 at P 107.

¹⁶¹ May 22 Filing, Transmittal Letter at 25.

¹⁶² *Id.* at 27.

¹⁶³ *Id.*

¹⁶⁴ *Id.* at 28 (citing Order No. 845, 163 FERC ¶ 61,043 at P 331).

interconnection request and the beginning of the next DPP cycle.¹⁶⁵ MISO explains that the interconnection customer must submit its request (which includes an executed interconnection study agreement) at least 45 days before the beginning of the next DPP cycle.¹⁶⁶ Moreover, MISO states that its Tariff defines specific study timeframes for each DPP phase in the cycle.¹⁶⁷ MISO thus proposes to use the start date for study metric reporting to be the start of each respective DPP phase.¹⁶⁸ MISO states that, beginning in the first quarter of 2020, it will provide study metrics for all active DPP cycles.¹⁶⁹ MISO asserts that the proposed variation meets the independent entity standard because it will: (1) allow the study reporting to align with the DPP timeframes when interconnection studies are conducted and, therefore, provide meaningful information to an interconnection customer regarding the length of the interconnection study portion of the process; and (2) reflect MISO's existing group interconnection study process.¹⁷⁰

82. MISO also requests an independent entity variation to reflect the multiple system impact and facilities studies conducted under the DPP.¹⁷¹ MISO states that the language proposed by the Commission in Order No. 845 for study reporting has individual provisions for feasibility studies, system impact studies, and facilities studies. MISO asserts that, because it undertakes system impact and facilities studies in sequential phases, MISO proposes to provide study metrics reporting for each interconnection study that is undertaken in each DPP phase (a total of five studies: the preliminary system impact study in DPP Phase I, the revised preliminary system impact study in DPP Phase II, the final system impact study in DPP Phase III, and the two facilities studies

¹⁶⁵ *Id.* at 34.

¹⁶⁶ *Id.* (citing MISO Tariff, att. X, § 3.3.1 (Initiating an Interconnection Request) (111.0.0)).

¹⁶⁷ *Id.* at 28 (referencing MISO Tariff, att. X, § 7.3.1 (Definitive Planning Phase I), § 7.3.2 (Definitive Planning Phase II), and § 7.3.3 (Definitive Planning Phase III) (111.0.0)).

¹⁶⁸ *Id.* at 28-29, *proposed* MISO Tariff, att. X, § 3.4.2.1 (Preliminary System Impact Studies in Definitive Planning Phase I Processing Time) to § 3.4.2.5 (Interconnection Facilities Studies for Network Upgrades Processing Time) (112.0.0).

¹⁶⁹ *Id.*, Transmittal Letter at 34.

¹⁷⁰ *Id.* at 30, 34 (referencing Order No. 845, 163 FERC ¶ 61,043 at P 306).

¹⁷¹ *Id.* at 30.

conducted in DPP Phases II and III).¹⁷² MISO argues that the proposed variation meets the independent entity standard because the metrics for each interconnection study will provide more granular information to interconnection customers in considering potential delays and will align the study metrics with the DPP process.¹⁷³

83. Further, MISO requests an independent entity variation to report more detailed withdrawal information for each DPP phase.¹⁷⁴ MISO states that it complies with the requirements of Order No. 845 by proposing to report interconnection withdrawals that occur after the execution of a GIA (or a request for the filing of an unexecuted GIA), and the mean time in the queue prior to withdrawal for all withdrawn interconnection requests.¹⁷⁵ However, MISO proposes modifications to the other parts of GIP section 3.4.2.6 to report withdrawals that occur prior to the start of DPP Phase I, during, and after MISO's DPP.¹⁷⁶

84. MISO requests an independent entity variation to account for the fact that its DPP uses both business days and calendar days.¹⁷⁷ Specifically, MISO proposes to: (1) account for business days first for model building and review purposes, and then calendar days for the completion of interconnection studies; and (2) clarify that, if the 10 business days for model building and review include one or more holidays, then the number of business days will be correspondingly extended.¹⁷⁸ MISO asserts that the proposed independent entity variations align with MISO's GIP and provide

¹⁷² *Id.* at 31-33, *proposed* MISO Tariff, att. X, § 3.4.2.1 (Preliminary System Impact Studies in Definitive Planning Phase I Processing Time) to § 3.4.2.5 (Interconnection Facilities Studies for Network Upgrades Processing Time) (112.0.0).

¹⁷³ *Id.*, Transmittal Letter at 33.

¹⁷⁴ *Id.* at 35.

¹⁷⁵ *Id.*, *proposed* MISO Tariff, att. X, §§ 3.4.2.6(A), 3.4.2.6(F), 3.4.2.6(G) (Interconnection Requests Withdrawn from Interconnection Queue) (112.0.0).

¹⁷⁶ *Id.*, Transmittal Letter at 35, *proposed* MISO Tariff, att. X, § 3.4.2.6 (Interconnection Requests Withdrawn from Interconnection Queue) (112.0.0).

¹⁷⁷ *Id.*, Transmittal Letter at 36.

¹⁷⁸ *Id.*, *proposed* MISO Tariff, att. X, § 3.4.2 (OASIS Posting) (112.0.0).

interconnection customers with meaningful insight into MISO's ability to meet its DPP timeframes.¹⁷⁹

85. Regarding the study completion deadlines, MISO proposes additions to its GIP to specify the following deadlines. MISO proposes to add to its Tariff: (1) GIP section 3.4.2.1, specifying a preliminary system impact study completion deadline of "120 Calendar Days ... after the periodic, scheduled start of the Definitive Planning Phase I;" (2) GIP section 3.4.2.2, specifying a revised system impact study completion deadline of "10 Business Days for Model Building and Review plus 45 Calendar Days ... after the date the Interconnection Customer Decision Point I window expired;" (3) GIP section 3.4.2.3, specifying a final system impact study completion deadline of "10 Business days plus 30 Calendar Days ... after the Interconnection Customer Decision Point II window expired;" (4) GIP section 3.4.2.4, specifying an interconnection facilities study completion deadline of "90 Calendar Days ... after the Interconnection Customer Decision Point I window expired;" and (5) GIP section 3.4.2.5, specifying an interconnection facilities study for network upgrades completion deadline of "90 Calendar Days after completion of the Definitive Planning Phase III final System Impact Study."¹⁸⁰

86. Finally, MISO proposes a series of changes from the Commission's *pro forma* LGIP to conform to MISO's specific Tariff language.¹⁸¹

b. Protests/Comments

87. Generation Developers and Clean Energy Entities contend that MISO's proposal does not adequately reflect delays in the start of MISO's interconnection study process.¹⁸² Generation Developers argue that MISO's proposal to begin measuring study performance when MISO begins processing a DPP cycle will not account for delays that

¹⁷⁹ *Id.*, Transmittal Letter at 36.

¹⁸⁰ *Id.*, *proposed* MISO Tariff, att. X, § 3.4.2.1 (Preliminary System Impact Studies in Definitive Planning Phase I Processing Time), § 3.4.2.2 (Revised System Impact Studies in Definitive Planning Phase II Processing Time), § 3.4.2.3 (Final System Impact Studies in Definitive Planning Phase III Processing Time), § 3.4.2.4 (Interconnection Facilities Studies Processing Time), and § 3.4.2.5 (Interconnection Facilities Studies for Network Upgrades Processing Time) (112.0.0).

¹⁸¹ *Id.*, Transmittal Letter at 37-38, *proposed* MISO Tariff, att. X, §§ 3.4.3, 3.4.4 (OASIS Posting) (112.0.0).

¹⁸² Generation Developers Protest, Docket No. ER19-1960-000 at 9-13; Clean Energy Entities Comments, Docket No. ER19-1960-000 at 7-8.

occur between the point that an interconnection customer completes all requirements to be part of a cycle and when the study actually moves forward.¹⁸³ For instance, Generation Developers state that, if MISO takes a full year from the date of execution of a study agreement to begin processing a DPP cycle, the reporting MISO proposes will not capture this delay.¹⁸⁴ Generation Developers argue that the appropriate starting point for assessing delays should be when the interconnection study agreement is executed, as required by Order No. 845.¹⁸⁵ Generation Developers state that, without the proper starting point, MISO's statistics will be misleading and not provide the means for Commission oversight.¹⁸⁶

c. Answers

88. MISO disagrees with Generation Developers' and Clean Energy Entities' arguments that, if metrics reporting does not begin with the execution of an interconnection study agreement, delays associated with the start of the DPP cycle will not be captured.¹⁸⁷ MISO asserts that MISO's proposed Tariff language will capture such delays.¹⁸⁸ MISO explains, for example, that it has 120 calendar days to complete the preliminary system impact study and must report the number of interconnection requests whose preliminary system impact studies were delayed more than 120 calendar days after the "periodic, scheduled start" of DPP Phase I.¹⁸⁹ As such, MISO states that any delay to the scheduled start of the DPP will be counted against the required study timeframe. MISO asserts that similar reporting metrics are required for all other interconnection studies based on the DPP timeframes for

¹⁸³ Generation Developers Protest, Docket No. ER19-1960-000 at 9; Clean Energy Entities Comments, Docket No. ER19-1960-000 at 7.

¹⁸⁴ Generation Developers Protest, Docket No. ER19-1960-000 at 10. Clean Energy Entities assert that this delay can be up to several years in some regions in MISO. Clean Energy Entities Comments, Docket No. ER19-1960-000 at 7.

¹⁸⁵ Generation Developers Protest, Docket No. ER19-1960-000 at 10-11.

¹⁸⁶ *Id.* at 11.

¹⁸⁷ MISO Answer, Docket No. ER19-1960-000 at 12.

¹⁸⁸ *Id.* at 13.

¹⁸⁹ *Id.* (citing May 22 Filing, *proposed* MISO Tariff, att. X, § 3.4.2.1(B) (Preliminary System Impact Studies in Definitive Planning Phase I Processing Time) (112.0.0)).

their respective DPP Phase.¹⁹⁰ MISO argues that its proposal meets the independent entity variation standard because, unlike the Commission's *pro forma* LGIP, in MISO, no interconnection studies begin with the execution of an interconnection study agreement.¹⁹¹ MISO states that, in fact, an interconnection customer could submit an interconnection study agreement far in advance of the application deadline for the next DPP cycle, and thus wait much longer than the standard time for the study cycle to begin.¹⁹² MISO states that its proposed start date is consistent with Order No. 845's objective to measure performance against the timeframes in the Tariff.¹⁹³ Furthermore, MISO argues that any comments regarding the manner in which MISO establishes the scheduled start of the DPP are outside the scope of its Order No. 845 compliance filing.¹⁹⁴

89. Clean Energy Entities agree that, in the unlikely event that an interconnection customer submits an interconnection request far in advance of the application deadline, it should not be captured as a delay in the MISO study process.¹⁹⁵ However, Clean Energy Entities contend that there should be some mechanism to capture extended delays between the submission of the interconnection study agreement and the beginning of the DPP study cycle.¹⁹⁶

90. Generation Developers argue that MISO is still not proposing to capture delays from the time the interconnection request enters the queue until the DPP cycle starts; rather, MISO would only measure from the time of the scheduled start of the DPP cycle.¹⁹⁷ Generation Developers further contend that, because MISO has divided its queue into sub-regions, it should not be allowed to lump its reporting as if it processes one entire region simultaneously.¹⁹⁸

¹⁹⁰ *Id.* at 14.

¹⁹¹ *Id.* at 15.

¹⁹² *Id.* at 17-18.

¹⁹³ *Id.* at 16.

¹⁹⁴ *Id.* at 17-18.

¹⁹⁵ Clean Energy Entities Answer, Docket No. ER19-1960-000 at 6-7.

¹⁹⁶ *Id.* at 7.

¹⁹⁷ Generation Developers Answer, Docket No. ER19-1960-000 at 12.

¹⁹⁸ *Id.* at 13.

d. Commission Determination

91. We find that MISO has complied with the requirements of Order Nos. 845 and 845-A by providing for the quarterly posting of interconnection study metrics on its OASIS or its website, beginning in the first quarter of 2020. We also accept MISO's requested independent entity variations, as we find that they are just and reasonable and not unduly discriminatory, and accomplish the purposes of Order Nos. 845 and 845-A, as discussed below.

92. First, we accept MISO's independent entity variation from the Order No. 845 requirement that the start date for each study included in the performance reporting metrics be the date that the transmission provider receives a fully executed study agreement.¹⁹⁹ We accept MISO's proposal to begin study metric reporting at the start of each DPP phase. We agree with MISO that this proposal is just and reasonable because it reflects the unique nature of MISO's three-phase DPP; specifically, MISO does not begin interconnection studies at the execution of an interconnection study agreement, but rather performs interconnection studies for specific groups of interconnection requests within each DPP phase. MISO's proposed Tariff language will provide information on study delays for each phase of the DPP, which will appropriately provide transparency regarding how effective MISO is at meeting its Tariff-prescribed study timeframes, identifying process deficiencies, allowing better-informed interconnection customer planning, and improving queue management, as required by Order No. 845.²⁰⁰

93. We disagree with Generation Developers' and Clean Energy Entities' arguments that MISO's proposed independent entity variation to begin study metric reporting at the start of each DPP phase will not capture delays from the time the interconnection request enters the queue until DPP Phase I begins. As MISO clarified in its answer, MISO will report the number of interconnection requests whose preliminary system impact studies were delayed more than 120 calendar days after the scheduled start of DPP Phase I. If DPP Phase I begins later than its scheduled start, the preliminary system impact study will not begin on time and may not be completed on time; thus, reporting will show if MISO did not meet its 120-day deadline.

94. We accept MISO's requested independent entity variation to omit reporting on interconnection feasibility studies, as MISO cannot report on studies that it does not conduct.

95. Finally, we accept MISO's requested independent entity variations to: (1) provide study metrics reporting for each interconnection study that is undertaken in each DPP;

¹⁹⁹ Order No. 845, 163 FERC ¶ 61,043 at P 331.

²⁰⁰ *Id.* PP 305, 307.

(2) report withdrawal information for each DPP phase; and (3) account for the fact that its DPP uses both business days and calendar days. We find that MISO's proposed variations properly conform the required study reporting metrics to the three-phase DPP process in its Tariff and provide more granular information to interconnection customers, which will provide interconnection customers with meaningful insight into MISO's ability to meet its DPP timeframes and better accomplish the transparency purposes of Order No. 845.

8. Requesting Interconnection Service below Generating Facility Capacity

96. In Order No. 845, the Commission modified sections 3.1, 6.3, 7.3, 8.2, and Appendix 1 of the *pro forma* LGIP to allow interconnection customers to request interconnection service that is lower than the proposed generating facility's capacity,²⁰¹ recognizing the need for proper control technologies and flexibility for transmission providers to propose penalties to ensure that the generating facility does not inject energy above the requested level of service.²⁰²

97. The Commission required, in *pro forma* LGIP revised section 3.1, that transmission providers have a process in place to consider requests for interconnection service below the full generating facility capacity. The Commission stipulated that such requests should be studied at the level of interconnection service requested for purposes of determining interconnection facilities, network upgrades, and associated costs, but that such requests may be subject to other studies at the full generating facility capacity to ensure safety and reliability of the system.²⁰³ In addition, *pro forma* LGIP revised section 3.1 states that the interconnection customer is responsible for all study costs and interconnection facility and/or network upgrade costs required for safety and reliability. The Commission also required in *pro forma* LGIP revised section 3.1 that any necessary control technologies and/or protection systems be memorialized in the LGIA.

98. The Commission required, in *pro forma* LGIP revised sections 6.3, 7.3, and 8.2, that the feasibility, system impact, and facilities studies be performed at the level of interconnection service that the interconnection customer requests, unless the

²⁰¹ The term generating facility capacity is defined as "the net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple energy production devices." *Pro forma* LGIA art. 1.

²⁰² Order No. 845, 163 FERC ¶ 61,043 at P 367; *see also pro forma* LGIP §§ 3.1, 6.3, 7.3 and 8.2, and *pro forma* LGIP app. 1.

²⁰³ Order No. 845, 163 FERC ¶ 61,043 at PP 383-84.

transmission provider is otherwise required to study the full generating facility capacity due to safety and reliability concerns. The Commission stated that, if the transmission provider determines that additional network upgrades are necessary based on these studies, it must specify which additional network upgrade costs are based on which studies and provide a detailed explanation of why the additional network upgrades are necessary.²⁰⁴

99. Finally, the Commission revised sections 4.4.1 and 4.4.2 of the *pro forma* LGIP to allow an interconnection customer to reduce the size of its interconnection request either prior to returning to the transmission provider an executed system impact study agreement or an executed facilities study agreement.²⁰⁵

a. MISO's Compliance Filing

100. MISO proposes revisions to MISO's GIP to adopt language directed by the Commission requiring that the transmission provider establish a process for considering requests for interconnection service below generating facility capacity.²⁰⁶ Further, to incorporate the Order No. 845 requirement that the facilities study identify any potential control equipment for requests for interconnection service that are lower than the generating facility capacity, MISO proposes to use the term "interconnection facilities study" in place of the term "facilities study." MISO states this language will align the changes with MISO's existing nomenclature without altering the meaning of the language.²⁰⁷

²⁰⁴ *Id.* P 384. The Commission clarified that, if the transmission provider determines, based on good utility practice and related engineering considerations and after accounting for the proposed control technology, that studies at the full generating facility capacity are necessary to ensure safety and reliability of the transmission system when an interconnection customer requests interconnection service that is lower than full generating facility capacity, then it must provide a detailed explanation for such a determination in writing to the interconnection customer. *Id.*

²⁰⁵ *Id.* P 406; *see also pro forma* LGIP §§ 4.4.1 and 4.4.2.

²⁰⁶ May 22 Filing, Transmittal Letter at 39, *proposed* MISO Tariff, att. X, § 3.1 (General) (112.0.0).

²⁰⁷ *Id.*, Transmittal Letter at 41, *proposed* MISO Tariff, att. X, § 7.3.3.4 (Scope of Interconnection Facilities Study) (112.0.0).

101. MISO requests an independent entity variation to account for its three-phase DPP interconnection study process when incorporating the Commission's requirements that: (1) the interconnection system impact study shall consider the level of interconnection service requested by the interconnection customer, unless otherwise required to study the full generating facility capacity due to safety or reliability, for purposes of determining necessary interconnection facilities and network upgrades; and (2) that the interconnection feasibility study shall study an interconnection request at the level of service requested by the interconnection customer, unless otherwise required to study the full generating facility capacity due to safety or reliability concerns.²⁰⁸ MISO explains that, under its three-phase DPP, system impact studies are conducted in each DPP phase. MISO proposes to provide that, for purposes of determining necessary interconnection facilities and network upgrades, its preliminary, revised, and final interconnection system impact studies will each consider the level of interconnection service requested by the interconnection customer, unless otherwise required to study the full generating facility capacity due to safety or reliability concerns.²⁰⁹ MISO contends that its proposed inclusion of such language achieves the goals of Order Nos. 845 and 845-A by ensuring that, for each phase of the MISO study process, MISO will consider the level of interconnection service requested by the interconnection customer.²¹⁰ MISO also explains that it does not conduct an interconnection feasibility study, and therefore has not proposed to incorporate the language related to the standard of the feasibility study.

102. MISO also requests an independent entity variation to account for its three-phase DPP in incorporating the Commission's directive to allow an interconnection customer to reduce the size of its interconnection request prior to returning to the transmission provider either an executed system impact study agreement or an executed facilities study agreement.²¹¹ MISO explains that its existing DPP provides Decision Point I (at the end of DPP Phase I) and Decision Point II (at the end of DPP Phase II), at which points interconnection customers are allowed to reduce the size of their interconnection request. MISO states that, under its existing process, interconnection customers are allowed to reduce the total amount of their requested service at Decision Point I by up to 100 percent and at Decision Point II by up to an additional 10 percent. MISO proposes to revise its

²⁰⁸ *Id.*, Transmittal Letter at 40.

²⁰⁹ *Id.* at 40, *proposed* MISO Tariff, att. X, § 7.3.1.3 (Scope of the Preliminary Interconnection System Impact Study), § 7.3.2.3 (Scope of the Interconnection System Impact Study), and § 7.3.3.3 (Scope of the Final Interconnection System Impact Study) (112.0.0).

²¹⁰ *Id.*, Transmittal Letter at 41.

²¹¹ *Id.* at 42.

GIP to specify that, as required by the Commission, an interconnection customer may reduce the size of its request through either a decrease in plant size or a decrease in interconnection service level accomplished by applying transmission provider-approved injection limiting equipment at both decision points.

103. However, MISO requests an independent entity variation to explicitly state that, at Decision Point I, an interconnection customer may reduce the size of its interconnection request by as much as 100 percent and to clarify that “the total amount of [Network Resource Interconnection Service (NRIS)]²¹² requested shall not exceed the amount of [Energy Resource Interconnection Service (ERIS)]²¹³ requested.”²¹⁴ Additionally, MISO requests an independent entity variation to specify that at Decision Point II: (1) an interconnection customer may reduce the size of its request *for ERIS* by as much as *an additional* 10 percent; and (2) an interconnection customer may request to reduce the amount of NRIS by as much as 100 percent, independent of any requested reduction in ERIS, but that “the total amount of NRIS requested shall not exceed the amount of ERIS

²¹² NRIS is “an Interconnection Service that allows Interconnection Customer to integrate its Generating Facility with the Transmission System in the same manner as for any Generating Facility being designated as a Network Resource. Network Resource Interconnection Service does not convey transmission service. Network Resource Interconnection Service shall include any network resource interconnection service established under an agreement with, or the tariff of, a Transmission Owner prior to integration into MISO that is determined to be deliverable through the integration deliverability study process.” MISO Tariff, Module A, Definitions, § 1.S (111.0.0).

²¹³ ERIS is an “interconnection of a Generation Resource to the Transmission System or distribution system, as applicable, to be eligible to deliver the Generation Resource’s electric output using the existing firm or non-firm capacity of the Transmission System on an as available basis.” MISO Tariff, Module A, Definitions, § 1.S (111.0.0).

²¹⁴ May 22 Filing, Transmittal Letter at 42, *proposed* MISO Tariff, att. X, § 7.3.1.4 (Interconnection Customer Decision Point I) (112.0.0). MISO explains that requesting a 100 percent reduction in the level of interconnection service would result in the withdrawal of the interconnection request if the reduction is for ERIS. However, MISO states that requesting a 100 percent reduction would not result in a withdrawal if the request is for NRIS because NRIS “also includes an equal amount of ERIS and the ERIS service would remain,” even if the NRIS service is reduced to zero. *Id.*, Transmittal Letter at n.146.

requested.”²¹⁵ MISO states that it requests the independent entity variation to clarify its current rules because, without this additional language, there may be confusion about how to apply its reduction methodology.²¹⁶

104. Finally, to incorporate the Commission’s revisions to the interconnection request in Appendix 1 of the Commission’s *pro forma* LGIP to provide a space for the specification of the requested capacity if lower than the full generating facility capacity, MISO proposes to revise the table contained in MISO’s interconnection request that reflects the requested service levels.²¹⁷ MISO’s proposed revisions would direct that the requested total level of ERIS must be less than or equal to the installed generating facility capacity and that requested total NRIS must be less than or equal to total requested ERIS.²¹⁸ MISO asserts that its proposed revisions make clear that an interconnection customer can request a level of service that is lower than the installed capacity of its generating facility while also explicitly communicating the relationship between requested ERIS and NRIS.²¹⁹ MISO therefore submits that this language is just, reasonable, properly reflective of existing MISO rules, and accomplishes the stated goals of Orders No. 845 and 845-A within MISO’s Tariff framework.

b. Commission Determination

105. We find that MISO’s proposed Tariff revisions allowing an interconnection customer to request interconnection service below its full generating facility capacity partially comply with the requirements of Order Nos. 845 and 845-A. We find that MISO’s proposed revisions generally comply with the Commission’s directives that transmission providers have a process in place to consider requests for interconnection service below the full generating facility capacity and the requirements associated with that process. However, MISO’s proposed revisions to section 3.1 of MISO’s GIP do not

²¹⁵ *Id.* at 42, *proposed* MISO Tariff, att. X, § 7.3.2.4 (Interconnection Customer Decision Point II) (112.0.0).

²¹⁶ *Id.*, Transmittal Letter at 42-43.

²¹⁷ *Id.* at 44, *proposed* MISO Tariff, att. X, app. 1 (Interconnection Request for a Generating Facility) (44.0.0).

²¹⁸ *Id.*, Transmittal Letter at 44, *proposed* MISO Tariff, att. X, app. 1 (Interconnection Request for a Generating Facility) (44.0.0).

²¹⁹ *Id.*, Transmittal Letter at 45.

fully incorporate the *pro forma* LGIP language adopted by Order No. 845.²²⁰ Order No. 845 adopted the following language as the second sentence of the final paragraph in *pro forma* LGIP section 3.1:

These requests for Interconnection Service shall be studied at the level of Interconnection Service requested for purposes of Interconnection Facilities, Network Upgrades, *and associated costs*, but may be subject to other studies at the full Generating Facility Capacity to ensure safety and reliability of the system, with the study costs borne by the Interconnection Customer.²²¹

Accordingly, we direct MISO to file, within 60 days of the date of this order, a further compliance filing that incorporates the *pro forma* revisions to section 3.1 of its GIP, as required by Order No. 845.

106. Further, we grant MISO's requested independent entity variations to account for its three-phase DPP interconnection study process when incorporating the Commission's requirements that the interconnection system impact study consider the level of interconnection service requested by the interconnection customer, unless otherwise required to study the full generating facility capacity due to safety or reliability concerns, and to not incorporate the Commission's *pro forma* language related to the standard of the feasibility study, as MISO does not conduct such a study. We find that MISO's proposed language ensures that, for each phase of the MISO study process, MISO will consider the level of interconnection service requested by the interconnection customer unless otherwise required to study the full generating facility capacity due to safety or reliability concerns.

107. However, we find that MISO's proposed Tariff language describing the permissible reductions of requested levels of interconnection service at Decision Points I and II is unclear and could cause confusion among interconnection customers. Specifically, MISO's proposed Tariff language stating that the "total amount of NRIS requested shall not exceed the amount of ERIS requested" does not clearly reflect the relationship

²²⁰ See Order No. 845-A, 166 FERC ¶ 61,137 at P 117.

²²¹ Order No. 845, 163 FERC ¶ 61,043 at P 347; *see also id.* P 367. The italics indicate language adopted by Order No. 845 that MISO's Tariff revisions failed to include. We recognize, however, that the *pro forma* LGIP that was available on the Commission's website failed to include that language.

between ERIS and NRIS that MISO describes in its compliance filing.²²² In its transmittal letter, MISO states that requesting a 100 percent reduction in NRIS would not result in a withdrawal because NRIS “also includes an equal amount of ERIS” and that “the ERIS service would remain even if the NRIS service is reduced to zero.”²²³ However, neither MISO’s existing Tariff nor MISO’s proposed Tariff language provides that NRIS would effectively convert to ERIS when the requested level of NRIS is reduced. Therefore, we find that MISO’s proposed language is not clear without further Tariff revisions that describe the relationship between ERIS and NRIS that MISO discussed in its transmittal letter, and clarify that, when an interconnection customer requests NRIS service, it is also requesting an equivalent amount of ERIS service. Accordingly, we direct MISO to file, within 60 days of the date of this order, a further compliance filing to make these Tariff revisions or to remove the proposed language stating that the “total amount of NRIS requested shall not exceed the amount of ERIS requested.”

9. Provisional Interconnection Service

108. In Order No. 845, the Commission required transmission providers to allow all interconnection customers to request provisional interconnection service.²²⁴ The Commission explained that interconnection customers may seek provisional interconnection service when available studies or additional studies, as necessary, indicate that there is a level of interconnection service that can occur to accommodate an interconnection request without the construction of any additional interconnection facilities and/or network upgrades, and the interconnection customer wishes to make use of that level of interconnection service while the facilities required for its full interconnection request are completed.²²⁵ To implement this service, the Commission revised the *pro forma* LGIP and *pro forma* LGIA to add a definition for “Provisional

²²² May 22 Filing, *proposed* MISO Tariff, att. X, § 7.3.1.4 (Interconnection Customer Decision Point I), § 7.3.2.4 Interconnection Customer Decision Point II (112.0.0).

²²³ *Id.*, Transmittal Letter at n.146.

²²⁴ Order No. 845, 163 FERC ¶ 61,043 at P 438.

²²⁵ *Id.* P 441.

Interconnection Service”²²⁶ and for a “Provisional Large Generator Interconnection Agreement.”²²⁷

109. In addition, the Commission added *pro forma* LGIA article 5.9.2, which details the terms for provisional interconnection service.²²⁸ The Commission also explained that transmission providers have the discretion to determine the frequency for updating provisional interconnection studies to account for changes to the transmission system to reassess system capacity available for provisional interconnection service and included bracketed tariff language to be completed by the transmission provider, to specify the frequency at which they perform such studies in their *pro forma* LGIA.²²⁹ The Commission stated that interconnection customers are responsible for the costs for performing these provisional interconnection studies.²³⁰

a. MISO’s Compliance Filing

110. MISO proposes to add definitions for “Provisional Interconnection Service” and “Provisional Generator Interconnection Agreement” to its GIP and *pro forma* GIA, which MISO states replicate the language required by Order Nos. 845 and 845-A, with minor deviations to conform to MISO’s specific Tariff language.²³¹

111. MISO states that it provides a process for obtaining a provisional GIA under its existing GIP.²³² Along with the addition of the definitions discussed above, MISO proposes to revise the existing provisional generator interconnection agreement section of

²²⁶ *Pro forma* LGIP § 1 (Definitions); *pro forma* LGIA art. 1 (Definitions).

²²⁷ *Id.* The Commission declined, however, to adopt a separate *pro forma* provisional large generator interconnection agreement. Order No. 845, 163 FERC ¶ 61,043 at P 444.

²²⁸ *Id.* P 438; *see also pro forma* LGIP § 5.9.2.

²²⁹ Order No. 845, 163 FERC ¶ 61,043 at P 448.

²³⁰ *Id.* P 448.

²³¹ May 22 Filing, Transmittal Letter at 45, *proposed* MISO Tariff, att. X, § 1.P (Definitions) (112.0.0), app. 6, § 1.P (Definitions) (65.0.0).

²³² *Id.*, Transmittal Letter at 45 (referencing MISO Tariff, att. X, § 1.P (Definitions), § 7.9 (Provisional Generator Interconnection Agreement) (114.0.0), app. 6, app. H (Interconnection Requirements for Provisional GIA) (68.0.0)).

its GIP to clarify that, in accordance with Order No. 845, the transmission provider may offer provisional interconnection service based on the results of available studies that indicate that there is a level of interconnection service that can occur without any additional network upgrades.²³³ Additionally, MISO requests an independent entity variation, to the extent necessary, to remove existing GIP language stating that MISO will undertake a preliminary interconnection system impact study upon receiving a request for provisional interconnection service.²³⁴ MISO states that, under Order No. 845, interconnection customers may enter into provisional agreements prior to the completion of the full interconnection study process.²³⁵ MISO contends that eliminating the reference to the preliminary system impact study, which takes place prior to Decision Point I, allows an interconnection customer to request provisional interconnection service up through Decision Point II and reflects the fact that, depending on when an interconnection customer submits a request for provisional interconnection service, MISO will not always need to undertake a preliminary system impact study.²³⁶ MISO asserts that its proposed independent entity variation is reasonable because it more accurately reflects how MISO implements provisional generator interconnection service and because it will not result in undue discrimination or produce an interconnection process that is unjust and unreasonable.

112. Finally, MISO proposes to add article 5.9.2 to its *pro forma* GIA, which MISO states is consistent with article 5.9.2 in the Commission's *pro forma* LGIA.²³⁷ MISO also proposes to update the maximum permissible output of the generating facility under provisional service on a quarterly basis.

b. Commission Determination

113. We find that the proposed revisions to MISO's provisional interconnection service provisions in its GIP and *pro forma* GIA, which (1) clarify that MISO may offer provisional interconnection service based on results of available studies that indicate that there is a level of interconnection service that can occur without any additional network

²³³ *Id.* at 46 (citing to Order No. 845, 163 FERC ¶ 61,043 at P 441).

²³⁴ *Id.* at 46-47, *proposed* MISO Tariff, att. X, app. 6, art. 5.9.2 (Provisional Interconnection Service) (65.0.0).

²³⁵ *Id.*, Transmittal Letter at 45 (citing Order No. 845, 163 FERC ¶ 61,043 at P 438).

²³⁶ *Id.* at 46-47.

²³⁷ *Id.* at 45, 47, *proposed* MISO Tariff, att. X, app. 6, art. 5.9.2 (Provisional Interconnection Service) (65.0.0).

upgrades and (2) provide that MISO will update the maximum permissible output of the generating facility under provisional service on a quarterly basis, comply with the requirements of Order Nos. 845 and 845-A. We also find that MISO's requested independent entity variation is just and reasonable and accomplishes the purposes of Order Nos. 845 and 845-A because it reconciles the requirements of Order Nos. 845 and 845-A with MISO's existing provisional interconnection service provisions and facilitates an interconnection customer's ability to request provisional interconnection service prior to the completion of the full interconnection study process. Therefore, we find that MISO's existing provisional interconnection service provisions, as modified here, offer provisional interconnection service as required by Order Nos. 845 and 845-A.

114. However, we direct MISO to file, within 60 days of the date of this order, revisions to its Tariff to correct the typographical errors in its proposed article 5.9.2 of MISO's *pro forma* GIA to fully incorporate the Commission's language in article 5.9.2 of the Commission's *pro forma* LGIA. Specifically, the fourth sentence in article 5.9.2 should read: "Where available studies indicate that such Interconnection Facilities, Network Upgrades, Distribution Upgrades, and/or System Protections Facilities that are required *for* the interconnection"²³⁸

10. Surplus Interconnection Service

115. In Order No. 845, the Commission adopted *pro forma* LGIP sections 1, 3.3, and 3.3.1 and *pro forma* LGIA article 1 to establish surplus interconnection service, which the Commission defined as any unneeded portion of interconnection service established in an LGIA such that if the surplus interconnection service is utilized the total amount of interconnection service at the point of interconnection would remain the same.²³⁹ Surplus interconnection service enables a new interconnection customer to utilize the unused portion of an existing interconnection customer's interconnection service within specific parameters.²⁴⁰ The Commission required transmission providers to revise their tariffs to include the new definition of surplus interconnection service in their *pro forma* LGIP and *pro forma* LGIA, and provide in the *pro forma* LGIP an expedited interconnection

²³⁸ See Order No. 845, 163 FERC ¶ 61,043 at P 449; *see also pro forma* LGIA art. 5.9.2.

²³⁹ Order No. 845, 163 FERC ¶ 61,043 at P 467; *see also pro forma* LGIP § 1 (Definitions); *pro forma* LGIA art. 1 (Definitions).

²⁴⁰ Order No. 845, 163 FERC ¶ 61,043 at P 467; Order No. 845-A, 166 FERC ¶ 61,137 at P 119.

process outside of the interconnection queue for surplus interconnection service.²⁴¹ That expedited process must allow affiliates of the existing interconnection customer to use surplus interconnection service for another interconnecting generating facility and allow for the transfer of surplus interconnection service that the existing interconnection customer or one of its affiliates does not intend to use.²⁴² The transmission provider must perform reactive power, short circuit/fault duty, and stability analyses studies as well as steady-state (thermal/voltage) analyses as necessary to ensure evaluation of all required reliability conditions to provide surplus interconnection service and ensure the reliable use of surplus interconnection service.²⁴³ The original interconnection customer must be able to stipulate the amount of surplus interconnection service that is available, designate when that service is available, and describe any other conditions under which surplus interconnection service at the point of interconnection may be used.²⁴⁴ When the original interconnection customer, the surplus interconnection service customer, and the transmission provider enter into agreements for surplus interconnection service, the transmission provider must file those agreements with the Commission, because any surplus interconnection service agreement will be an agreement under the transmission provider's open access transmission tariff.²⁴⁵

a. MISO's Compliance Filing

116. MISO proposes revisions to its GIP to retain the net zero interconnection service that is currently included in its Tariff, change the name of this product to "Surplus Interconnection Service," and make several modifications in compliance with Order Nos. 845 and 845-A.²⁴⁶ MISO also proposes to remove all references to the competitive solicitation process for its renamed surplus interconnection service product.²⁴⁷

²⁴¹ Order No. 845, 163 FERC ¶ 61,043 at P 467; *see also pro forma* LGIP §§ 3.3 and 3.3.1.

²⁴² Order No. 845, 163 FERC ¶ 61,043 at P 483; *see also pro forma* LGIP § 3.3.

²⁴³ Order No. 845, 163 FERC ¶ 61,043 at PP 455 and 467.

²⁴⁴ *Id.* P 481.

²⁴⁵ *Id.* P 499.

²⁴⁶ May 10 Filing, Transmittal Letter at 1-2.

²⁴⁷ *Id.* at 12, *proposed* MISO Tariff, att. X, § 3.3.1.2 (Evaluation Process for Surplus Interconnection Request and the Requirements for the Request to Remain Valid) (110.0.0).

117. MISO proposes revisions to sections of its GIP and *pro forma* GIA regarding definitions, types of service, valid interconnection requests, duration of the DPP, interconnection requests for generating facilities, the Monitoring and Consent Agreement, and the Energy Displacement Agreement, in order to mirror the requirements from Order Nos. 845 and 845-A, with some requested independent entity variations.²⁴⁸

118. Specifically, MISO requests an independent entity variation in order to expand upon the Order No. 845 definition of surplus interconnection service, as follows:²⁴⁹

Surplus Interconnection Service shall mean any ~~unneeded portion of Interconnection Service~~ that is derived from the unneeded portion of Interconnection Service established in a Large Generator Interconnection Agreement GIA or in agreement with, or under the tariff of, a Transmission Owner prior to integration into MISO, such that if Surplus Interconnection Service is utilized, the total amount of Interconnection Service at the Point of Interconnection would remain the same.

119. MISO states that these changes represent two modifications to the Commission's definition. First, MISO states that its proposed definition clarifies that surplus interconnection service is derived from the unneeded portion of interconnection service that can only exist if the interconnection customer of the existing generating facility decides to make its unneeded interconnection service available through the surplus interconnection service processes established in MISO's Tariff.²⁵⁰ Second, MISO proposes to include language in the definition of surplus interconnection service that it states accounts for existing generating facilities in the MISO footprint that entered commercial operation prior to Order No. 2003 under a form of agreement that predated the MISO *pro forma* GIA or did not require an interconnection agreement. In addition, MISO proposes limited changes to provisions in its GIP and *pro forma* GIA that describe

²⁴⁸ *Id.*, proposed MISO Tariff, att. X, § 1 (Definitions), § 3.2 (Identification of Types of Services), § 3.3 (Valid Interconnection Request), § 7.3 (Duration of the Definitive Planning Phase) (110.0.0), app. 1 (Interconnection Request for a Generating Facility) (42.0.0), app. 6 (Standard Generator Interconnection Agreement) (63.0.0), app. 11 (Monitoring and Consent Agreement), and app. 12 (Energy Displacement Agreement) (34.0.0).

²⁴⁹ *Id.*, Transmittal Letter at 5-8, proposed MISO Tariff, att. X, § 1 (Definitions) (110.0.0), app. 6 (Standard Generator Interconnection Agreement) (63.0.0).

²⁵⁰ *Id.*, Transmittal Letter at 6.

the surplus interconnection service product, in order to align these provisions with the definition for surplus interconnection service, which provides that surplus interconnection service cannot increase the total amount of interconnection service at the point of interconnection.²⁵¹ MISO also proposes to revise its GIP and *pro forma* GIA to reflect that surplus interconnection service may be for either ERIS or NRIS, as applicable.²⁵²

120. MISO also proposes to make certain changes to existing language in its Tariff that, it asserts, will ensure that MISO satisfies the directives in Order No. 845.²⁵³ MISO proposes Tariff changes that it states will ensure it satisfies Order No. 845 directives related to studies performed for surplus interconnection service.²⁵⁴ MISO proposes to revise the description of the steady state analyses for requested surplus interconnection service in its GIP to ensure that the surplus interconnection service is studied under all required reliability conditions in accordance with MISO's Tariff and MISO's Generator Interconnection BPM No. 15. Further, MISO provides that, within 30 calendar days of the transmission provider's receipt of the completed surplus interconnection service request, MISO will commence a study of the proposed surplus interconnection service and will use reasonable efforts to complete this study within 90 calendar days.²⁵⁵ MISO states that it will perform a material adverse impact analysis to confirm that the proposed surplus interconnection service will not generate new network upgrades.²⁵⁶ If MISO determines that the surplus interconnection service request would result in new network upgrades on the MISO transmission system and/or affected systems, the interconnection customer that is seeking surplus interconnection service must proceed through the DPP with a new interconnection request.²⁵⁷ After receiving the results of MISO's surplus interconnection service study, the interconnection customer will have 30 calendar days to

²⁵¹ *Id.* at 8, *proposed* MISO Tariff, att. X, § 3.2.3.1 (The Product) (110.0.0), app. 6, § 4.1.3.1 (The Product) (63.0.0).

²⁵² *Id.*, Transmittal Letter at 8, 15-16 (citing Order No. 845, 163 FERC ¶ 61,043 at P 472), *proposed* MISO Tariff, att. X, § 3.2.3.1 (The Product) (110.0.0), app. 6, § 4.1.3.1 (The Product) (63.0.0).

²⁵³ *Id.*, Transmittal Letter at 9.

²⁵⁴ *Id.*, Transmittal Letter at 9-10, *proposed* MISO Tariff, att. X, § 3.2.3.2 (The Study) (110.0.0).

²⁵⁵ *Id.*, Transmittal Letter at 12.

²⁵⁶ *Id.* at 15.

²⁵⁷ *Id.* at 13.

inform MISO of its intention to proceed with its surplus interconnection service request, or otherwise the surplus interconnection service request will be deemed withdrawn. Once MISO receives this notice, MISO will either (1) initiate an interconnection facilities study, or (2) tender a draft GIA if an interconnection facilities study is not needed.

121. MISO acknowledges that the Commission requires an expedited interconnection process outside of the interconnection queue for surplus interconnection service.²⁵⁸ MISO states that the interconnection study that it proposes to perform will occur outside of the DPP process. MISO notes that its existing net zero interconnection service provisions were included in the description of the preliminary interconnection system impact study under the DPP.²⁵⁹ Thus, MISO proposes to remove all existing references to net zero interconnection service from this section of its GIP.

122. MISO proposes that, in order for a surplus interconnection request to remain valid, an interconnection customer must submit an executed Energy Displacement Agreement and Monitoring and Consent Agreement to MISO prior to the conclusion of negotiations for the associated GIA implementing surplus interconnection service.²⁶⁰ MISO also proposes to collect a \$60,000 study deposit from surplus interconnection customers initiating a surplus interconnection request, which MISO notes is consistent with the study deposit collected for replacement generating facilities studies and optional studies.²⁶¹ MISO states that it will refund any unused portion of this study deposit to the interconnection customer.

123. MISO acknowledges that Order No. 845 requires the transmission provider to file contractual agreements that memorialize the terms of the surplus interconnection service with the Commission.²⁶² MISO further notes that the Commission, in Order No. 845, declined to include these requirements in the *pro forma* LGIA but permitted transmission providers to file *pro forma* versions of these agreements. MISO states that its Tariff

²⁵⁸ *Id.* at 3, 9 (citing Order No. 845, 163 FERC ¶ 61,043 at PP 477, 486).

²⁵⁹ *Id.* at 9.

²⁶⁰ *Id.* at 13, 17, *proposed* MISO Tariff, att. X, § 3.3.1.2 (Evaluation Process for Surplus Interconnection Request and the Requirements for the Request to Remain Valid) (110.0.0).

²⁶¹ *Id.*, Transmittal Letter at 10-11, *proposed* MISO Tariff, att. X, § 3.3.1 (Initiating an Interconnection Request) (110.0.0).

²⁶² *Id.*, Transmittal Letter at 16-17 (citing Order No. 845, 163 FERC ¶ 61,043 at P 499).

includes such agreements in its *pro forma* Energy Displacement Agreement and *pro forma* Monitoring and Consent Agreement as part of its *pro forma* GIA.²⁶³ MISO also proposes language in its GIP and its *pro forma* Monitoring and Consent Agreement providing that the transmission provider and the transmission owner will file for termination of the “Surplus Interconnection Service agreement”²⁶⁴ with the Commission if the interconnection service limit is exceeded and the interconnection customer fails to provide documentation to demonstrate that the interconnection customer cured the deficiency.²⁶⁵

124. MISO proposes to revise its GIP to provide that the original interconnection customer, or one of its affiliates, have priority rights to any surplus interconnection service made available by the original interconnection customer.²⁶⁶ MISO proposes to revise its GIP to provide that an officer of the original interconnection customer must provide a written statement with the following: (1) the amount of surplus interconnection service made available by the interconnection customer that owns the existing generating facility; (2) the type of interconnection service that is made available for surplus interconnection service by the existing owner; and (3) the circumstances under which the surplus interconnection service will be made available by the existing owner.²⁶⁷

125. MISO proposes to add provisions to its GIP to establish the continuation of surplus interconnection service after the retirement and cessation of commercial operation of the original interconnection customer’s generating facility for a period of up to one year if the two following conditions are met: (1) the surplus interconnection

²⁶³ *Id.*, proposed MISO Tariff, att. X, app. 11 (Monitoring and Consent Agreement) and att. X, app. 12 (Energy Displacement Agreement) (34.0.0).

²⁶⁴ *Id.*, att. X, app. 11 (Monitoring and Consent Agreement) (34.0.0). MISO uses the terms “Surplus Interconnection Service Agreement,” “Surplus Interconnection Service agreement,” and “Surplus Interconnection Service Interconnection Agreement” in multiple sections of its proposed Tariff revisions. *See also id.*, att. X, § 3.3.1.3 (Requirements for Continuation of Surplus Interconnection Service after Retirement or Cessation of Commercial Operation of an Existing Generating Facility) (110.0.0).

²⁶⁵ *Id.*, att. X, app. 11 (Monitoring and Consent Agreement) (34.0.0).

²⁶⁶ *Id.*, Transmittal Letter at 14, proposed MISO Tariff, att. X, § 3.3.1.1 (Additional Requirements for a Surplus Interconnection Request Application) (110.0.0).

²⁶⁷ *Id.*, Transmittal Letter at 16, proposed MISO Tariff, att. X, § 3.3.1.1 (Additional Requirements for a Surplus Interconnection Request Application), § 6 (Pre-Queue Phase) (110.0.0).

customer's generating facility must have been studied by the transmission provider for sole operation at the point of interconnection at the time of the interconnection of the surplus interconnection customer; and (2) the original interconnection customer that is retiring its original generating facility must have agreed in writing that the surplus interconnection customer may continue to operate the surplus interconnection service generating facility after retirement of the original generating facility.²⁶⁸

126. MISO proposes various conforming revisions to existing language in its GIP to align the existing language with the new provisions for surplus interconnection service described above.²⁶⁹

b. Protests/Comments

127. AWEA/CGA and MISO Transmission Owners filed comments in support of MISO's surplus interconnection service compliance filing and request that the Commission accept MISO's proposal.²⁷⁰

c. Commission Determination

128. We find that MISO's proposed Tariff provisions regarding surplus interconnection service in its GIP and *pro forma* GIA comply with the requirements of Order Nos. 845 and 845-A. Specifically, MISO's definition for surplus interconnection service provides for a new interconnection customer to utilize the unneeded portion of an existing interconnection customer's interconnection service within specific parameters, in

²⁶⁸ *Id.*, Transmittal Letter at 18-20, *proposed* MISO Tariff, att. X, § 3.3.1.3 (Requirements for Continuation of Surplus Interconnection Service after Retirement or Cessation of Commercial Operation of an Existing Generating Facility) (110.0.0).

²⁶⁹ *Id.*, Transmittal Letter at 7, 11, 16, 20, *proposed* MISO Tariff, att. X, § 2 (Scope and Application) (110.0.0), app. 1 (Interconnection Request for a Generating Facility) (42.0.0), app. 6, § 4.1.3.1 (The Product), § 2.3.1.1 (Surplus Interconnection Service) (63.0.0).

²⁷⁰ American Wind Energy Association and Clean Grid Alliance Comments, Docket Nos. ER19-1823-000 and ER19-1823-001 at 1; MISO Transmission Owners Comments, Docket Nos. ER19-1823-000 and ER19-1823-001 at 2, 6, 9.

accordance with the requirements of Order No. 845.²⁷¹ We also find that MISO's Tariff provides an expedited interconnection study process outside of the interconnection queue for surplus interconnection service, as required by Order No. 845.²⁷² MISO's Tariff includes provisions for MISO to perform reactive power, short circuit/fault duty, and stability analyses studies, as well as steady-state (thermal/voltage) analyses as necessary, to ensure the evaluation of all required reliability conditions to provide surplus interconnection service and the reliable use of surplus interconnection service.²⁷³ MISO's proposed Tariff provisions also provide for the filing of contractual arrangements for surplus interconnection service with the Commission through the Energy Displacement Agreement and Monitoring and Consent Agreement contained within the interconnection customer's GIA. Further, we find that MISO's proposed Tariff revisions to remove references to a competitive solicitation process for its surplus interconnection service product are consistent with the Commission's change in policy with respect to requirements related to a competitive solicitation process previously imposed on MISO's net zero interconnection service.²⁷⁴

129. However, we note that MISO's proposed Tariff provisions also reference a "Surplus Interconnection Service agreement" that is not defined in the Tariff.²⁷⁵ While we understand this term to refer to the Energy Displacement Agreement and Monitoring and Consent Agreement contained in MISO's *pro forma* GIA, we direct MISO to file, within 60 days of the date of this order, a further compliance filing to revise its Tariff to either replace "Surplus Interconnection Service agreement" with "Energy Displacement Agreement and Monitoring and Consent Agreement" or clarify the nature of this agreement.

²⁷¹ Order No. 845, 163 FERC ¶ 61,043 at P 467; *see also pro forma* LGIP § 1 (Definitions); *pro forma* LGIA art. 1 (Definitions). *See* May 10 Filing, *proposed* MISO Tariff, att. X, § 1 (Definitions), § 3.2.3.1 (The Product) (110.0.0), app. 6, § 4.1.3.1 (The Product) (63.0.0).

²⁷² Order No. 845, 163 FERC ¶ 61,043 at PP 477, 486.

²⁷³ *Id.* PP 455, 467. *See* May 10 Filing, Transmittal Letter at 9-10, *proposed* MISO Tariff, att. X, § 3.2.3.2 (The Study) (110.0.0).

²⁷⁴ Order No. 845, 163 FERC ¶ 61,043 at PP 483, 484.

²⁷⁵ *See supra* n. 264; *see also* May 10 Filing, *proposed* MISO Tariff, att. X, § 3.3.1.3 (Requirements for Continuation of Surplus Interconnection Service after Retirement or Cessation of Commercial Operation of an Existing Generating Facility) (110.0.0), app. 11 (Monitoring and Consent Agreement) (34.0.0).

130. In addition, we grant MISO's requested independent entity variations to expand upon the definition of surplus interconnection service. We find these variations to be just and reasonable because they: (1) make clear that unneeded capacity is not itself surplus interconnection service, but rather may be used to develop surplus interconnection service; (2) account for the presence of legacy generators in the MISO footprint; and (3) clarify that surplus interconnection service cannot increase the total amount of interconnection service at the point of interconnection. We further find that these clarifications accomplish Order No. 845's purpose to ensure the reliable use of surplus interconnection service.

11. Material Modifications and Incorporation of Advanced Technologies

131. In Order No. 845, the Commission modified section 4.4.2(c) of the *pro forma* LGIP to allow an interconnection customer to incorporate certain technological advancements to its interconnection request, prior to the execution of the interconnection facilities study agreement,²⁷⁶ without risking the loss of its queue position. The Commission required transmission providers to develop and include in their LGIPs a definition of permissible technological advancements that will create a category of technological changes that, by definition, do not constitute a material modification and, therefore, will not result in the loss of queue position. In addition, the Commission modified section 4.4.6 of the *pro forma* LGIP to require transmission providers to insert a technological change procedure that includes the requisite information and process that the transmission provider will follow to assess whether an interconnection customer's proposed technological advancement is a material modification.²⁷⁷

132. The Commission required that the technological change procedure specify what technological advancements can be incorporated at various stages of the interconnection process and clearly identify which requirements apply to the interconnection customer and which apply to the transmission provider.²⁷⁸ Additionally, the technological change

²⁷⁶ While the Commission clarified that interconnection customers may submit a technological advancement request up until execution of the facilities study agreement, the Commission stated that it will permit transmission providers to propose rules limiting the submission of technological advancement requests to a single point in the study process (prior to the execution of a facilities study agreement), to the extent the transmission provider believes it appropriate. Order No. 845, 163 FERC ¶ 61,043 at P 536.

²⁷⁷ *Id.* P 518; *see also pro forma* LGIP § 4.4.6.

²⁷⁸ Order No. 845, 163 FERC ¶ 61,043 at P 519.

procedure must state that, if the interconnection customer seeks to incorporate technological advancements into its proposed generating facility, it should submit a technological advancement request, and the procedure must specify the information that the interconnection customer must submit as part of that request.

133. The Commission also required that the technological change procedure specify the conditions under which a study will or will not be necessary to determine whether a proposed technological advancement is a material modification.²⁷⁹ The Commission explained that the technological change procedure must also state that, if a study is necessary to evaluate whether a particular technological advancement is a material modification, the transmission provider shall clearly indicate to the interconnection customer the types of information and/or study inputs that the interconnection customer must provide to the transmission provider, including, for example, study scenarios, modeling data, and any other assumptions.²⁸⁰ In addition, the Commission required that the technological change procedure explain how the transmission provider will evaluate the technological advancement request to determine whether it is a material modification.

134. Further, the Commission required that the technological change procedure outline a time frame of no more than 30 days after the interconnection customer submits a formal technological advancement request for the transmission provider to perform and complete any necessary additional studies.²⁸¹ The Commission also found that, if the transmission provider determines that additional studies are necessary to evaluate whether a technological advancement is a material modification, the interconnection customer must tender a deposit, and the transmission provider must specify the amount of the deposit in the transmission provider's technological change procedure.²⁸² In addition, the Commission explained that, if the transmission provider cannot accommodate a proposed technological advancement without triggering the material modification provision of the *pro forma* LGIP, the transmission provider must provide an explanation to the interconnection customer regarding why the technological advancement is a material modification.²⁸³

²⁷⁹ *Id.*; Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

²⁸⁰ Order No. 845, 163 FERC ¶ 61,043 at P 521.

²⁸¹ *Id.* P 535.

²⁸² *Id.* P 534. The Commission set the default deposit amount to \$10,000 but stated that a transmission provider may propose a reasonable alternative deposit amount in its compliance filing and include a justification supporting this alternative amount. *Id.*

²⁸³ *Id.* P 522.

135. In Order No. 845-A, the Commission clarified that: (1) when studies are necessary, the interconnection customer's technological change request must demonstrate that the proposed incorporation of the technological change will result in electrical performance that is equal to or better than the electrical performance expected prior to the technological change and will not cause any reliability concerns; (2) if the interconnection customer cannot demonstrate in its technological change request that the proposed technological change would result in equal or better electrical performance, the change will be assessed pursuant to the existing material modification provisions in the *pro forma* LGIP; (3) information regarding electrical performance submitted by the interconnection customer is an input into the technological change study, and this factor alone is not determinative of whether a proposed technological change is a material modification; and (4) the determination of whether a proposed technological change (that the transmission provider does not otherwise include in its definition of permissible technological advancements) is a material modification should include an analysis of whether the proposed technological change materially impacts the timing and costs of lower-queued interconnection customers.²⁸⁴

a. MISO's Compliance Filing

136. MISO proposes a definition for "Permissible Technological Advancement" for inclusion in its GIP.²⁸⁵ The proposed definition states that a permissible technological advancement does not: (1) degrade the electrical characteristics of the generating equipment; (2) cause any material adverse impact on the transmission system with regard to short circuit capability limits, steady-state thermal and voltage limits, or dynamic system stability and response; (3) increase the installed capacity of the generating facility; or (4) change the fuel source of the proposed generating facility. MISO states that the proposed definition complies with the directives of Order Nos. 845 and 845-A by defining a class of technological advancements that generally do not require significant analysis to determine whether they have an adverse impact on the electrical characteristics of the generating facility or the transmission system.

137. MISO also proposes to revise section 4.4.1 of its GIP to specify that the cut-off date for a modification is prior to the issuance of a draft GIA and to add a new subsection (c) that adds "Permissible Technological Advancement" to the list of permitted modifications.²⁸⁶ MISO states that the language it proposes in subsection (c) conforms to

²⁸⁴ Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

²⁸⁵ May 22 Filing, Transmittal Letter at 48-49.

²⁸⁶ *Id.* at 49, *proposed* MISO Tariff, att. X, § 4.4.1 (Modifications) (112.0.0).

the language adopted by the Commission.²⁸⁷ MISO states that its proposed cut-off date—prior to issuance of a draft GIA—is later than the date suggested in the Commission’s guidance for such a procedure, and accordingly, MISO requests an independent entity variation to accommodate this change to the extent needed. MISO asserts that, under its process, changes that would be permissible under the technological change procedure can be accommodated without harm to the rest of the queue and that the cut-off date it proposes provides greater flexibility to interconnection customers.

138. Finally, MISO proposes to describe the procedures applicable to review of technological advancement requests.²⁸⁸ The proposed Tariff language states that an interconnection customer or merchant high voltage direct current (HVDC) connection customer shall submit a technological advancement request demonstrating that the proposed change is a permissible technological advancement or submit a detailed analysis to demonstrate that the proposed change is not a material modification. Further, MISO proposes requiring the customer to include a description of the proposed change together with updated modeling data (i.e., power flow and stability), updated technical data as outlined in Attachment A of Appendix 1 of the GIP, and a study deposit of \$10,000. The proposed Tariff language further states that MISO will review technological advancement requests within 30 days and determine if the proposed change is a permissible technological advancement or otherwise not a material modification, or MISO will inform the interconnection customer or merchant HVDC connection customer if additional data or studies are required to make a determination.²⁸⁹ Within 60 days after receipt of said data or studies, MISO will perform such studies and communicate the results, with a written explanation, to the interconnection customer or merchant HVDC connection customer on whether the proposed modification is a material modification. In the event that MISO determines that the proposed change is a material modification, the interconnection customer or merchant HVDC connection customer has the option of: (1) withdrawing such technological advancement request and retaining its current queue position; or (2) resubmitting its proposed generating facility as a new interconnection request.

²⁸⁷ *Id.*, Transmittal Letter at 49.

²⁸⁸ *Id.* at 50, *proposed* MISO Tariff, att. X, § 4.4.1.1 (Technological Change Procedure) (112.0.0).

²⁸⁹ *Id.*, Transmittal Letter at 50.

139. MISO contends that its proposed procedure conforms to the guidance in Order Nos. 845 and 845-A, specifically the 30-day timing requirement and the deposit amount.²⁹⁰ MISO states that, while it is difficult to predict in advance the types of situations necessitating further studies beyond initial screens, its proposed process requires MISO to provide an explanation in the event such studies are needed.²⁹¹ MISO also requests, as an independent entity variation, that it be allowed 60 days from the date of receipt of any additional data required from the interconnection customer or HVDC connection customer to conduct further studies, in the event such studies are needed. MISO argues that this timeframe is important given the number of projects in its queue and the variation in studies that may be needed to make such a final determination. MISO states that it considered rejecting technological advancement requests that did not include sufficient data to allow MISO to determine their permissibility, but it believes that interconnection customers would benefit from a further review process and a fixed outer timeframe so that they can determine in a timely manner whether their proposed modification may proceed or must be withdrawn.

b. Commission Determination

140. We find that MISO's proposed provisions to incorporate a definition of a permissible technological advancement and associated procedures partially comply with the requirements of Order Nos. 845 and 845-A. Specifically, we find that MISO's proposed definition of a permissible technological advancement meets the Commission's requirement to provide a category of technological change that does not constitute a material modification. We also find that MISO's proposed revisions to section 4.4.1 of its GIP to add a new subsection (c) that adds permissible technological advancement to the list of permitted modifications complies with Order No. 845 because it incorporates the Commission's *pro forma* language. Additionally, we find that MISO's proposal to accept technological change requests up until the issuance of a draft GIA, rather than the execution of the facilities study agreement, is a permissible independent entity variation. Noting MISO's assertion that allowing the submission of technological advancement requests prior to issuance of the draft GIA can be accommodated without harm to the rest of the queue, we find that MISO's proposal will achieve the purpose of Order No. 845 requirement by establishing a reasonable cut-off point for allowing submission of requests to incorporate technological advancements that will not be considered material modifications without delaying MISO's ability to tender a GIA or disrupting the queue.²⁹²

²⁹⁰ *Id.*

²⁹¹ *Id.* at 51.

²⁹² Order No. 845, 163 FERC ¶ 61,043 at P 536.

141. We reject MISO's requested independent entity variation related to the timing of completing additional studies and find that its proposed technological advancement procedure is not compliant with the requirements of Order Nos. 845 and 845-A. While we understand that MISO has a large number of projects in its queue and a wide variation in studies that may be needed, we find that MISO has not justified its proposal to allow it 60 days from the date of receipt of additional information from an interconnection customer or merchant HVDC connection customer to conduct further studies, in the event such studies are needed. Accordingly, we direct MISO to file, within 60 days of the date of this order, a further compliance filing that either justifies its proposed 60-day timeline for completing additional studies or adopts a 30-day study result deadline.²⁹³

142. Further, Order No. 845 requires that the technological advancement procedure explain how the transmission provider will evaluate the technological advancement request to determine whether it is a material modification.²⁹⁴ MISO's proposed revisions do not explain how it will evaluate a technological advancement request to determine whether it is a material modification. Accordingly, we direct MISO to file, within 60 days of the date of this order, a further compliance filing that revises its GIP to provide a more detailed explanation of the studies that it will conduct to determine whether the technological advancement request would be a material modification.

The Commission orders:

(A) MISO's compliance filing is hereby accepted, effective as of the date of this order, subject to a further compliance filing, as discussed in the body of this order.

(B) MISO is hereby directed to submit a further compliance filing, within 60 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.

²⁹³ See *id.* P 535 (“we believe that it is appropriate to establish a 30-day study result deadline”).

²⁹⁴ *Id.* P 521.