

158 FERC ¶ 61,003
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

Midcontinent Independent System Operator, Inc.

Docket No. ER17-156-000

ORDER ACCEPTING TARIFF REVISIONS SUBJECT TO CONDITION

(Issued January 3, 2017)

	<u>Page Numbers</u>
I. Background.....	2
A. History of Interconnection Queue Issues	2
B. MISO’s Filing.....	7
II. Notice and Responsive Pleadings.....	9
III. Discussion.....	10
A. Procedural Matters.....	10
B. Standard of Review	11
C. Substantive Issues.....	11
1. DPP	12
2. Milestone Payments.....	17
3. Transition Plan.....	20
4. Study Services Agreement	27
5. Increased Information and Accountability	31
6. Site Control.....	37
7. Alteration of the 25 Percent Threshold for Milestone Payment Refunds	42
8. Provisional GIAs	45
9. Restudy Provisions	54
10. External NRIS	56
11. Miscellaneous	56
The Commission orders:.....	58

1. On October 21, 2016, Midcontinent Independent System Operator, Inc. (MISO) submitted, under section 205 of the Federal Power Act (FPA),¹ proposed revisions to its Generator Interconnection Procedures (GIP) and its *pro forma* Generator Interconnection Agreement (GIA) contained in Attachment X of its Open Access Transmission, Energy and Operating Reserve Markets Tariff (Tariff).² MISO states that the proposed changes improve the timeliness and efficiency of its queue, which will result in positive effects on resource adequacy in the MISO footprint.³ In this order, we accept MISO's proposed Tariff revisions, subject to condition, to be effective January 4, 2017, as discussed below.

I. Background

A. History of Interconnection Queue Issues

2. In Order No. 2003,⁴ the Commission issued standardized large generator interconnection procedures (LGIP) and a standardized large generator interconnection agreement (LGIA). The Commission's goal was to minimize opportunities for undue discrimination and expedite the development of new generation, while protecting reliability and ensuring that rates are just and reasonable.⁵

3. In its compliance filing to Order Nos. 2003 and 2003-A, MISO stated that the geographic expanse of its footprint made it inefficient to process interconnection requests

¹ 16 U.S.C. § 824d (2012).

² MISO Queue Reform Filing, Docket No. ER17-156-000 (filed Oct. 21, 2016) (Filing). MISO made an errata to its Filing on October 24, 2016, to correct typographical errors in the transmittal letter. *See* MISO Errata Queue Reform Filing, Docket No. ER17-156-000 (filed Oct. 24, 2016). Unless indicated otherwise, all capitalized terms shall have the same meaning given them in the MISO Tariff.

³ Filing, Transmittal Letter at 1.

⁴ *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, FERC Stats. & Regs. ¶ 31,146 (2003), *order on reh'g*, Order No. 2003-A, FERC Stats. & Regs. ¶ 31,160, *order on reh'g*, Order No. 2003-B, FERC Stats. & Regs. ¶ 31,171 (2004), *order on reh'g*, Order No. 2003-C, FERC Stats. & Regs. ¶ 31,190 (2005), *aff'd sub nom. Nat'l Ass'n of Regulatory Util. Comm'rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007), *cert. denied*, 552 U.S. 1230 (2008).

⁵ Order No. 2003, FERC Stats. & Regs. ¶ 31,146 at P 7.

according to time of receipt, without regard for geography; thus, MISO proposed revisions to the *pro forma* LGIP in order to use a “group study” approach to queue processing. MISO also sought changes to the *pro forma* LGIP and LGIA that would permit MISO to study individual interconnection requests out-of-queue order based upon: (1) the electrical remoteness of the generating facility; or (2) the request of the interconnection customer, when MISO concurs with the request and has the resources to perform the study, and if the interconnection customer accepts the financial risk of restudy and reassignment of upgrades when the interconnection request becomes the next in the queue. The Commission accepted MISO’s proposal to process interconnection requests in groups and out-of-queue order, as proposed, conditioned on MISO meeting timing requirements in Order Nos. 2003 and 2003-A.⁶

4. In 2008, the Commission held a technical conference regarding interconnection queuing practices and queue related issues that emerged after the issuance of Order No. 2003 and issued an order directing Regional Transmission Organizations (RTO) and Independent System Operators (ISO) to develop and propose their own solutions to issues related to delays and backlogs in processing queues.⁷

5. To remedy this situation, MISO, along with its stakeholders, created the Interconnection Practices Task Force to identify and correct the parts of its queue management procedures that were not functioning well. As a result of this stakeholder process, MISO proposed, and the Commission largely accepted, revisions to Attachment X of the Tariff in order to reform MISO’s interconnection queue.⁸ Those revisions modified MISO’s GIP to limit delays caused by inactive projects in the queue. Among other things, MISO revised its procedure for processing interconnection applications from a “first-come, first-served” approach to an approach based on the progress that the generation project makes towards commercial operation, essentially a “first-ready, first-served” approach. Under these procedures, an interconnection customer entered the Pre-Queue Phase, during which MISO performs a Feasibility Study to determine whether the transmission system can accommodate the interconnection request and whether the project could move directly to the second phase of the queue – the Definitive Planning Phase (DPP) – or whether it should proceed to the first phase of

⁶ *Midwest Indep. Transmission Sys. Operator, Inc.*, 108 FERC ¶ 61,027, at PP 122-123, *order on reh’g*, 109 FERC ¶ 61,085, at PP 25-28 (2004).

⁷ *Interconnection Queuing Practices*, 122 FERC ¶ 61,252, at PP 8-9 (2008) (Conference Order).

⁸ *Midwest Indep. Transmission Sys. Operator, Inc.*, 124 FERC ¶ 61,183 (2008) (MISO First Queue Reform Order), *order on reh’g*, 127 FERC ¶ 61,294 (2009).

the queue – the System Planning and Analysis phase – for additional study. If a project was not eligible to proceed to the DPP, the customer then entered the System Planning and Analysis phase and underwent a System Impact Study. After receiving its study results, the customer would then have to decide whether to fulfill the M2 milestone⁹ to enter the DPP. In the DPP, the customer would receive a System Impact Study Review that would give it an approximation of the type and cost of upgrades that would have to be funded to facilitate its interconnection request. After receiving this information, the customer would then have to decide whether to fulfill the M3 milestone¹⁰ to undergo a Facilities Study. Upon completion of the Facilities Study Review, the interconnection customer would then have the opportunity to negotiate an interconnection agreement. Projects that had not yet started a Facilities Study as of the effective date of the new GIP were subject to all provisions of the new GIP; projects that had started a Facilities Study were only subject to revisions relating to suspension.

6. In 2009, MISO proposed, and the Commission accepted, additional revisions to its GIP that it characterized as the second phase of its interconnection queue reform.¹¹ MISO stated that its revisions were intended to address physical constraints that were delaying the interconnection of new generation in many areas of MISO's footprint and streamline the processing of interconnection requests. To address these concerns, MISO put in place two new *pro forma* agreements in the GIP: a facilities construction agreement for a single interconnection customer and a facilities construction agreement for multiple interconnection customers.

7. In 2012, the Commission conditionally accepted, subject to further compliance, additional revisions to MISO's GIP that it characterized as the third phase of its interconnection queue reform.¹² The reforms were intended to extend the idea of "first-ready, first-served" in the queuing process by removing timelines for interconnection customers in order to allow them to proceed at their own pace. The Commission found

⁹ The M2 milestone refers to a set of requirements that an interconnection customer must meet before entering the DPP. These requirements include a study deposit based upon the historical study cost data and a series of specific accomplishments the customer must fulfill.

¹⁰ The M3 milestone refers to the requirements that an interconnection customer must meet in order to obtain a Facilities Study.

¹¹ *Midwest Indep. Transmission Sys. Operator, Inc.*, 129 FERC ¶ 61,301 (2009).

¹² *Midwest Indep. Transmission Sys. Operator, Inc.*, 138 FERC ¶ 61,233 (MISO Third Queue Reform Order), *order on reh'g and compliance*, 139 FERC ¶ 61,253 (2012).

that MISO's proposed transition provisions were reasonable in light of the issues that MISO was experiencing in the queue.¹³ Specifically, the Commission accepted MISO's proposal to eliminate the timelines for exiting the System Planning and Analysis phase, such that the interconnection customer may remain in this phase indefinitely so long as it refreshes its study once every 18 months. The Commission also accepted MISO's proposal to limit the modifications that can be made after an interconnection customer enters the DPP. The Commission further accepted MISO's proposal to implement two new payments, subject to MISO revising its Tariff to address certain issues identified by the Commission. Thus, under the revised procedures, the interconnection customer may move to the DPP at a time of its choosing by providing a study deposit, providing necessary information, and making the M2 "cash-at-risk" payment (M2 milestone payment). Once in the DPP, most modifications by the interconnection customer would be deemed to be Material Modifications such that a new interconnection request would be required to address the modifications. After the conclusion of the DPP and within 30 days following the execution of the GIA or the filing of an unexecuted GIA with the Commission, an interconnection customer is required to make an Initial Payment toward its network upgrade costs. In particular, the interconnection customer is required to either pay a certain percentage of the total cost of its network upgrades, depending on the customer's scheduled in-service date, or to provide security equal to 100 percent of the cost of network upgrades.¹⁴

8. In December 2015, MISO filed a further proposed queue reform in Docket No. ER16-675-000.¹⁵ MISO stated that it has experienced significant delays in its generator interconnection queue, particularly in the DPP, and that these delays are often the result of numerous unplanned restudies due to higher-queued projects exiting the queue.¹⁶ Additionally, MISO stated that projects that are not ready to proceed to the GIA phase have little incentive to voluntarily exit the queue; instead, the "cash-at-risk" M2 milestone payment, a condition for entering the DPP, incentivizes interconnection customers to remain in the queue until the very last moment, often when the impact of

¹³ MISO Third Queue Reform Order, 138 FERC ¶ 61,233 at P 100. The Commission found, however, that the transition provisions did not give MISO authority to unilaterally amend existing GIAs in order to apply its queue reform to certain existing interconnection requests without prior Commission approval. *Id.* P 105.

¹⁴ See MISO *pro forma* GIA at Article 11.5.

¹⁵ MISO 2015 Queue Reform Filing, Docket No. ER16-675-000 (filed Dec. 31, 2015).

¹⁶ *Id.*, Transmittal Letter at 2.

their withdrawal on other projects is greatest.¹⁷ MISO proposed to minimize restudies by: (1) subdividing the DPP into three sequential phases to provide for a structured restudy process; (2) creating two designated off-ramps for interconnection customers to withdraw projects that are not ready to proceed; and (3) restricting restudies after the GIA stage.¹⁸ MISO's restructured three-phase DPP would include two new milestone payments, the M3 and M4 payments. MISO also: (1) proposed to remove the Tariff provisions allowing refund of the M2 DPP entry milestone if the network upgrade cost estimates increase by more than 25 percent between the System Impact Study and the Facilities Study;¹⁹ (2) proposed to allow customers that have demonstrated a high level of readiness to enter into provisional GIAs;²⁰ and (3) developed a plan that outlined transition procedures for currently pending interconnection requests.²¹

9. The Commission rejected MISO's filing without prejudice and provided guidance on several aspects of the proposal.²² The Commission agreed with MISO that its interconnection process could be improved to address continued inefficiencies in MISO's generator interconnection queue.²³ The Commission found that the filing proposed some positive changes to MISO's interconnection queue, such as a phased study process with two "off-ramps" that would replace unscheduled, *ad hoc* restudies and with updated system impact study results being provided at designated points. However, the Commission found that MISO did not adequately support its proposed reforms as just and reasonable and not unduly discriminatory.²⁴ The Commission found that the proposal's narrow focus on additional financial milestones placed the onus for the existing queue backlog and any potential future delays fully on "speculative" projects, but ignored other potential causes of MISO's queue backlog, such as study procedures not being completed

¹⁷ *Id.* at 4.

¹⁸ *Id.* at 3.

¹⁹ *Id.* at 20.

²⁰ *Id.* at 18-19.

²¹ *Id.* at 12-13.

²² *Midcontinent Indep. Sys. Operator, Inc.*, 154 FERC ¶ 61,247 (2016) (Guidance Order).

²³ *Id.* P 35.

²⁴ *Id.* PP 2, 46.

in accordance with the proposed Tariff timelines.²⁵ In addition, the Commission found that MISO failed to show that the levels of the milestone payments were not unduly discriminatory.²⁶ The Commission indicated that the timely processing of interconnection requests, improved coordination with neighboring regions, and earlier engagement of transmission owners in the generator interconnection review process are important aspects of an efficiently-managed generator interconnection queue, and that MISO's proposal did not address actions MISO and MISO transmission owners could take to ensure that studies are completed on time.²⁷ Among other things, the Commission also: (1) found that MISO did not justify removal of the 25 percent threshold provision, which protects interconnection customers from significant cost increases;²⁸ (2) suggested that MISO consider keeping its proposal to allow interconnection customers that have demonstrated a high level of readiness to enter into provisional GIAs if MISO proposes further queue reforms;²⁹ and (3) found that MISO did not show that its proposed transition plan was a just and reasonable method of resolving current backlogs and failed to show how the proposal could be implemented.³⁰

B. MISO's Filing

10. MISO states that interconnection queue reform is needed to ensure that MISO is well equipped to handle new infrastructure challenges, such as the likelihood of reserve margin shortages in the next several years if sufficient new resources are unable to interconnect quickly enough to offset the impact of high levels of expected unit retirements.³¹ MISO states that it has experienced significant delays in its generator interconnection queue, particularly in the DPP, and that these delays are often the result of numerous unplanned restudies due to higher-queued projects exiting the queue. MISO explains that, whenever a higher-queued project withdraws from the queue, the assumptions change for every lower-queued project. This change in assumptions necessitates a restudy under the current *pro forma* GIA, which may then change the

²⁵ *Id.* PP 3, 35.

²⁶ *Id.* P 3.

²⁷ *Id.* PP 35, 47.

²⁸ *Id.* P 112.

²⁹ *Id.* P 116.

³⁰ *Id.* P 95.

³¹ Filing, Transmittal Letter at 2.

assumptions for another lower-queued project, necessitating another restudy, in a cascading effect. MISO asserts that these cascading restudies delay the execution of GIAs and extend the uncertainty in project costs.

11. Similar to the prior proposal, MISO proposes to divide its existing DPP into three phases, each of which will require a milestone payment to enter, and include a “Decision Point” before each of the second and third phases, wherein an interconnection customer could withdraw and receive a refund of its previous milestone payment. In response to Commission guidance, MISO further proposes to make the scoping meeting between the interconnection customer, MISO, and the transmission owner mandatory for the customer and retains, with certain modifications, its provision to allow a customer refund of its entry DPP milestone payment if the network upgrade cost estimates increase by more than 25 percent. MISO proposes a transition plan and a voluntary Pre-Queue Feasibility Phase to replace the current Feasibility Study and System Planning and Analysis phase. MISO also revises the site control requirement, includes a *pro forma* study services agreement as an informational exhibit to the Filing, and revises the interconnection customer’s ability to request a provisional GIA under specific circumstances.

12. MISO states that its proposed queue reform changes build off of the prior effort and are the culmination of work with MISO stakeholders following the Guidance Order.³² MISO asserts that it held numerous stakeholder meetings and discussions, conducted two stakeholder surveys, accepted, reviewed and discussed multiple stakeholder comments, and posted and revised proposed Tariff revisions online.³³ MISO states that this process resulted in overwhelming stakeholder support for the proposed reforms. MISO asserts that the proposed Tariff revisions, along with certain additional proposed process changes, will help interconnection customers make well-informed decisions regarding the commercial viability of proposed generation projects earlier in the queue process and allow interconnection customers reasonable opportunities to withdraw non-viable projects from the queue at designated points.³⁴ Through these changes, MISO expects to improve the timeliness and efficiency of its queue, which will positively affect resource adequacy in the MISO footprint and maximize commercially

³² *Id.* at 1, 3.

³³ *Id.* at 6-7.

³⁴ *Id.* at 3.

viable projects' opportunity to succeed. MISO requests an effective date of January 4, 2017 for the proposed Tariff revisions.³⁵

II. Notice and Responsive Pleadings

13. Notice of the Filing was published in the *Federal Register*, 81 Fed. Reg. 74,780 (2016), with interventions and protests due on or before November 14, 2016.

14. Timely motions to intervene were filed by: American Transmission Company, LLC; Entergy Services, Inc., on behalf of Entergy Arkansas, Inc., Entergy Louisiana, LLC, Entergy Mississippi, Inc., Entergy New Orleans, Inc., and Entergy Texas, Inc.; Enel Green Power North America, Inc.; American Municipal Power, Inc.; Avangrid Renewables, LLC; EDP Renewables North America LLC; Project Resources Corporation; Apex Clean Energy Management, LLC; the Tenaska Wind Parties;³⁶ Ameren Services Company; the Iowa Utilities Board; Wisconsin Electric Power Company and Wisconsin Public Service Corporation; Manitoba Hydro; WPPI Energy; and NRG Power Marketing LLC and GenOn Energy Management, LLC.

15. Timely motions to intervene and protests were filed by: the American Wind Energy Association (AWEA) and Wind on the Wires (together, AWEA/WOW); Generation Developers;³⁷ NextEra Energy Resources, LLC (NextEra); and Missouri River Energy Services (Missouri River). Timely motions to intervene and comments were filed by: Great River Energy; Xcel Energy Services Inc. (Xcel); MidAmerican Energy Company (MidAmerican); MISO Transmission Owners;³⁸ Alliant Energy

³⁵ *Id.* at 2.

³⁶ The Tenaska Wind Parties consist of Tenaska Wind Holdings, LLC, Nobles 2 Power Partners, LLC, and Red Butte Wind, LLC.

³⁷ Generation Developers are EDF Renewable Energy, Inc. and E.ON Climate & Renewables North America, LLC.

³⁸ The MISO Transmission Owners for this filing consist of: Ameren Services Company, as agent for Union Electric Company d/b/a Ameren Missouri, Ameren Illinois Company d/b/a Ameren Illinois 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; Cooperative Energy; Dairyland Power Cooperative; Duke Energy Business Services, LLC for Duke Energy Indiana, LLC; East Texas Electric Cooperative; Entergy Arkansas, Inc.; Entergy Louisiana, LLC; Entergy Mississippi, Inc.; Entergy New Orleans, Inc.; Entergy Texas, Inc.; Great River Energy; Hoosier Energy Rural Electric

(continued...)

Corporate Services, Inc. (Alliant Energy); Invenergy Thermal Development LLC, Invenergy Wind Development LLC and Invenergy Solar Development LLC (collectively, Invenergy); and Consumers Energy Company.

16. The Organization of MISO States filed a notice of intervention and comments.

17. On October 28, 2016, AWEA filed a motion to extend the comment period. On October 31, 2016, MISO filed an answer opposing AWEA's motion. On November 1, 2016, Generator Group³⁹ filed a motion supporting AWEA's motion. On November 7, 2016, the Commission issued a notice denying the motion for extension of time.

18. On November 29, 2016, MISO filed an answer to the comments and protests, and the ITC Companies filed an answer to the comments of AWEA/WOW, Invenergy, and Generation Developers. Missouri River, Invenergy, AWEA/WOW, Generation Developers, and NextEra filed answers to MISO's answer. The MISO Transmission Owners filed an answer to the MISO and ITC Companies answers.

III. Discussion

A. Procedural Matters

19. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2016), the notice of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

Cooperative, Inc.; Indiana Municipal Power Agency; Indianapolis Power & Light Company; International Transmission Company d/b/a ITC*Transmission*, ITC Midwest LLC, and Michigan Electric Transmission Company, LLC (collectively, the ITC Companies); MidAmerican; Minnesota Power (and its subsidiary Superior Water, L&P); Missouri River; Montana-Dakota Utilities Co.; Northern Indiana Public Service Company; Northern States Power Company, a Minnesota corporation, and Northern States Power Company, a Wisconsin corporation, subsidiaries of Xcel Energy Inc.; Northwestern Wisconsin Electric Company; Otter Tail Power Company; Prairie Power Inc.; Southern Illinois Power Cooperative; Southern Indiana Gas & Electric Company (d/b/a Vectren Energy Delivery of Indiana); Southern Minnesota Municipal Power Agency; Wabash Valley Power Association, Inc.; and Wolverine Power Supply Cooperative, Inc.

³⁹ The Generator Group consists of EDF Renewable Energy, Inc., E.ON Climate & Renewables North America, LLC and Enel Green Power North America, Inc.

20. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2016), prohibits an answer to a protest or answer unless otherwise ordered by the decisional authority. We will accept the answers because they have provided information that assisted us in our decision-making process.

B. Standard of Review

21. The Commission applies an independent entity standard to evaluate RTO and ISO proposals for revisions to the procedures outlined in Order No. 2003.⁴⁰ Under that standard, independent entities, such as RTOs and ISOs, are afforded more flexibility in proposing variations than are non-independent entities, primarily because they do not have affiliated generation and thus are less likely than non-independent entities to favor one generator over another.⁴¹ Under the independent entity standard, MISO must demonstrate that its proposed variations are just and reasonable and not unduly discriminatory, and that they would accomplish the purposes of Order No. 2003.⁴²

C. Substantive Issues

22. We find that MISO's proposed Tariff revisions, with certain modifications discussed below, are just and reasonable and not unduly discriminatory methods of improving the GIP by restructuring and streamlining MISO's interconnection process and providing additional information and flexibilities to interconnection customers. As such, MISO has demonstrated that its proposed deviations from the *pro forma* GIA and GIP meet the "independent entity variation standard," and that they would accomplish the purposes of Order No. 2003. We accept the Tariff revisions, subject to condition,⁴³ to be

⁴⁰ Order No. 2003, FERC Stats. & Regs. ¶ 31,146 at PP 822-827; Order No. 2003-A, FERC Stats. & Regs. ¶ 31,160 at P 759. *See also* MISO First Queue Reform Order, 124 FERC ¶ 61,183 at P 31; Conference Order, 122 FERC ¶ 61,252 at P 13.

⁴¹ Order No. 2003, FERC Stats. & Regs. ¶ 31,146 at PP 548, 827; MISO Third Queue Reform Order, 138 FERC ¶ 61,233 at P 28.

⁴² Conference Order, 122 FERC ¶ 61,252 at P 13, n.10.

⁴³ The Commission can revise a proposal filed under section 205 of the FPA as long as the filing utility accepts the change. *See City of Winnfield v. FERC*, 744 F.2d 871, 875-77 (D.C. Cir. 1984). The filing utility is free to indicate that it is unwilling to accede to the Commission's conditions by withdrawing its filing.

effective January 4, 2017, as requested, and require MISO to submit a compliance filing within 60 days of the issuance of this order, as discussed below.

1. DPP

a. DPP Structure

i. Filing

23. MISO proposes to modify the current interconnection queue by restructuring the DPP into three sequential phases where System Impact Studies will be completed at three distinct points.⁴⁴ Prior to entering Phase I, an interconnection customer pays an entry milestone payment (M2 milestone payment). Following the interconnection customer's receipt of the preliminary System Impact Study analysis, the interconnection customer enters Decision Point I. Decision Point I is a period of 15 business days and provides the interconnection customer with three options: (1) remain in the queue and proceed to Phase II by paying the second milestone payment (M3 milestone payment); (2) remain in the queue and proceed to Phase II while reducing the size of its interconnection request and paying the M3 milestone payment; or (3) withdraw its interconnection request and receive a refund of its M2 milestone payment and any remaining study deposits. Once the interconnection customer proceeds into Phase II, the M2 milestone payment is "at risk," such that the M2 milestone payment will be forfeited if the interconnection customer withdraws the interconnection request.

24. If the interconnection customer pays the M3 milestone payment, it will enter Phase II, where MISO will update its study models to take into account any changed facts and assumptions that arose during Phase I.⁴⁵ The updated study models will be used to perform the next study, the revised System Impact Study. MISO will also begin certain aspects of the Facilities Study in this phase. Following the customer's receipt of the revised System Impact Study analysis, the interconnection customer enters Decision Point II. Decision Point II is also a period of 15 business days and provides the interconnection customer with three options: (1) remain in the queue and proceed to Phase III by paying the third milestone payment (M4 milestone payment); (2) remain in the queue and proceed to Phase III while reducing the size of its interconnection request by up to 10 percent and paying the M4 milestone payment; or (3) withdraw its interconnection request and receive a refund of its M3 milestone payment and any

⁴⁴ Filing, Transmittal Letter at 14-15.

⁴⁵ *Id.*, Aliff Testimony at 27-28.

remaining study deposits and forfeit the now cash-at-risk M2 milestone payment. Once the customer proceeds into Phase III, the M3 and M4 milestone payments are “at risk.”

25. If the interconnection customer pays the M4 milestone payment, it will enter Phase III, where MISO will update its study models to take into account any changed facts and assumptions that arose during Phase II.⁴⁶ The updated study models will be used to perform the final System Impact Study. Phase III will also include the completion of the Facilities Study. In the event an interconnection request is withdrawn during Phase III, MISO will perform an analysis to determine if a restudy is necessary. Upon completion of the Facilities Study, MISO will tender a draft GIA to the interconnection customer and transmission owner. If the interconnection customer executes the GIA, it must make an Initial Payment of 20 percent of the costs of the network upgrades identified in the Facilities Study. The already paid M2, M3, and M4 milestone payments will be applied to the Initial Payment.⁴⁷ If the interconnection customer does not execute a GIA and withdraws, all “at risk” milestone payments will be used to fund network upgrades where costs increased as a result of the customer’s withdrawal, with the remainder, if any, refunded.

26. MISO’s proposal extends the timeline for the interconnection process envisioned by the currently effective GIP. Under the currently effective GIP, a customer would plan to spend 180 days in the DPP. Under MISO’s proposal, customers will spend 460 days in Phases I, II, and III combined. However, MISO also notes that its current average study timeline is 589 days.⁴⁸ MISO states that it included in its proposed timeline planned coordination with affected systems. MISO states that, based on the need for coordination with affected systems, the amount of time needed to perform a System Impact Study, and allowing for sufficient time to make decisions and review models, the proposed time frame of 460 days is likely the minimum processing time needed to move a project to a GIA.⁴⁹ As noted above, the proposed 460 days also includes scheduled restudies so as to minimize future unscheduled, *ad hoc* restudies.

⁴⁶ *Id.* at 30.

⁴⁷ *Id.* at 37-38.

⁴⁸ *Id.* at 9. Mr. Aliff notes an average kickoff delay of 213 days in addition to the average DPP length of 376 days, amounting to a total of 589 days.

⁴⁹ *Id.* at 25-26.

ii. Comments and Protests

27. Invenergy contends that the milestone payments should be refundable if the DPP is delayed.⁵⁰ Invenergy contends that it is not just and reasonable to allow MISO to keep the interconnection customer's deposit if MISO is unable to provide interconnection service because it failed to meet its Tariff timeline. AWEA/WOW similarly contend that MISO needs to consider penalty-free withdrawal for excessive delays in the interconnection process.⁵¹ NextEra argues that the overall timeline for the study process is excessive, and that the Commission should direct MISO to provide an explanation of why it cannot conduct its studies more quickly and reduce the estimated 460-day processing time.⁵² Generation Developers state that MISO has not provided data to substantiate that its proposed time frames for the System Impact Studies will work with the affected system schedules, nor has it provided documentation that shows a coordinated effort and requirement to comply with MISO's timing needs.⁵³ Generation Developers contend that without these, it will be difficult for the Commission to find that the proposed timeline is just and reasonable.

28. Generation Developers contend that MISO needs to explain what information will be provided in the initial Facilities Study.⁵⁴

iii. Answers

29. MISO contends that the length of the proposed DPP simply reflects the fact that it is a three-phase procedure and that MISO must go through several iterative steps to create a structured restudy process.⁵⁵ MISO notes that stakeholders considered but ultimately rejected a shorter two-phase DPP, because such an approach would fail to adequately curb restudies and delays and would not materially improve on the current process. MISO also contends that the individual phase durations are just and reasonable, and states that it has consulted with its neighboring transmission providers to align with their study cycles. As to the Facilities Studies, MISO states that these studies are much more than

⁵⁰ Invenergy Comments at 5-6.

⁵¹ AWEA/WOW Protest at 8.

⁵² NextEra Protest at 9-10.

⁵³ Generation Developers Protest at 15-16.

⁵⁴ *Id.* at 32.

⁵⁵ MISO Answer at 14-15 (citing Filing, Aliff Testimony at 26-27).

just cost estimates, as they include a detailed engineering review of the facilities that need to be constructed or modified, and that the process should not be shortened to avoid a significant and potentially detrimental reduction in scope.⁵⁶

30. MISO states that, while it is not opposed in principle to certain delay remedies, the penalty-free withdrawal proposed by AWEA/WOW should be reviewed in the stakeholder process.⁵⁷ MISO states that this would help to identify ways to ensure balance between allowing penalty-free withdrawals and recognizing the impacts that those withdrawals will have on other projects.

31. Generation Developers argue that MISO has not provided substantial evidence to conclude that its 460-day period will actually work with Affected Systems and is just and reasonable.⁵⁸

iv. Commission Determination

32. We find MISO's proposed three-phase DPP structure and the proposed 460-day timeline just and reasonable and not unduly discriminatory, and therefore accept these Tariff revisions. While MISO's proposed process increases the length of time an interconnection customer spends in the queue relative to the time that the *pro forma* study process anticipates, the proposal is an improvement compared with MISO's current study process that can take nearly two years due to unscheduled, *ad hoc* restudies. MISO's proposal improves on its current process by building restudies into the process through sequential System Impact Studies throughout the DPP Phases, which represents a more realistic timeline and reduces the risk of further delays through unscheduled restudies. The revised procedures should allow MISO to evaluate the impact of queue withdrawals on a more structured basis and minimize delays in processing new interconnection requests, and the comments and protests have not persuaded us that MISO will not adhere to its proposed schedule. Further, we agree with MISO that a penalty-free withdrawal provision in the event of significant delays should be reviewed by stakeholders, and will not require such a provision at this time.

⁵⁶ *Id.* at 15.

⁵⁷ *Id.* at 16.

⁵⁸ Generation Developers Answer at 7-8.

b. Study Deposits**i. Filing**

33. MISO proposes to require an interconnection customer to pay a study deposit based on the size of its interconnection request prior to entering the DPP.⁵⁹ The interconnection customer is responsible for the cost of all interconnection studies, and so any differences between the study deposit and the actual cost of the studies will be charged or refunded to the interconnection customer. Withdrawal of the interconnection request during one of the decision points will result in the refund of all unused study deposits. Withdrawal before Decision Point I leaves the interconnection customer responsible for any interconnection study costs during Phase I, but not any study costs for Phases II and III. Analogous refund provisions apply to Phase II. During Phase III, if the withdrawal does not cause any restudies, the unused portion of the study deposit is refunded to the interconnection customer. If any restudy is required, however, the withdrawing interconnection customer will be responsible for funding all such restudies, including costs of other interconnection customers' interconnection studies.⁶⁰

ii. Commission Determination

34. We accept MISO's proposed study deposit provisions, subject to condition. We note that section 7.6.1 in the proposed Tariff could be read to require that an interconnection customer that withdraws prior to Decision Point I, or after Decision Point I but before Decision Point II, could be responsible for the costs of all studies during the Phase in which the interconnection customer withdraws. MISO has not supported this requirement. Furthermore, MISO's proposed Tariff language appears to require withdrawing interconnection customers to fund all Phase III restudies, even those exceeding its study deposits. Accordingly, in its compliance filing to be submitted within 60 days from the date of this order, we direct MISO to submit Tariff revisions clarifying that an interconnection customer that withdraws during Phase I or Phase II will not be responsible for the costs of other interconnection customers' interconnection studies. Further, we find that MISO has not supported its proposed study deposit refund provisions during Phase III, and we direct MISO, in its compliance filing, to submit Tariff revisions clarifying that an interconnection customer's responsibility for restudy costs is limited to that interconnection customer's total study deposit, i.e., that MISO will

⁵⁹ Filing, Transmittal Letter at 22. Previously, the study deposit was based on both size of interconnection requests and type of service requested. MISO's proposal now bases the study deposit purely on the size of the interconnection request.

⁶⁰ See MISO Tariff, Attachment X, Section 7.6.1.

not separately bill the withdrawing interconnection customer for the costs of other interconnection customers' restudies.

c. Model Availability

i. Filing

35. MISO states that it now posts the base model for each DPP on its extranet free of charge.⁶¹ MISO states that once an entity becomes a MISO Member, interconnection customer, or a Market Participant, it can access MISO's extranet and access the model. MISO contends that this will allow potential interconnection customers to access information needed to find locations for projects that will make the most efficient use of the existing transmission system.

ii. Commission Determination

36. We accept, as just and reasonable and not unduly discriminatory, MISO's provision of its study model free of charge on its extranet.⁶²

2. Milestone Payments

a. Filing

37. MISO proposes to revise the M2 milestone payment to be a flat fee of \$4,000/MW of the new gross nameplate capacity.⁶³ MISO states that changing the M2 milestone payment amount was recommended by stakeholders because the known flat fee provides accounting and budgeting certainty to interconnection customers. The M3 milestone payment is calculated as 10 percent of the upgrade costs indicated by the preliminary System Impact Study, less the M2 milestone payment. The M4 milestone payment is calculated as 20 percent of the upgrade costs indicated by the revised System Impact Study, less the M3 and M2 milestone payments. In no event will either the M3 or M4 milestone payments be less than zero dollars. If the interconnection customer executes a

⁶¹ Filing, Transmittal Letter at 6, Aliff Testimony at 49-50.

⁶² In the Guidance Order, the Commission rejected as unsupported MISO's proposed fee for the Pre-Queue Feasibility Study, and noted that other RTOs provide similar information for a fraction of the cost or for free. Guidance Order, 154 FERC ¶ 61,247 at P 48.

⁶³ Filing, Transmittal Letter at 4, Aliff Testimony at 36-37.

GIA, the M2, M3, and M4 milestone payments will be applied to the Initial Payment.⁶⁴ MISO asserts that all milestone payments will apply equally to all interconnection requests regardless of interconnection service requested, i.e., Network Resource Interconnection Service (NRIS), NRIS-only, External NRIS, Energy Resource Interconnection Service, and Net Zero Interconnection Service.⁶⁵

38. MISO contends that the milestone payment amounts are just and reasonable because they match closely with the Initial Payment.⁶⁶ MISO also contends that tying milestone payments to network upgrades encourages customers to efficiently site their projects, and sends an appropriate price signal to help customers make well-informed decisions regarding the commercial viability of their projects. MISO states that the proposed milestones do not impose an unfair burden on small generation and are commensurate with project size.

b. Comments and Protests

39. Generation Developers contend that the M3 and M4 milestone payments should be capped at \$30,000/MW.⁶⁷ They contend that, without a cap, (1) it will be impossible for the interconnection customer to count the cost up front and determine the amount of funds that would be required to continually move through the DPP, and (2) generation may be forced out of the market simply because the milestone payments cannot be known before entering the DPP. They state that they chose this amount because it is three times the \$10,000/MW floor MISO is proposing to allow a project to withdraw from the queue when network upgrade costs rise by at least 25 percent over prior MISO estimates.

40. Xcel contends that the milestone payment amounts are not unduly discriminatory, and that they have not increased over the existing GIP; rather, they have been moved to earlier in the process.⁶⁸ Xcel and Alliant Energy contend that the revised milestone

⁶⁴ If the milestone payments exceed the Initial Payment, MISO will refund the difference within 45 days of the effective date of the GIA. *See* MISO Tariff, Attachment X, Section 7.7.

⁶⁵ *Id.*, Aliff Testimony at 19 and 47. As explained herein, MISO also requires customers seeking Provisional Interconnection Service to make similar payments, subject to a true-up procedure.

⁶⁶ *Id.*, Transmittal Letter at 16.

⁶⁷ Generation Developers Protest at 25-27.

⁶⁸ Xcel Comments at 4-5.

payments should encourage non-viable projects to exit the queue so viable projects can proceed.⁶⁹ The Organization of MISO States asserts that the ability for an interconnection customer to apply milestone payments to the Initial Payment is a beneficial improvement.⁷⁰ The MISO Transmission Owners contend that, because the milestone payments apply equally to all types of interconnection requests, they respond to the Commission's directive that MISO adopt non-discriminatory milestone payments.⁷¹

c. Answers

41. MISO argues that imposing a cap would blunt the price signal sent by the M3 and M4 milestone payments.⁷² MISO contends that its proposal provides the incentives for interconnection customers to make sound decisions regarding whether to proceed or withdraw. The ITC Companies state that setting milestone payments commensurate with upgrade cost is the best approach to reduce the risk of restudies, and that the cap proposed by Generation Developers would be unfair.⁷³ MISO notes that the uncapped M3 and M4 milestone payments will be applied toward the Initial Payment, and would have to be made anyway if a project is viable enough to get a GIA. MISO states that milestone caps were discussed in the stakeholder process, but were rejected.⁷⁴

42. Generation Developers argue that the relevant price signal is the cost of the network upgrades provided in the System Impact Studies.⁷⁵ Generation Developers further argue that a cap would provide a certain dollar value to understand the cash outlays that would be required to move through the queue and obtain a GIA, and that there is no downside to such a provision.

⁶⁹ *Id.*; Alliant Energy Comments at 8.

⁷⁰ Organization of MISO States Comments at 3.

⁷¹ MISO Transmission Owners Comments at 11.

⁷² MISO Answer at 24-25.

⁷³ The ITC Companies Answer at 2-3.

⁷⁴ MISO Answer at 25.

⁷⁵ Generation Developers Answer at 10-11.

d. Commission Determination

43. We find MISO's proposed M2, M3, and M4 milestone payments to be just and reasonable and not unduly discriminatory, and therefore accept them. We also find it just and reasonable to apply the M2, M3, and M4 milestone payments towards the Initial Payment, as the Commission suggested in the Guidance Order.⁷⁶ These milestone payments are based on actual upgrade costs and add up to the current Initial Payment that an interconnection customer needs to pay before executing a GIA. MISO has not changed the total payment required to obtain a GIA, but simply staggered that payment to accommodate the structured restudies it is introducing into the process in order to send an accurate price signal to interconnection customers.

3. Transition Plan

a. Filing

44. MISO proposes revisions to transition current customers to the new DPP. MISO proposes that interconnection requests received on or after the January 4, 2017 effective date of the Filing will follow the new proposed GIP and will not require any transition.⁷⁷ Such requests will be eligible to enter the next DPP cycle, which commences in August 2017. For existing interconnection requests, MISO proposes that interconnection customers that have entered the DPP (as currently set forth in the Tariff) and have completed the DPP System Impact Study prior to January 4, 2017 will finish the DPP pursuant to the GIP in effect on January 3, 2017.

45. MISO states that interconnection requests that have entered the DPP prior to January 4, 2017, but that have not completed a System Impact Study, would be subject to the proposed transition plan.⁷⁸ MISO will use the System Impact Study underway for Phase I for these customers. These customers will follow the new GIP, with the exception of the M2 milestone payment and site control. The study deposits paid by these customers before January 4, 2017 will be applied to studies performed under the transition plan.⁷⁹ Similarly, any M2 milestone payments made before January 4, 2017, will satisfy in full any amount that otherwise would be owed for the M2 milestone

⁷⁶ Guidance Order, 154 FERC ¶ 61,247 at P 79.

⁷⁷ Filing, Transmittal Letter at 17.

⁷⁸ *Id.*

⁷⁹ *Id.* at 23.

payment described in section 3.3.1 of the GIP. The customers will be required to pay the M3 and M4 milestone payments. MISO proposes several transition group categories with specific transition timelines for each group, for each region in MISO.⁸⁰ For example, the August 2016 DPP transition group will begin the DPP on May 20, 2017, proceed through the three phases and complete GIAs on August 23, 2018.

46. MISO states that an interconnection customer in the System Planning and Analysis phase prior to January 4, 2017, will have the option to pay the M2 milestone payment under the existing formula prior to January 4, 2017; however, such an interconnection customer that pays on or after January 4, 2017 will pay the M2 milestone payment under the new formula.⁸¹ In other respects, the customer's request would be processed according to the new GIP. In order to effectuate the elimination of the System Planning and Analysis phase, interconnection requests may remain in the System Planning and Analysis phase until 45 calendar days before the start of the first DPP cycle under the proposed GIP, which would occur on August 1, 2017. Accordingly, the last day to make the M2 milestone payment under the new formula to transition from the System Planning and Analysis phase would be June 16, 2017. If the M2 milestone payment is not made on or before June 16, 2017, the interconnection request will be deemed withdrawn from the queue.⁸²

47. MISO states that, in its third queue reform, all projects were grouped together and that this led to many projects withdrawing, which caused additional restudies.⁸³ MISO asserts that its transition plan is intended to minimize the harm to existing projects and maintain queue priority to the extent possible. MISO states that it has tailored the transition plan based on an interconnection customer's current status, such that those farther along in the current GIP will continue under the existing process. MISO asserts that the proposed transition procedures are just and reasonable because they are consistent with the Commission's guidance to avoid large study groups that lead to study delays, have minimal impact on a project's ability to move through the queue, and permit

⁸⁰ *Id.*, Aliff Testimony, Attachment 4 (Diagram of Proposed Transition Plan).

⁸¹ *Id.*, Transmittal Letter at 24.

⁸² Testimony submitted with the Filing states that MISO is currently developing a separate merchant High Voltage Direct Current (HVDC) process for the existing HVDC requests currently in the System Planning and Analysis Phase, and that these HVDC projects will be moved to this new process upon its completion. *Id.*, Aliff Testimony at 53.

⁸³ *Id.*, Transmittal Letter at 24.

a timely transition to the new queue process to be in place in time to address the potential for generation deficiencies in the future. MISO emphasizes that entry milestones will be at or lower than current levels for almost all customers, and that even when the entry milestone is slightly higher, it comes with the benefit of commercial certainty.⁸⁴

b. Comments and Protests

48. NextEra states that the current proposed transition is too compressed and gives inadequate consideration to how interconnection customers have relied on the ability to place projects in the System Planning and Analysis phase.⁸⁵ NextEra states that, under the “first ready, first served” methodology proposed by MISO in 2011, one of the keys to interconnection processing was to let customers decide when to proceed with their projects. NextEra argues that the System Planning and Analysis phase was designed so that customers could enter various projects in the System Planning and Analysis phase, obtain study results, and choose whether to proceed into the DPP without harming other customers. NextEra states that many of these projects are not sufficiently commercially viable to proceed to the DPP at this point, and it would be very costly to move all these projects into the DPP. NextEra believes that MISO’s proposal to require projects to enter the DPP almost immediately, or, at the latest, by August 2017, does not respect the reliance customers have had on the current rules. NextEra proposes that projects currently in the System Planning and Analysis phase be allowed to stay in this phase for an additional cycle. While NextEra accepts the elimination of the System Planning and Analysis phase, NextEra states that MISO has not shown that having projects suspended in the System Planning and Analysis phase is a cause of its delays in queue processing; rather, delays are due to projects dropping out in the DPP.

49. MidAmerican asks the Commission to ensure that MISO has authority under its Tariff to implement its proposed transition plan.⁸⁶ MidAmerican notes that MISO would grandfather certain interconnection requests under Tariff provisions that will be “in effect on January 3, 2017,” but which MISO proposes to delete effective January 4, 2017. MidAmerican proposes that the Commission affirm that MISO will have authority to continue enforcing these deleted provisions of its Tariff; alternatively, the Commission should provide for MISO to retain such Tariff provisions until they no longer apply to any grandfathered projects.

⁸⁴ *Id.*, Aliff Testimony at 53.

⁸⁵ NextEra Protest at 17-20.

⁸⁶ MidAmerican Comments at 10-11.

50. Invenergy states that the structure of MISO's proposed transition plan has merit, but argues that, even assuming every step of the newly-revised DPP is timely, the process will take another 460 days, while projects have already been waiting in the queue for nearly a year just to begin the DPP.⁸⁷ Invenergy states that these customers entered the queue when the DPP was intended to be a 180-day process and that they should not be made to wait an additional year for a GIA. Invenergy proposes that, for those projects already in the queue, their interconnection requests should be processed under the proposed GIP within a 180-day timeline. Invenergy argues that MISO can accomplish this by condensing the time allotted in the revised DPP for building and updating its models and completing its studies.

51. Several commenters are concerned that wind generators will not be able to meet federal Production Tax Credit (PTC) and power purchase agreement deadlines due to issues with current MISO queue delays.⁸⁸ AWEA/WOW state that MISO's proposed transition timeline indicates that projects in the February 2017 DPP cycle would still meet PTC deadlines, but they argue that the schedule assumes no delays or restudies of the August 2015 DPP or the February and August 2016 DPP cycles and that MISO has not provided evidence that this is achievable or realistic, especially since MISO has recently conceded there are such delays.⁸⁹ Generation Developers and AWEA/WOW propose a fast track process, which will allow a project already in the queue to proceed to a GIA based on one System Impact Study and one Facilities Study cycle, but only if it demonstrates extreme readiness by providing (1) the new M2, M3 and M4 milestone payments, (2) site control and (3) evidence of a power sales opportunity.⁹⁰ The commenters argue that a fast track proposal would provide customers with more flexibility in meeting the PTC deadline in the event of delays, and should be included with the GIP proposal as a one-time transition mechanism.

52. Generation Developers and MidAmerican are concerned that the August 2015 DPP West study may be delayed and may not be completed before January 4, 2017, which means that that study group would be subject to the new 460-day process instead of the current, shorter study process.⁹¹ MidAmerican believes that a sudden, unexpected

⁸⁷ Invenergy Comments at 9.

⁸⁸ Generation Developers Protest at 39-41; AWEA/WOW Protest at 4.

⁸⁹ AWEA/WOW Protest at 4.

⁹⁰ *Id.* at 5-6; Generation Developers Protest at 42.

⁹¹ Generation Developers Protest at 41; MidAmerican Comments at 5.

shift to the new GIP at this late stage in the process would cause confusion, create uncertainty for a number of projects, and contradict MISO's intent in creating the transition plan.

53. Finally, Generation Developers state that MISO should clarify that it will submit a separate section 205 filing to accomplish a separate merchant HVDC process for the existing HVDC requests currently in the System Planning and Analysis Phase, and if it will not do so, the Commission should order MISO to submit that filing when the time comes.⁹²

c. Answers

54. MISO states that it engaged its stakeholders to develop broadly acceptable transition procedures.⁹³ MISO states that the Filing reflects this effort and includes a balanced transition plan that, among other things, protects customer expectations, reflects some of the features of the proposed queue reform proposal, and maintains queue priority. MISO states that it is open to working with the stakeholders to develop a fast track process; indeed, MISO presented a "Fast DPP" proposal at the November Interconnection Process Task Force meeting and expects to file it with the Commission in the first quarter of 2017. MISO states that such a proposal should allow for projects moving forward in the transition plan to have a faster exit from the DPP, if desired.

55. MISO asserts that Invenergy's proposal to condense the DPP for all pending projects to 180 days is not feasible.⁹⁴ With the large sizes of the 2016 queues, MISO states that a process including more than two DPP Phases was desired by the stakeholders. MISO expects that there will be a large number of projects that will withdraw after Phase I is completed and costs are known, and asserts that shortening the phases would not allow for remaining projects to also have the ability to withdraw if costs increase, albeit under risk of losing milestones.

56. MISO questions the utility of NextEra's request to extend the System Planning and Analysis phase for one more cycle, among other things, because projects in that phase do not have any queue position.

⁹² Generation Developers Protest at 39.

⁹³ MISO Answer at 29.

⁹⁴ *Id.* at 30.

57. MISO confirms that the August 2015 DPP cycle System Impact Studies have been completed or will be completed prior to January 4, 2017.⁹⁵ MISO states that, in the event there are further delays, it is not MISO's intention for this DPP group to be included in the transition plan. Therefore, MISO states that these projects will complete the DPP in accordance with the current procedures, as provided in section 5.1.1 of the revised GIP. MISO is willing to clarify that the August 2015 DPP cycles should follow section 5.1.1, if so directed by the Commission for added clarity.⁹⁶

58. NextEra states that it relied on the rules surrounding the System Planning and Analysis phase and their promise of flexibility to advance numerous projects into that phase.⁹⁷ NextEra states that many of these projects are not sufficiently commercially viable to proceed to the DPP at this point. NextEra states that it understands MISO's concern about having to potentially perform numerous studies for projects in the System Planning and Analysis phase based on assumptions provided by interconnection customers. However, NextEra clarifies that it was only asking for the completion of the System Planning and Analysis System Impact Study process through the November 2016 System Planning and Analysis System Impact Study.⁹⁸

d. Commission Determination

59. We accept the transition plan, subject to condition, as a just and reasonable and not unduly discriminatory method of implementing MISO's new Tariff provisions and avoiding queue backlogs. The proposed plan, consistent with the Commission's guidance in the Guidance Order, avoids the creation of an unwieldy study group that may cause further backlog in the queue, and provides more precise information about the projects that will be grouped together for study and explains in more detail the timing of these studies.⁹⁹ In particular, MISO's current plan respects queue positions by grandfathering late-stage interconnection requests and setting out specific transition timelines for groups of interconnection customers based on their status as of the effective date of the new GIP.

⁹⁵ *Id.*

⁹⁶ *Id.* at 31.

⁹⁷ NextEra Answer at 2.

⁹⁸ *Id.* at 3.

⁹⁹ Guidance Order, 154 FERC ¶ 61,247 at P 98.

60. In response to the concerns about MISO's potential treatment of the August 2015 DPP study group, MISO has indicated that it is willing to clarify that the August 2015 DPP study group will follow the existing GIP, even in the event that MISO does not complete the System Impact Studies for this group before January 4, 2017. We therefore direct MISO, in its compliance filing to be submitted within 60 days from the date of this order, to revise the Tariff to indicate that the August 2015 DPP group will be processed under the existing GIP.

61. We reject as speculative commenters' concerns that wind generators may not be able to meet federal PTC and power purchase agreement deadlines under the proposed transition plan. In order to receive the PTC, wind generators must commence construction by the end of 2019.¹⁰⁰ The latest date for execution of a GIA under the proposed transition plan (for the February 2017 DPP transition group in the MISO West region) is January 10, 2019, almost a full year before the PTC deadline. In addition, we reject without prejudice commenters' requests to include a fast track transition process, as such process is not presently before us and as MISO has indicated that it has presented such a proposal to its stakeholders and expects to file it with the Commission in the first quarter of 2017.

62. We reject Invenergy's request that the Commission require MISO to shorten the transition timeline to 180 days, as MISO indicates that this request is not feasible and that stakeholders requested a process including more than two DPP Phases. We further reject NextEra's request to allow customers to remain in the System Planning and Analysis phase for one more cycle. The System Planning and Analysis phase is being eliminated in the new GIP. The System Planning and Analysis phase identifies network upgrades that will reliably and efficiently integrate the proposed generating facility or capacity increase onto the transmission system, prior to the interconnection request moving to the DPP, where such studies are based upon *assumptions specified by interconnection customer*.¹⁰¹ However, under MISO's new GIP, such assumptions will quickly be overtaken by changes in the queue, i.e., by interconnection customers exiting the queue through off-ramps. As such, NextEra does not explain how it would receive value from an on-going System Planning and Analysis phase where information is quickly overtaken as subsequent system impact studies are performed. Moreover, MISO's proposal reduces the financial risk of entering the DPP as an interconnection customer would receive

¹⁰⁰ U.S. Department of Energy, <http://www.energy.gov/savings/renewable-electricity-production-tax-credit-ptc>.

¹⁰¹ See GIP Sections 7.1 (Purpose of the System Planning and Analysis Phase) and 7.3 (Scope of Interconnection System Impact Study).

information at Decision Point I and be permitted to leave the queue while receiving a refund of its M2 milestone payment.

63. With respect to MidAmerican's concern about MISO's proposal to grandfather certain interconnection requests by applying the Tariff provisions that were "in effect on January 3, 2017," the Commission may approve a Tariff that differentiates when its terms will take effect and when they will not,¹⁰² and it is common for the Commission to allow a transmission provider to grandfather certain customers when making prospective Tariff changes. For example, in MISO's first queue reform, the Commission permitted MISO to apply interconnection procedures from its old Tariff to certain customers already waiting in the queue.¹⁰³

64. Finally, we will not make any findings with respect to MISO's indication that it is developing a separate merchant HVDC process for the existing HVDC requests currently in the System Planning and Analysis Phase, as that process is outside the scope of this proceeding.

4. Study Services Agreement

a. Filing

65. MISO states that its study services agreement is a non-filed agreement between MISO and any transmission owner, consultant, or contractor that performs interconnection studies.¹⁰⁴ MISO states that it is proposing changes to the agreement to facilitate greater involvement by the interconnection customer and to bring additional accountability upon MISO and the transmission owner. MISO explains that the proposed changes require a more definitive time schedule and require the consultant to provide an

¹⁰² *West Deptford Energy, LLC v. FERC*, 766 F.3d 10, 21 (2014).

¹⁰³ MISO First Queue Reform Order, 124 FERC ¶ 61,183 at P 90 (accepting MISO's proposal to grandfather customers that had entered the facilities study stage, because it found that "having started a Facilities Study is a reasonable distinction between early and late stage interconnection requests.") *See also Southwest Power Pool, Inc.*, 128 FERC ¶ 61,114, at P 98 (2009) (finding that grandfathering customers with an executed facilities study agreement under the previous rules was appropriate because "customers who have late-stage requests may have taken action in reliance upon existing procedures.").

¹⁰⁴ Filing, Transmittal Letter at 6.

estimate of related costs.¹⁰⁵ If the costs are expected to exceed the total, the consultant must provide MISO and the interconnection customer with a written explanation and an updated cost estimate before incurring any additional costs. In addition, section 1.7 of the revised agreement designates the interconnection customer as an intended beneficiary and gives the customer a right to participate in any dispute resolution proceedings and to enforce the performance, satisfaction, and fulfillment of the parties' obligations under the agreement. MISO states that the agreement is neither part of the Tariff nor has it been filed with the Commission because it does not materially affect MISO's jurisdictional rates, terms and conditions of service.¹⁰⁶ However, MISO notes that some stakeholders have recently requested MISO to file this agreement as part of the MISO Tariff. MISO contends that, if the Commission were to determine that this agreement needs to be added to the MISO Tariff, MISO would comply with that direction.

b. Protests and MISO Answer

66. Generation Developers and AWEA/WOW argue that the Commission should order MISO to file the study services agreement because it bears directly on MISO's means to provide interconnection service and will have a significant impact on costs borne by interconnection customers.¹⁰⁷ Generation Developers state that this *pro forma* agreement would be used with all transmission owners and consultants that perform interconnection studies for MISO, and MISO would not be required to file individual executed agreements with the Commission.¹⁰⁸

67. MISO argues that the study services agreement relates to MISO's jurisdictional rates, terms and conditions of service, but argues that it does not affect them significantly.¹⁰⁹ MISO further states that, given the number of interconnection studies

¹⁰⁵ Section 2.5 of the agreement requires the consultant to provide the study to MISO within 90 days, absent events or conditions beyond the consultant's reasonable control. The consultant must notify MISO as soon as possible of expected delays, and if extenuating circumstances are expected to prevent timely study delivery, the consultant must undertake commercially reasonable efforts to overcome those circumstances.

¹⁰⁶ Filing, Transmittal Letter at 29. MISO also indicates that the agreement has been used in its current form for a number of interconnection studies that predate this set of GIP revisions.

¹⁰⁷ Generation Developers Protest at 9-10; AWEA/WOW Protest at 3.

¹⁰⁸ Generation Developers Protest at 10.

¹⁰⁹ MISO Answer at 8.

that would come within the template agreement, the filing requirement could drastically increase MISO's logistical burdens if individual agreements must be filed with or reported to the Commission. Nonetheless, MISO indicates that it is open to including the template agreement as a *pro forma* agreement in the Tariff, assuming that MISO will not be required to file individual agreements.

68. Invenergy states that, while MISO claims that the new study services agreement allows for customers to enforce certain aspects of the interconnection study process, the revised agreement still specifies no customer remedies or any clear path to hold the contractor conducting the study accountable.¹¹⁰ Invenergy requests that the Commission (1) direct study services agreement revisions giving customers the right to disqualify a transmission owner contractor that fails to meet these requirements from conducting interconnection studies with respect to the customer's future projects and (2) confirm that, whether or not the form study services agreement is incorporated into MISO's Tariff, the customer can seek recourse before the Commission.¹¹¹

c. Commission Determination

69. Section 205(c) of the FPA states that "every public utility shall file with the Commission... schedules showing all rates and charges for any transmission or sale subject to the jurisdiction of the Commission... together with all contracts which in any manner affect or relate to such rates, charges, classifications, and services."¹¹² The determination of what agreements "affect or relate to" electric service must be judged by the Commission's "rule of reason" policy,¹¹³ which requires provisions that significantly affect rates, terms, and conditions to be included in the filed tariff.¹¹⁴ The rule of reason

¹¹⁰ Invenergy Answer at 5.

¹¹¹ *Id.* at 6.

¹¹² 16 U.S.C § 824d(c) (2012). Section 35.1(a) of the Commission's regulations implements section 205(c) of the FPA. *See* 18 C.F.R. § 35.1(a) (2016).

¹¹³ *See PacifiCorp*, 127 FERC ¶ 61,144, at P 11 (2009) (*PacifiCorp*); *City of Cleveland v. FERC*, 773 F.2d 1368, 1376 (D.C. Cir. 1985) (*Cleveland*) (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"); *Public Serv. Comm'n of N.Y. v. FERC*, 813 F.2d 448, 454 (D.C. Cir. 1987) (holding that the Commission properly excused utilities from filing policies or practices that dealt with only matters of "practical insignificance" to serving customers).

recognizes that there is an “infinite of practices affecting rates and services”¹¹⁵ and “allows the Commission to exercise its discretion to allow utilities to forego filing particular contracts or practices.”¹¹⁶ In general, the Commission has said that, in making the determination of what must be filed with the Commission, “we must balance our desire not to deprive utilities or groups of utilities of the flexibility they need to manage their own affairs by introducing substantial delay and layered decision-making into their operations, with the need for full disclosure that furthers the purpose of having filing and posting requirements which provide real benefits to existing and potential customers or users of the services in question.”¹¹⁷

70. We find that the study services agreement does not materially affect MISO’s jurisdictional rates, terms and conditions of service, and thus does not need to be filed. The agreement is a bilateral contract between MISO and the consultant (often the transmission owner) that is used for various interconnection studies. The details of the studies, as well as the timelines for those studies, are already in the GIP. The study services agreement does not establish rates for jurisdictional service; rather, it is used to estimate the cost and timeline to study the interconnection request. The study services agreement does not represent a firm commitment to take interconnection service, nor does it contain terms and conditions of interconnection service – such terms and conditions are memorialized in the jurisdictional GIA that is executed by MISO, the transmission owner, and the interconnection customer if the project proceeds through the interconnection queue. MISO’s proposed changes to the study services agreement are intended to enhance MISO’s and its contractors’ accountability in preparing required interconnection studies and ensure that the interconnection customer has more accurate information about the costs and timeline to study its request. The changes will not affect the ultimate terms and conditions of interconnection service, e.g., the costs and construction of network upgrades, should the project proceed through the queue process. However, while the Commission will not require that the study services agreement be filed, parties are free to contact the Commission’s Enforcement Hotline or to file a

¹¹⁴ *Cal. Indep. Sys. Operator Corp.*, 119 FERC ¶ 61,076, at P 656 (2007) (citing *ANP Funding I, LLC v. ISO-NE*, 110 FERC ¶ 61,040, at P 22 (2005); *Prior Notice and Filing Requirements Under Part II of the Federal Power Act*, 64 FERC ¶ 61,139 at 61,986-89 (1993), *order on reh’g*, 65 FERC ¶ 61,081 (1993)).

¹¹⁵ *Cleveland*, 773 F.2d at 1376.

¹¹⁶ *PacifiCorp*, 127 FERC ¶ 61,144 at P 9 & n.14.

¹¹⁷ *Town of Easton, Maryland v. Delmarva Power & Light Co.*, 24 FERC ¶ 61,251, at 61,531 (1983).

complaint pursuant to section 206 of the FPA, should a dispute arise under a specific study services agreement.

5. **Increased Information and Accountability**

a. **Filing**

71. MISO states that, in the Guidance Order, the Commission found that MISO's previous proposed reforms focused too narrowly on the queue backlog as caused by "speculative" projects while not considering other potential factors.¹¹⁸ In the instant proposal, MISO asserts that it takes a broader view of the relevant factors by putting forth changes to facilitate customer analysis and decision-making earlier in the GIP, improving transparency, and holding the transmission provider, affected systems, and transmission owners accountable for the accuracy of study results. Specifically, MISO's proposal includes: (1) the previously discussed additions to the study services agreement, which require a more definitive time schedule for interconnection studies, mandate an estimate of costs, and designate the interconnection customer as an intended beneficiary; (2) a scoping meeting before the start of DPP Phase I that is mandatory for the interconnection customer and the transmission owner, which will ensure that point of interconnection location and project size are valid before studies are started; (3) coordinating with affected systems at the start of DPP I; and (4) the application of the 25 percent refund to address errors committed by MISO or a transmission owner.¹¹⁹

b. **Protests**

72. Some commenters state that MISO has once again focused too much on interconnection customers and failed to address other potential causes of MISO's queue backlog; specifically, they state that MISO has not proposed to hold itself, transmission owners, or study consultants accountable to provide accurate and timely study results.¹²⁰ As Invenergy notes, MISO currently hires a consultant, which is often the transmission owner, to conduct interconnection studies, and the transmission owner is only subject to "commercially reasonable efforts" to meet Tariff deadlines.¹²¹ Commenters state that

¹¹⁸ Filing, Transmittal Letter at 17 (citing Guidance Order, 154 FERC ¶ 61,247 at P 35).

¹¹⁹ *Id.*, Aliff Testimony at 20-21.

¹²⁰ Invenergy Comments at 3; Generation Developers Protest at 5-8; NextEra Protest at 10.

¹²¹ Invenergy Comments at 4.

MISO should either be required to conduct its own interconnection studies or hire an outside consultant, rather than allow transmission owners to perform these studies, in order to minimize delays, increase study uniformity, and prevent conflicts of interest that may arise because the transmission owners are often developing their own projects in MISO and may have interests that are averse to those of the interconnection customer.¹²²

73. Commenters state that MISO should propose a mechanism to hold MISO or the consultant accountable for meeting DPP study deadlines, as the study services agreement contains no remedy for breach of the time requirements.¹²³ AWEA/WOW and Generation Developers suggest that this could be accomplished by including in the study services agreement a provision for liquidated damages equal to half of one percent of the actual cost of the study per day for each day the study is late, capped at the ultimate cost of the study.¹²⁴ They state that this mirrors the liquidated damages clause in section 5.3 of MISO's *pro forma* GIA. Generation Developers also suggest an accuracy requirement, such that the consultant would perform any necessary restudies at no cost within 60 days if an error is found after the results are provided to MISO, with an additional liquidated damages clause for late restudy results.¹²⁵

74. Generation Developers note that the Commission is considering transmission provider standards in the generic rulemaking dockets, and that it is hopeful that the Commission will change the "reasonable efforts" standard.¹²⁶ NextEra asks the Commission to eliminate the "reasonable efforts" standard or require MISO to propose a stricter performance standard.¹²⁷

¹²² *Id.*, AWEA/WOW Protest at 2. Invenegy states that Southwest Power Pool (SPP) and PJM Interconnection, L.L.C. (PJM) conduct their own studies with input from the transmission owners and experience far fewer queue delays.

¹²³ Invenegy Comments at 5; Generation Developers Protest at 5-8; NextEra Protest at 10.

¹²⁴ AWEA/WOW Protest at 2; Generation Developers Protest at 12.

¹²⁵ Generation Developers Protest at 13.

¹²⁶ *Id.* at 7.

¹²⁷ NextEra Protest at 10.

75. NextEra notes that MISO's Tariff language at section 3.3.4 of the GIP has made the scoping meeting mandatory only for the interconnection customer, and that MISO is only subject to "reasonable efforts" to get the transmission owner to attend.¹²⁸

76. AWEA/WOW contend that MISO should be required to instruct affected systems to model MISO generation dispatch the same way the affected system would model that dispatch if it were being studied as a generator internal to the affected system. AWEA/WOW contend this would help ensure MISO's process is not delayed as a result of legal disputes surrounding affected systems studies.¹²⁹ Invenenergy contends that MISO should ensure that affected systems understand that they can and should use their own study protocols when conducting an affected system study.¹³⁰ NextEra recommends that MISO provide further detail on how it will seek to improve coordination with affected systems.¹³¹

c. Answers

77. MISO opposes any liquidated damages clause.¹³² MISO states that the Commission specifically rejected liquidated damages penalties for study delays in Order No. 2003 and found that such damages could undermine the transmission provider's ability to economically administer its study process.¹³³ Furthermore, MISO notes that a liquidated damages penalty that has the potential to wipe out the payment due to the study consultant could make it difficult for MISO to procure the necessary expertise.¹³⁴ Finally, MISO argues that, in drawing parallels with section 5.3 of MISO's *pro forma* GIA, protesting parties ignore that this provision does not permit liquidated damages to be awarded in a number of defined circumstances, such as when the delay is the result of the action or inaction of other parties, including the interconnection customer, or due to

¹²⁸ *Id.*

¹²⁹ AWEA/WOW Protest at 9-10.

¹³⁰ Invenenergy Protest at 8.

¹³¹ NextEra Protest at 16.

¹³² MISO Answer at 9.

¹³³ *Id.* (citing Order No. 2003, FERC Stats. & Regs. ¶ 31,146 at PP 883, 898, Order No. 2003-A, FERC Stats. & Regs. ¶ 31,160 at P 249). *See also* ITC Companies Answer at 4-5.

¹³⁴ MISO Answer at 10.

the transmission owner's inability to obtain required approval or permits, or when the interconnection customer is not ready to move forward.

78. MISO disagrees that its transmission owners should not be eligible to perform interconnection studies as consultants to MISO.¹³⁵ MISO states that the transmission owners are often best positioned to conduct these studies due to their knowledge of the transmission facilities involved, and that their involvement in the study process is critical. MISO also rejects the protesting parties' suggestions of conflict of interest as speculative and unsubstantiated.¹³⁶ MISO asserts that it closely supervises the study process and that interconnection customers have recourse to MISO's dispute resolution process and/or the Commission's complaint procedures.

79. MISO argues that the requests to change the "reasonable efforts" standard are a collateral attack on Order No. 2003 and the Commission's orders approving MISO's current GIP, and that they are outside the scope of the Filing.¹³⁷ MISO argues that, to the extent the protesting parties believe that MISO's existing "reasonable efforts" provisions are no longer just and reasonable, they must make the required showings and carry the burden of proof in a separate FPA section 206 proceeding.

80. Finally, MISO states that the MISO Tariff and provisions of MISO's Joint Operating Agreements with SPP and PJM are specific in requiring the affected systems to perform studies under the assumptions as any other generator interconnecting to their systems.¹³⁸ MISO contends that revisions to these requirements are outside the scope of this proceeding. MISO states, however, that further technical details of affected system coordination can be provided in the business practices manual, and that it is planning to update the applicable provisions upon Commission acceptance of this filing.

81. The ITC Companies state that liquidated damages for interconnection queue delays were specifically considered and rejected by the Commission in Order No. 2003 and 2003-A. They further state that the Commission expressed concerns that liquidated damages will "undermine the Transmission Provider's ability to economically administer its study process," and also that such damages are unnecessary because the interconnection customer is not obligated to pursue its request at that point in the process,

¹³⁵ *Id.* at 11.

¹³⁶ *Id.* at 12. *See also* ITC Companies Answer at 5.

¹³⁷ MISO Answer at 12.

¹³⁸ *Id.* at 32-33.

and thus does not bear a significant risk of damages.¹³⁹ The ITC Companies state that MISO is a non-profit entity, and has no means to recoup the costs of administering its interconnection study processes absent payment by the interconnection customers for whom these studies are performed.

82. Invenenergy states that transmission owners should not be allowed to conduct MISO's studies and that having transmission owners conduct interconnection studies allows study costs, which are ultimately borne by the customer, to balloon out of control.¹⁴⁰ Invenenergy adds that third-party contractors have incentives to control costs because they must compete for business, while the transmission owners have no such incentives.¹⁴¹ Invenenergy concludes that if its queue reforms are going to be effective, MISO should conduct its own interconnection studies with input from the transmission owners.¹⁴²

83. Invenenergy argues that MISO should allow interconnection customers to request reductions in the amount of NRIS if the customer determines that doing so will eliminate the need for some of the affected system network upgrades on the affected system.¹⁴³ Invenenergy states that MISO needs to address study timing in its affected system coordination efforts and should ensure it is doing everything it can to facilitate timely affected system studies.¹⁴⁴

84. The MISO Transmission Owners state that they support MISO's and the ITC Companies' answers, and oppose the imposition of any requirement that transmission owners or other parties be liable for liquidated damages in connection with performing interconnection studies.¹⁴⁵ They state that the Commission in Order No. 2003

¹³⁹ The ITC Companies Answer at 3 (citing Order No. 2003, FERC Stats. & Regs. ¶ 31,146 at PP 898-99 (2003)).

¹⁴⁰ Invenenergy Answer at 2.

¹⁴¹ *Id.* at 3.

¹⁴² *Id.* at 5.

¹⁴³ *Id.* at 7.

¹⁴⁴ *Id.* at 8.

¹⁴⁵ MISO Transmission Owners Answer at 4.

specifically rejected liquidated damages provisions except in instances when the interconnection customer has elected the alternative option under Article 5.1.2 of the *pro forma* LGIP.

85. The MISO Transmission Owners state that the Commission should reject any calls to limit the rights of transmission owners to perform System Impact or other studies because, as MISO points out, System Impact Studies are highly detailed and specialized, and the transmission owners often have the specialized knowledge of their systems necessary to perform the studies.¹⁴⁶ Furthermore, the MISO Transmission Owners argue that there has been no evidence demonstrating that the transmission owners have acted in a biased manner in performing studies.¹⁴⁷

d. Commission Determination

86. As in the Guidance Order, we find that the timely processing of interconnection requests, improved coordination with neighboring regions, and earlier engagement of transmission owners in the generator interconnection review process are important aspects of an efficiently-managed generator interconnection queue.¹⁴⁸ Although we separately discuss MISO's proposed 25 percent refund proposal below, we find that MISO's proposed changes to the Tariff address the Commission's previous concerns by implementing more transparent timing and cost information to enhance accountability in preparing timely interconnection studies, providing for more involvement of the interconnection customer in the study process, and providing for earlier coordination with affected systems. However, although the testimony submitted with MISO's Filing indicates that the scoping meeting will now be mandatory for both the transmission owner and the interconnection customer, section 3.3.4 of the GIP only requires MISO to use reasonable efforts to include the transmission owner. We find that transmission owner attendance at the scoping meeting is essential to the purpose of that meeting, which is to discuss alternative interconnection options, to exchange information including any transmission data that would reasonably be expected to impact such interconnection options, to analyze such information, and to determine the potential feasible points of interconnection. We direct MISO, in its compliance filing to be submitted within 60 days from the date of this order, to revise section 3.3.4 to make the scoping meeting mandatory for the transmission owner.

¹⁴⁶ *Id.* at 6 (citing MISO Answer at 11-12).

¹⁴⁷ *Id.* at 4-5.

¹⁴⁸ Guidance Order, 154 FERC ¶ 61,247 at PP 35, 47.

87. We reject commenters' requests that we require MISO to conduct its own interconnection studies or hire an outside consultant, rather than allow transmission owners to perform these studies. Based on the record in this proceeding, we are not persuaded that such a requirement is necessary at this time, particularly given that the transmission owners are often best positioned to conduct these studies due to their knowledge of the transmission facilities involved.

88. We reject commenters' requests that the Commission change the "reasonable efforts" standard or require a liquidated damages clause for late or inaccurate interconnection studies, as the Commission is currently considering these issues in Docket No. RM17-8-000.¹⁴⁹

89. We reject as outside the scope of this proceeding commenters' requests that MISO modify how it coordinates with affected systems. As MISO notes, no revisions were proposed to the relevant GIP section, and coordination with affected systems is contemplated in MISO's respective Joint Operating Agreements. Here as well, the Commission is currently considering this issue in Docket No. RM17-8-000.¹⁵⁰

6. Site Control

a. Filing

90. Currently, 50 percent site control is needed for an interconnection request at the beginning of the DPP, or in lieu of site control, a customer can provide a deposit of \$100,000.¹⁵¹ MISO proposes to revise section 3 of its GIP to require either evidence of 100 percent site control at the interconnection request stage or, if such evidence is unavailable, the interconnection customer may submit a \$100,000 deposit in lieu of site control.¹⁵² Regardless of the interconnection customer's decision regarding site control

¹⁴⁹ *Reform of Generator Interconnection Procedures and Agreements*, 157 FERC ¶ 61,212, at PP 140-151 (2016) (Generator Interconnection NOPR).

¹⁵⁰ *Id.* PP 152-159.

¹⁵¹ The requirement for 50 percent site control is not in MISO's Tariff; rather, it is in Business Practice Manual for Generator Interconnection (*see* BPM-015-r12 at 20).

¹⁵² Filing, Transmittal Letter at 5-6; Aliff Testimony at 42-44; GIP Section 3.3.1. The GIP provides that site control can be evidenced with options to purchase or lease the land required for the generating facility, as well as the land required for any interconnection facilities.

or a deposit in lieu of site control in Phase I, MISO also proposes to require full site control to be evidenced before the end of Decision Point II. Customers failing to provide site control at Decision Point II are deemed withdrawn and any site control deposit will be refunded.¹⁵³

91. MISO states that stakeholders have indicated that site control has a strong correlation with the ability of a project to be commercially viable and that these requirements are similar to approved requirements in other RTOs such as SPP and PJM.¹⁵⁴ MISO currently has about 35 percent of the projects in the queue that are using the \$100,000 cash option in lieu of site control.¹⁵⁵ MISO states that requiring site control at Decision Point II strikes a balance between increasing the need for site control and the ability for projects to understand the impact of the interconnection. MISO's proposed Tariff revisions also eliminate the option to pay an additional \$250,000 deposit in lieu of site control after execution of the interconnection agreement.¹⁵⁶ Finally, as part of MISO's proposed transition plan, the proposed revisions to the site control requirements will not apply to interconnection requests that are subject to the transition plan.¹⁵⁷

b. Protests

92. Missouri River protests the inclusion of interconnection facilities in the definition of site control and the proposed elimination of the option for a \$250,000 deposit in lieu of site control after the execution of the interconnection agreement.¹⁵⁸ Missouri River requests that the Commission direct MISO to modify the requirement in one of two ways: (1) remove "interconnection facilities" from the definition of site control, or (2) allow for a deposit in-lieu of site control for interconnection facilities only. Missouri River states that, per Iowa Code, any person wishing to build an electric transmission line, such as those necessary for interconnection, must first obtain a right-of-way permit from the Iowa Utilities Board, which is valid for two years. Missouri River argues that, for interconnection customers wishing to interconnect with MISO, this creates the possibility

¹⁵³ *Id.*, Transmittal Letter at 6; GIP Section 7.3.2.4.

¹⁵⁴ SPP requires reasonable evidence of site control or a \$250,000 non-refundable security deposit. PJM requires evidence of site control to have a valid queue position.

¹⁵⁵ Filing, Aliff Testimony at 43.

¹⁵⁶ *Id.*, GIP Section 11.3.

¹⁵⁷ *Id.*, Transmittal Letter at 23; GIP Section 5.1.3.

¹⁵⁸ Missouri River Protest at 5-6.

that the customer could be faced with being dropped from the MISO queue if MISO has not completed the requisite studies before the right-of-way expires, or complete the costly construction of interconnection facilities within the two year permit window, but prior to obtaining an interconnection agreement from MISO, in order to maintain the requisite site control.¹⁵⁹ Finally, Missouri River states that MISO's proposed site control requirements far exceed the Commissions requirements under Order No. 2003 and the requirements of other RTOs/ISOs.¹⁶⁰

93. The MISO Transmission Owners object to the proposed requirement of an interconnection customer to provide reasonable evidence of site control prior to the end of Decision Point II to the extent it would require an interconnection customer to demonstrate site control for the interconnection facilities.¹⁶¹ The MISO Transmission Owners state that the requirement to demonstrate site control for interconnection facilities prior to the end of Decision Point II may conflict with the timelines for state easement application and requirements.¹⁶² As such, the MISO Transmission Owners propose removing "interconnection facilities" from the definition for site control.

94. MidAmerican states that it is vital that the Commission adopt the proposed transitional treatment of MISO's site control requirements in section 5.1.2 of MISO's GIP because a number of interconnection requests are currently progressing through the MISO queue, and modifying the site control requirements for these projects without timely prior warning would unduly burden the developers and threaten the viability of projects where eventual site control is certain to be achieved.¹⁶³ MidAmerican also argues that MISO's proposed requirement of 100 percent site control imposes undue risks on viable wind projects because wind generation sites often involve many small parcels of land where site control must be individually negotiated with numerous property owners, and it is common for the locations of individual wind towers to continue changing long after ultimate site control is no longer in doubt.¹⁶⁴ As such, MidAmerican proposes a threshold of 75 percent site control as a reasonable hurdle for non-viable

¹⁵⁹ *Id.* at 6-7.

¹⁶⁰ *Id.* at 8-10.

¹⁶¹ MISO Transmission Owners Comments at 14.

¹⁶² *Id.* at 14.

¹⁶³ MidAmerican Comments at 7.

¹⁶⁴ *Id.* at 8.

projects while also not imposing undue risks on viable projects.¹⁶⁵ MidAmerican supports the MISO Transmission Owners recommendation that MISO's proposed site control requirements should not apply to the interconnection facilities associated with a project.¹⁶⁶ MidAmerican also notes that the definition for site control in Attachment X, section 1 is inconsistent with the definition in Attachment X, Appendix 6, Article 1 and requests MISO to explain the difference or make the Tariff language consistent.¹⁶⁷

c. Answers

95. MISO states that it is willing to reduce the requirement for site control from 100 percent to 75 percent in response to the concerns of some commenters, particularly wind developers, who indicate that 100 percent site control would be burdensome.¹⁶⁸ In response to the concerns regarding state easements, MISO suggests the following language be added to the site control definition:

If an Interconnection Customer cannot demonstrate Site Control for Interconnection Facilities as a result of regulatory requirements or obligations, the Interconnection Customer must demonstrate such regulatory requirements or obligations to the Transmission Provider and provide cash in-lieu of Site Control until the time that the regulatory requirements allow the Site Control requirement to be met.¹⁶⁹

96. The ITC Companies support MISO's proposal to require an interconnection customer to provide evidence of 100 percent site control at Decision Point II, and urge the Commission to reject the protests of AWEA/WOW and the Generation Developers which seek lower thresholds.¹⁷⁰ The ITC Companies state that site control is strongly correlative with project viability, and that MISO's proposal, which sets the in-lieu-of

¹⁶⁵ *Id.* at 9.

¹⁶⁶ *Id.* at n.13.

¹⁶⁷ *Id.* at 10.

¹⁶⁸ MISO Answer at 18.

¹⁶⁹ *Id.* at 21.

¹⁷⁰ The ITC Companies Answer at 1.

payment level at \$100,000 and deems it refundable, appropriately balances MISO's interests in screening out non-viable projects with the need for flexibility to ensure that developers' projects have the best opportunity to become commercially viable.¹⁷¹

97. Missouri River supports MISO's proposed new Tariff language regarding conflicts between regulatory requirements and MISO's interconnection timeline. Missouri River states that, while its original proposal of removing "interconnection facilities" from MISO's definition of site control is still its preferred option, it supports MISO's revision as well.¹⁷² However, Missouri River argues that MISO should drop the provision that requires the interconnection customer to demonstrate a regulatory conflict. Missouri River states that MISO's requirement to "demonstrate such regulatory requirements or obligations to the Transmission Provider" creates an ambiguous standard that will be difficult to apply consistently and efficiently.¹⁷³ Finally, Missouri River argues that the Commission should not require 100 percent site control for interconnection facilities before the receipt of the MISO system impact study and facilities study because such a requirement would force developers to make financially imprudent investments to obtain local permitting prematurely.¹⁷⁴

98. The MISO Transmission Owners state that MISO's proposed Tariff revisions to address conflicts between state regulatory requirements and MISO's site control requirements language is too vague and ambiguous, and lacks any standards as to what will constitute an adequate showing of conflict.¹⁷⁵ The MISO Transmission Owners aver that the proposed Tariff revisions also lack any timeframe as to when MISO must act once an interconnection customer proffers such a showing. They suggest revising MISO's proposed language to remove the "must demonstrate" clause.

d. Commission Determination

99. We accept MISO's proposal, subject to condition, and direct MISO, in its compliance filing to be submitted within 60 days of the date of this order, to submit Tariff revisions that: (1) reduce the site control requirement to 75 percent from 100 percent; and (2) insert Tariff language as proposed in its answer, as discussed above.

¹⁷¹ *Id.* at 2.

¹⁷² Missouri River Answer at 2.

¹⁷³ *Id.* at 5.

¹⁷⁴ *Id.* at 6.

¹⁷⁵ MISO Transmission Owners Answer at 8.

On the first issue, we agree with MidAmerican that obtaining 100 percent site control may be challenging for a developer that must control numerous small parcels of land. We find that a 75 percent threshold allows for both enough certainty that the developer plans to complete the project and for the flexibility needed by the developer to accurately site its construction. On the second issue, we find that it would be unjust and unreasonable to require site control at a stage of the interconnection process that would be in conflict with state easement requirements. The Tariff language MISO proposes in its answer allows for the flexibility developers need to meet varying state regulatory obligations. As MISO is a large, multi-state RTO, we find that this type of flexibility can allow developers in different regulatory environments to meet both MISO's requirements and those of their home states. Accordingly, we direct MISO, in its compliance filing to be submitted within 60 days of the date of this order to submit such Tariff revisions.

7. Alteration of the 25 Percent Threshold for Milestone Payment Refunds

a. Filing

100. MISO's currently effective GIP grants a refund of the M2 milestone payment if the network upgrade cost estimates increase by more than 25 percent between the System Impact Study and the Facilities Study.¹⁷⁶ MISO proposes to replace the current provision with new provisions that would allow full return of milestone payments for a withdrawn interconnection request in the event that the customer withdraws because (1) the cost estimates in the current phase's System Impact Study increased by more than 25 percent and more than \$10,000/MW over the previous phase's System Impact Study as a result of MISO, transmission owner, or Affected System error, or after (2) cost estimates in the final Facilities Study increased more than 25 percent and more than \$10,000/MW over the Phase III System Impact Study.¹⁷⁷

b. Protests

101. AWEA/WOW contend that the 25 percent threshold should include the cumulative effect of errors from different rounds of study and indicate that MISO's proposal could result in circumstances where cost estimates may increase by 25 percent or more between any of the four studies, and yet still not meet the 25 percent threshold between successive phases.¹⁷⁸ AWEA/WOW contend that adding a provision for the cumulative effect of

¹⁷⁶ See MISO Tariff, Attachment X, Section 8.2.

¹⁷⁷ See MISO Tariff, Attachment X, Sections 7.3.2.4 and 7.6.2.

¹⁷⁸ AWEA/WOW Protest at 6-8.

errors between any of the studies would be consistent with the application of MISO's current 25 percent safeguard and would incentivize projects to withdraw sooner in the process. AWEA/WOW further contend that MISO should include a window of opportunity for those projects that lose financial viability due to an increase in network upgrade estimates of 25 percent or above to withdraw penalty-free in order to prevent late stage withdrawals and the need for restudies after GIA execution.

102. Generation Developers argue that it is inappropriate for MISO to base its penalty-free withdrawal provision on a comparison of the costs in the Phase III System Impact Study and the Facilities Study.¹⁷⁹ Generation Developers contend that the standard to determine the just and reasonable comparison must be where the interconnection incurs risk based on the information that MISO provides. Generation Developers contend that it is the Phase I and Phase II System Impact Study estimates that provide the interconnection customer with the information to determine whether or not to move forward, and that the Phase III System Impact Study estimates are meaningless in terms of risk mitigation. Thus, Generation Developers argue that the proper comparison for evaluating the 25 percent threshold needs to be between the Phase I System Impact Study and the Phase III System Impact Study, or between the Phase II System Impact Study and the Phase III System Impact Study if MISO were not to allow projects into the DPP without a demonstration of site control. Generation Developers also state that a comparison of the Phase III System Impact Study and the final Facilities Study is likely to never reach the 25 percent or \$10,000/MW thresholds. Generation Developers note that MISO is willing to refer to earlier System Impact Studies for 25 percent thresholds due to errors, but not for the non-error cost increase calculations, and they contend that if MISO can do this for errors, MISO should also do this for evaluating general cost increases exceeding 25 percent.¹⁸⁰

103. Generation Developers argue that the 25 percent threshold standard due to errors should be between the Phase II System Impact Study and the final Facilities Study rather than Phase III System Impact Study and the final Facilities Study, as errors may not manifest until the final Facilities Study.¹⁸¹ Generation Developers also contend that the 25 percent threshold provisions triggered by errors should be revised to include errors by third party consultants.

¹⁷⁹ Generation Developers Protest at 35-36.

¹⁸⁰ *Id.* at 38.

¹⁸¹ *Id.* at 37.

104. NextEra contends that the 25 percent rule for non-error costs increases should also apply to the Phase III System Impact Study.¹⁸² NextEra also argues that it is not clear how MISO will apply its proposal to shield customers from the impact of errors, and the Commission should direct MISO to address possibilities such as study errors only being detected after a GIA has been signed.¹⁸³

c. Answers

105. MISO asserts that there needs to be a balance between allowing interconnection requests to be withdrawn penalty-free and ensuring that those withdrawals do not financially harm projects that remain in the queue.¹⁸⁴ MISO contends that allowing interconnection customers to withdraw penalty-free if costs make the project unable to proceed makes sense only from that project's perspective. MISO explains that, in some cases, allowing one interconnection customer to withdraw because the total upgrade costs increased by more than 25 percent could cause cascading withdrawals; for instance, where multiple interconnection customers share the cost of a Common Use Upgrade, the remaining interconnection customers would see their shared costs increase. MISO further contends that a comparison between the Phase I System Impact Study and the final Facilities Study is illogical, as the two studies may not even be addressing the same mitigation measures or upgrades.

106. AWEA/WOW respond that cascading withdrawals are a potential consequence when costs increase to the point that a project is no longer viable, regardless of whether the Interconnection Customer has a penalty-free withdrawal.¹⁸⁵

d. Commission Determination

107. We accept MISO's proposal, subject to condition, and direct MISO, in its compliance filing to be submitted within 60 days of the date of this order, to make the following changes. First, we accept the MISO's proposed 25 percent and \$10,000/MW threshold for milestone payment refunds. However, we agree with the commenters that, consistent with its existing Tariff, the early System Impact Study network upgrade cost estimates provide the interconnection customer with the information to determine

¹⁸² NextEra Protest at 13-15.

¹⁸³ *Id.* at 16-17.

¹⁸⁴ MISO Answer at 23.

¹⁸⁵ AWEA/WOW Answer at 4.

whether or not to move forward, and as such, we direct MISO to propose, on compliance, an additional provision that allows for a customer to withdraw and receive a refund of their milestone payments if there are significant change(s) to cumulative network upgrade costs over the course of the DPP, i.e., at intervals beginning with the initial System Impact Study and ending with the final Facilities Study. However, we recognize that the thresholds in MISO's present proposal may need to be revised for purposes of identifying significant increases in a customer's cumulative network upgrade costs that would warrant the ability to withdraw penalty-free. Second, we agree with MISO that the potential for cascading withdrawals if customers are allowed to withdraw penalty-free at any point in the DPP is a concern and believe that the compliance directive herein and MISO's compliance filing should address that concern. Thus, we direct MISO, in its compliance filing, to support its proposed threshold.

108. We direct MISO to provide periodic informational reports describing the number of customers that experience changes in cost estimates for network upgrades greater than 25 percent and \$10,000/MW over the course of the DPP and the changes in network upgrade cost estimates that they experience.¹⁸⁶ MISO should submit these reports semi-annually for a period of two years, with each report including information regarding customers from a single DPP group, i.e., the first report would describe the February 2016 DPP. MISO should also include the changes in cost estimates for interconnection customers, and should also report on cumulative network upgrade costs, including the Phase I, II, and III System Impact Studies, and the final Facilities Study.

8. Provisional GIAs

a. Filing

109. As initially accepted by the Commission in the first queue reform, provisional GIAs provide for limited operation by an interconnection customer that has demonstrated a higher level of readiness to complete the GIP and that seeks an interconnection prior to completion of the regular interconnection studies. Currently, the Tariff does not address when interconnection customers may request a provisional GIA other than specifying that “[a]t a minimum, Interconnection Customer must demonstrate, through available studies, that any Network Upgrades, Interconnection Facilities, Distribution Upgrades, System Protection Upgrades and/or Generator Upgrades that are necessary to meet the requirements of the North American Electric Reliability Corporation (NERC), or any

¹⁸⁶ The reports will be for informational purposes and will not be noticed for comment or subject to Commission order.

applicable Regional Entity for the interconnection of a new, modified and/or expanded generator are in place prior to the commencement of generation from the Generating Facility.”¹⁸⁷

110. Proposed section 7.9 now addresses when an interconnection customer may request a provisional GIA. Specifically, interconnection customers may request provisional GIAs beginning upon interconnection request submission and through Decision Point I. After the time period scheduled for Decision Point I, interconnection customers may request a provisional GIA only if Decision Point I, Decision Point II, or the Facilities Study become delayed by more than 60 calendar days from the time schedule in the Tariff.¹⁸⁸

111. MISO also proposes to revise the provisional GIA requirements to require MISO to perform a Provisional Interconnection Study¹⁸⁹ prior to the completion of the System Impact Study and the Facilities Study.¹⁹⁰ MISO proposes to revise Appendix H of the *pro forma* GIA, Interconnection Requirements for Provisional GIA, to replace the requirement to perform the Optional Interconnection Study as detailed in section 10 of the GIP, with the Provisional Interconnection Study. According to MISO, requiring an optional study to be performed led to potential misunderstanding of the need for a study. MISO also notes that the process for performing the Provisional Interconnection Study is identified in the Business Practice Manual on Generator Interconnections and is intended to be largely the same as under the current process.¹⁹¹

¹⁸⁷ MISO Tariff, Attachment X, Section 11.5.

¹⁸⁸ Filing, Transmittal Letter at 26; Aliff Testimony at 47; GIP Section 7.9.

¹⁸⁹ Section 1 of the GIP and Article 1 of the *pro forma* GIA define the Provisional Interconnection Study as “an engineering study, performed at Interconnection Customer’s request, as a condition to entering into a provisional GIA, that evaluates the impact of the proposed interconnection on the safety and reliability of the Transmission System and, if applicable, any Affected System. The study shall identify and detail the impacts on the Transmission System and, if applicable, an Affected System, from stability, short circuit, and voltage issues that would result if the Generating Facility were interconnected without project modifications or system modifications.”

¹⁹⁰ Filing, Aliff Testimony at 47.

¹⁹¹ *Id.*

112. Additionally, provisional GIAs will be subject to all provisions of the revised DPP process except as provided in section 7.9.1 of the GIP. Section 7.9.1 of the proposed GIP requires interconnection customers seeking a provisional GIA to submit both the M3 and M4 milestone payments in the amount of \$4000/MW, the same amount as the M2 milestone payment, at the time of the request for the provisional GIA. Once the project progresses through the DPP, MISO will calculate the M3 and M4 amounts as provided in the standard DPP process, which is after Decision Point I for M3 and after Decision Point II for M4. Within 30 days of MISO calculating the amounts, the interconnection customer must pay any difference between the M3 and M4 previously paid and the actually calculated values or the interconnection request will be automatically withdrawn.

113. MISO also proposes to include new section 7.9.2 of the GIP, which states that interconnection customers seeking a provisional GIA “automatically consent to the Transmission Provider moving the Interconnection Request through [DPP] Phase II and III without regard to Interconnection Customer Decision Point II unless notification of withdrawal is provided to the Transmission Provider.” Section 7.9.3 of the GIP provides that an interconnection customer seeking a provisional GIA may withdraw the interconnection request (1) during Decision Point I and receive a refund of the M2, M3, and M4 milestone payments and unencumbered study deposits remaining, or (2) any other time after Decision Point I but forfeit the M2, M3, and M4 milestone payments. Section 7.9.4 of the GIP provides that an interconnection customer seeking a provisional GIA may revert its interconnection request to the standard DPP process by notifying MISO before and during Decision Point I, and MISO will then refund the M4 milestone payment.

b. Protests

114. Generation Developers state that the opportunity to obtain a provisional GIA should not be limited to prior to Decision Point I, because an interconnection customer needs the flexibility to seek a provisional GIA if and when it desires if the customer determines it is needed to protect and support its proposed project.¹⁹² Generation Developers assert that allowing interconnection customers to request a provisional GIA after Decision Point I will not harm the queue and will not cause cost shifts because a provisional GIA does not disrupt MISO’s study process; MISO would still complete Phases I, II, and III the same as if a provisional GIA was not requested, and the interconnection customer would still be required to fund and pay for all network upgrades in order to transition to a regular GIA. Generation Developers state that MISO offers no

¹⁹² Generation Developers Protest at 33.

explanation or supporting testimony for these limitations. Generation Developers believe the requirement is not just and reasonable and that there is no legitimate reason why an interconnection customer could not request a provisional GIA at any time.

115. Generation Developers state that a MISO study delay should not be the driver of whether a provisional GIA may be allowed, because an interconnection customer may need a provisional GIA for other reasons than delay, such as a legitimate need to come online earlier than the stated Commercial Operation Date.¹⁹³ Generation Developers contend that, if there is capacity available, MISO should allow use of that capacity for early connection. Generation Developers also assert that delays in DPP cycle 1 will cascade into DPP cycle 2, hindering generation developers' means to judge study completion dates. However, if the developer has a power purchase agreement lined-up, pursuing early connection can mitigate the unknown study time and delay. Generation Developers note that MISO would not grant the provisional GIA in any event unless there is available capacity, resulting in a no-harm situation. Thus, Generation Developers contend that MISO's GIP should allow a provisional GIA at any time during Phases II and III.

116. Generation Developers also believe that the process for performing the Provisional Interconnection Study should be listed in MISO's Tariff, rather than the Business Practice Manual on Generator Interconnections. Generation Developers state it is unclear what other process MISO might employ, because MISO states that "the provisional GIA will be subject to the revised DPP process."¹⁹⁴ Generation Developers also express concern that stakeholders could change features of the Business Practice Manual at any time, citing a recent example where MISO processed External NRIS within its DPP but not according to the same requirements imposed on all other customers in its DPP. Generation Developers state that the Commission put a stop to that by requiring MISO to "clarify the services it provides *and the process* for receiving that service for every class of interconnection customer to which the Tariff applies" and stating that "MISO may continue to include the implementation details of these revisions in its Business Practice Manuals, but the overall framework must be provided in the Tariff since it significantly affects rates and services."¹⁹⁵

¹⁹³ *Id.* at 34.

¹⁹⁴ *Id.* (citing Filing, Attachment A at 46.).

¹⁹⁵ *Id.* (citing *Internal MISO Generation v. Midcontinent Indep. Sys. Operator, Inc.*, 154 FERC ¶ 61,248, at P 34 & n.41 (2016) (emphasis added)).

117. Invenergy states that provisional GIAs should be available at any time, because: (1) MISO does not identify any problems with the current rules that allow customers to request provisional GIAs any time during the DPP; (2) provisional GIAs would not constitute a withdrawal requiring restudy because customers requesting a provisional GIA will still go through each of the DPP studies; and (3) there is no principled reason why requesting a provisional GIA earlier in the DPP would be allowable and requesting one after having paid the M3 milestone would be prohibited.¹⁹⁶ Invenergy also states that provisional GIAs are a very useful tool for developers in negotiations and should be available at any time during the interconnection process. Invenergy asserts that provisional GIAs are intended for interconnection customers that are ready to proceed ahead of the normal DPP schedule and such customers are still responsible for funding the required DPP studies and assume the risk of interconnecting before such studies and upgrades are complete.¹⁹⁷ Invenergy maintains that interconnection customers requesting provisional GIAs have a significant financial investment in moving the project forward, and only developers serious about proceeding would be likely to assume the additional risks associated with provisional GIAs.¹⁹⁸ Therefore, Invenergy requests that the Commission reject the part of MISO's proposal that limits the timeframe for requesting provisional GIAs. However, Invenergy also states that if MISO is later able to demonstrate (1) that it is meeting the projected timelines under the new process and (2) that there is a good reason for limiting requests for provisional GIAs, MISO can file for an amendment to its Tariff at that time.¹⁹⁹

118. AWEA/WOW express concern that MISO's proposal will hinder wind generators' ability to meet PTC deadlines due to issues with current MISO queue delays.²⁰⁰ AWEA/WOW maintain that the ability to obtain a provisional GIA is of critical importance to the wind industry, because a provisional GIA offers the means for a project to move forward quickly if there is a compelling reason for the interconnection customer to take on the significant risk associated with a provisional GIA. AWEA/WOW assert that MISO's proposed 60-day study delay requirement in order to request a provisional GIA after Decision Point I unnecessarily removes flexibility that exists today. AWEA/WOW believe that 60 days is an excessive and unnecessary wait to begin a

¹⁹⁶ Invenergy Comments at 6-7.

¹⁹⁷ *Id.* at 7.

¹⁹⁸ *Id.* at 7-8.

¹⁹⁹ *Id.* at 8, n.14.

²⁰⁰ AWEA/WOW Protest at 4.

process that currently can start at any point in the interconnection process and is typically time-sensitive. For example, AWEA/WOW state that a 60-day waiting period could cause widespread harm to interconnection customers who require the ability to obtain a provisional GIA in a timely manner for reasons such as a power purchase agreement with rigid timing requirements, the need to meet seasonal construction schedules, the need to meet PTC requirements, or any another business reason to move forward quickly on short notice.²⁰¹ AWEA/WOW request that the Commission direct MISO to remove the 60-day delay requirement after Decision Point I for requesting provisional GIAs in the event that further delays occur in DPP study groups.

119. Additionally, AWEA/WOW believe that MISO's proposed definition of "Provisional Interconnection Study" unnecessarily removes flexibility that exists in the provisional GIA process today.²⁰² MISO's proposed definition provides that "[t]he study shall identify and detail the impacts on the Transmission System and, if applicable, an Affected System, from stability, short circuit, and voltage issues that would result if the Generating Facility were interconnected without project modifications or system modifications."²⁰³ AWEA/WOW believe that MISO has not provided a sufficient justification as to why this flexibility should be reduced with respect to whether or not the facilities were interconnected with modifications, and MISO should strike the phrase "without project modifications or system modifications" from this definition, which would be consistent with what is currently allowed.²⁰⁴

c. Answers

120. MISO asserts that the provisional GIA is most effective early in the interconnection process and that MISO has provided for the continuation of that option.²⁰⁵ Further, as MISO explained in connection with similar revisions in the initial fourth queue reform, the expenditure of MISO's resources to provide studies for provisional GIAs late in the queue process does not justify a limited time savings for the interconnection customer.²⁰⁶ MISO states that, in the Guidance Order, the Commission

²⁰¹ *Id.* at 4-5.

²⁰² *Id.* at 5.

²⁰³ MISO Filing, Attachment B, Section 1.

²⁰⁴ AWEA/WOW Protest at 5.

²⁰⁵ MISO Answer at 26.

²⁰⁶ *Id.* (citing Guidance Order, 154 FERC ¶ 61,247 at P 115).

agreed with MISO that “any marginal time savings for a customer who requested a provisional GIA at Decision Point II is more than offset by the cost to MISO to process the studies for the provisional GIA.”²⁰⁷

121. With regard to AWEA/WOW’s concern that the Provisional Interconnection Study would identify impacts that would result if the Generating Facility were interconnected “without project modifications or system modifications,” MISO states that this additional language provides certainty to the other planning processes with MISO.²⁰⁸ According to MISO, because a GIA triggers a generator’s inclusion in several MISO planning processes going forward, adding this language would help provide certainty to the other planning processes that MISO performs and thus ensure that the results of those studies are also kept at a high degree of accuracy. MISO asserts that, while not allowing a project that decides to pursue the provisional GIA path to take advantage of some of the benefits included in the proposed reform package (e.g., MW size reduction) might appear unreasonable, the impact of modification after a GIA can have harmful impacts to others outside of the queue process. AWEA/WOW answer that they do not request to alter a provisional GIA once it has been executed; they request only that an interconnection customer be allowed to modify its initial interconnection request when it makes sense to do so given initial discussions with MISO and the transmission owner at the outset of the interconnection process.²⁰⁹

122. Invenenergy contends that MISO offers no support for its belief that provisional GIAs are “most effective” early in the DPP.²¹⁰ Invenenergy requests that the Commission direct MISO to make provisional GIAs available to developers throughout the DPP.²¹¹

d. Commission Determination

123. We accept MISO’s alterations to the availability of a provisional GIA, subject to condition, as discussed below.

124. We direct MISO to make the provisional GIA option available at any time in the interconnection process up to and including at Decision Point II, regardless of whether

²⁰⁷ *Id.* (citing Guidance Order, 154 FERC ¶ 61,247 at P 116).

²⁰⁸ *Id.* at 27.

²⁰⁹ AWEA/WOW Answer at 6-7.

²¹⁰ Invenenergy Answer at 6.

²¹¹ *Id.* at 7.

MISO has failed to meet its timelines, and at Decision Point III when there are significant delays in the interconnection process. While the Commission stated in the Guidance Order that “any marginal time savings for a customer who requested a provisional GIA at Decision Point II is more than offset by the cost to MISO to process the studies for the provisional GIA,”²¹² the extended timelines associated with the current proposal make the time savings a customer may experience more significant. We believe that extending the time in which a customer may obtain a provisional GIA to include Phase II of the DPP strikes a reasonable balance between allowing the customer to make use of the provisional GIA option where it is most useful, and at the same time, not imposing a processing burden on MISO within a short timeframe of the standard GIA process. We agree with AWEA/WOW that a customer may need a GIA before the interconnection process is complete due to a power purchase agreement with rigid timing requirements, the need to meet seasonal construction schedules, the need to meet PTC requirements, or any another business reason to move forward quickly on short notice. We also note that the issue of provisional GIA availability is currently being considered by the Commission in Docket No. RM17-8-000.²¹³

125. The only detailed information MISO provides in its Tariff regarding the Provisional Interconnection Study is the definition of Provisional Interconnection Study. However, similar required studies in the GIP, such as the System Impact Study and Facilities Study, as well as the Optional Interconnection Study, include both definitions and a detailed description of the scope of the studies.²¹⁴ MISO states that “the process for performing the Provisional Interconnection Study is identified in the Business Practice Manual on Generator Interconnections and is intended to be largely the same as under the current process.”²¹⁵ MISO also states that the Provisional Interconnection Studies are intended to replace one primary use of the Optional Interconnection Study. Because the Provisional Interconnection Study replaces the Optional Interconnection Study in

²¹² MISO Answer at 26 (citing Guidance Order, 154 FERC ¶ 61,247 at P 116).

²¹³ Generator Interconnection NOPR, 157 FERC ¶ 61,212 at PP 181-190.

²¹⁴ Definitions for Interconnection System Impact Study, Interconnection Facilities Study, and Optional Interconnection Study are in section 1 of the GIP. Specific details regarding the scope and procedures for the Optional Interconnection Study are in section 10 of the GIP. Specific details regarding the scope and procedures for the Interconnection Facilities Study are in sections 7.3.2.5, 7.3.3.4, and 7.3.3.5 of the GIP. Specific details regarding the scope of the System Impact Studies are in sections 7.3.1.3, 7.3.2.3, and 7.3.3.3 of the GIP.

²¹⁵ Filing, Aliff Testimony at 47.

Appendix H of the *pro forma* GIA as a requirement to receive a provisional GIA, and because the scope and procedures of the Optional Interconnection Study as well as other required studies are in the GIP, we direct MISO, in its compliance filing to be submitted within 60 days from the date of this order, to include in the Tariff a similar level of information regarding the scope and procedures for performing the Provisional Interconnection Study as it does for the Optional Interconnection Study, the System Impact Study, and the Facilities Study.

126. With regard to the provisions surrounding true-up procedures for the M3 and M4 milestone payments in section 7.9.1 of the GIP, there appears to be a discrepancy between the Tariff record and MISO's description in the Aliff Testimony. The process for seeking a provisional GIA requires interconnection customers to submit the M3 and M4 milestone payments (\$4000/MW each) upfront.²¹⁶ The testimony states that, as the project progresses through the DPP, more accurate estimates of the M3 and M4 milestone payments will become available and MISO will true up the initial estimated payments to the revised values, by either refunding the difference or requiring an additional payment at the appropriate time based on the GIP.²¹⁷ However, the Tariff record at section 7.9.1 of the GIP does not include language requiring MISO to provide refunds if the initial estimated payments were more than the revised values. The Tariff only includes the requirement that interconnection customers pay any difference between the M3 and M4 milestone payments previously paid and the actually calculated values. We direct MISO, in its compliance filing to be submitted within 60 days from the date of this order, to revise this section of the Tariff to include the requirement that MISO refund the difference between the initial estimated M3 and M4 milestone payments and the actually calculated M3 and M4 milestone payments, if the initial estimated payments are greater than the calculated amounts.

127. Finally, we disagree with AWEA/WOW that MISO has not sufficiently justified inclusion of the phrase "without project modifications or system modifications" in its proposed definition of Provisional Interconnection Study. MISO states that this language was added to help provide certainty to the other MISO planning processes that would be affected by the provisional GIA. We agree with MISO that increased certainty regarding affected planning processes is beneficial, and any diminished flexibility resulting from the language is offset by the added benefits provided by more accurate study results.

²¹⁶ Section 7.9.1 of the GIP.

²¹⁷ Filing, Aliff Testimony at 47 (emphasis added).

9. Restudy Provisions

a. Filing

128. Articles 11.3.1 and 11.3.2 in the *pro forma* GIA describe the circumstances under which MISO will perform restudies on customers with executed GIAs. In Article 11.3.1, MISO lists a set of contingencies, which in essence are restudy “triggers” such that if any of the contingencies occur, a restudy may be required pursuant to article 11.3.2.

Currently, under article 11.3.2, the interconnection customer must be restudied if, at any time before the network upgrades associated with higher queued projects are completed, MISO determines restudy is required because one of the contingencies in article 11.3.1 occurred.

129. Under MISO’s new proposal, article 11.3.2 in the *pro forma* GIA first is renamed from “Agreement to Restudy” to “Cost Reallocation.” MISO’s proposed article 11.3.2 requires that, instead of conducting a restudy upon the occurrence of a contingency described in article 11.3.1, MISO will reevaluate the need for any common use or shared network upgrades associated with the project. If the results of the reevaluation indicate that the upgrade is still required notwithstanding the contingency that has triggered article 11.3.1, upgrade costs will be reallocated among the remaining projects that require the upgrade(s) in question. Finally, MISO has in essence deleted the existing provisions in article 11.3.2 that require customers to agree to be restudied, should MISO determine a restudy is required. However, MISO states in the transmittal letter that restudies are preserved and may be performed as needed to ensure that reliability is maintained.²¹⁸

b. Protests

130. Generation Developers argue that there should be no restudies after a GIA is executed.²¹⁹ They go on to state that a developer will be entering into numerous commercial arrangements once it has a GIA, including for financing, procurement of generation and interconnection facilities equipment and perhaps entering into a long-term power purchase agreement. They further state that a restudy allowed after the GIA is executed effectively exposes the developer to financial and commercial risk that it has no means to hedge. Generation Developers provide, as an attachment to their comments, a proposal made during the stakeholder process by Entergy. In this proposal, Entergy suggests that as part of the GIA, MISO would include a formula that would allow a simple calculation to reassign network upgrade costs after an interconnection customer

²¹⁸ Filing, Transmittal Letter at 27.

²¹⁹ Generation Developers Protest at 27.

withdraws. Generation Developers further request that MISO include in the System Impact Study results a table of network upgrades and a formula for re-determining cost assignment, outlining each interconnection customer's cost responsibility for each network upgrade under a variety of withdrawal scenarios.²²⁰ Finally, Generation Developers argue that, under this type of proposal, there would be no unacceptable cost shifts and no violations of the Commission's "but for" pricing policy.²²¹

c. MISO Answer

131. MISO states that the proposed new section 11.3.2 addresses the concerns of the Generation Developers.²²² MISO adds that its proposal to reallocate costs of common use and shared network upgrades is similar to the Entergy proposal discussed by the Generation Developers. MISO finally states that it is willing to have further discussions in the stakeholder process to help resolve cost shift issues, but to date, an effective way of handling these costs shifts has not been proposed, including the protesters' comments.

d. Commission Determination

132. We accept MISO's proposed revision of section 11.3.2, subject to condition. We recognize MISO's effort to limit restudies of customers with GIAs arising from withdrawals of projects participating in common use and shared network upgrades. However, MISO has not maintained the existing language regarding restudies related to other types of upgrades or contingencies and has not explained why such existing language is no longer necessary. We therefore require MISO, in its compliance filing to be submitted within 60 days of the date of this order, to (1) clarify what specific events (e.g., higher-queued withdrawals) might trigger a restudy, and (2) insert language to section 11.3.2 that allows MISO to conduct restudies, as it deems appropriate, even if a specified event would otherwise trigger a restudy. Furthermore, we disagree with Generation Developers that restudies should not be performed after the GIA stage. The Commission rejected MISO's request to waive the restudy provisions in existing GIAs in the Guidance Order as inconsistent with Commission precedent.²²³

²²⁰ *Id.*, Attachment A at 3-5.

²²¹ *Id.* at 29.

²²² MISO Answer at 28.

²²³ Guidance Order, 154 FERC ¶ 61,247 at P 102.

10. External NRIS

a. Filing

133. MISO states that Appendix 1 to the GIP now includes External NRIS as a specific interconnection service, and that conforming revisions with respect to interconnection studies have also been included.²²⁴ MISO further states that Appendix 13 contains the recently accepted *pro forma* Service Agreement for Network Resource Interconnection Service for External Generating Facilities, but that the Commission established certain compliance obligations affecting the service agreement, which are pending before the Commission in Docket No. ER16-1817-001 *et al.*²²⁵ To the extent that changes to the service agreement or any other provisions of the Tariff relating to External NRIS and NRIS-only are required, MISO states that those changes will be filed in a compliance filing as directed by the External NRIS Order.

b. Commission Determination

134. We note that MISO's proposed External NRIS Tariff provisions have also been proposed on compliance with the External NRIS Order in Docket No. ER16-1817-001. We address these Tariff revisions in a concurrent order issued in that docket.²²⁶

11. Miscellaneous

135. AWEA/WOW state that MISO should be encouraged to conduct, as part of the Transmission Service Requests process, the same analyses conducted in the DPP (such as thermal off-peak, voltage, and stability studies for both on- and off-peak scenarios) so that MISO can streamline queue processing, ensure that cost-shifting has not occurred, and prevent late-stage withdrawals of otherwise viable projects due to unforeseen upgrade costs resulting from insufficiently studied Transmission Service Requests that

²²⁴ Filing, Transmittal Letter at 27.

²²⁵ *Id.* at 28 (citing *Internal MISO Generation v. Midcontinent Indep. Sys. Operator, Inc.* 157 FERC ¶ 61,021, at P 81 (2016) (External NRIS Order)).

²²⁶ *Midcontinent Indep. Sys. Operator, Inc.*, 158 FERC ¶ 61,004 (2016).

become inserted in DPP models.²²⁷ We agree with MISO that AWEA/WOW's request and MISO's Transmission Service Request process are outside the scope of this queue reform proceeding.²²⁸

136. Great River Energy generally supports MISO's Filing, but disagrees with the traditional modeling assumptions in Attachment X, Appendix 10 (Interconnection Study Model Review Form) given the changing generation resource mix.²²⁹ Great River Energy states that specific dispatch and other detailed assumptions should be removed from the Filing, because generator modeling assumptions are better addressed through the compliance requirements in the NERC Standards and local planning criteria. We find that changes to MISO's dispatch and modeling procedures are outside the scope of this proceeding, but note that MISO indicated in its answer that MISO is currently addressing these issues in its Interconnection Process Task Force.²³⁰

137. Generation Developers state that MISO should clarify that its revised GIP applies to External NRIS.²³¹ They further ask the Commission to direct MISO to confirm that the revisions it proposes here are the only means by which external generation will be studied to inject power onto the MISO grid, and that there is no loophole for external generation to utilize transmission service. Generation Developers state that this is necessary so that external generation may not avoid the milestone payments and be accounted for in the base case DPP that MISO prepares without network upgrade cost responsibility to mitigate the impacts and constraints it causes, which in turn will shift network upgrade cost responsibility to all other impacted interconnection customers in the applicable DPP.²³² We find that the proposed revisions clearly apply the new GIP to External NRIS. Furthermore, we find that MISO's Transmission Service Request process is outside the scope of this queue reform proceeding.

²²⁷ AWEA/WOW Protest at 10-11.

²²⁸ See MISO Answer at 33-34.

²²⁹ Great River Energy Comments at 3-6.

²³⁰ MISO Answer at 33.

²³¹ Generation Developers Protest at 38.

²³² *Id.* at 38-39.

138. Finally, we note that MISO references section 6.6 of the GIP in several places while discussing withdrawal. However, these references should be to section 3.6. We direct MISO, in its compliance filing due within 60 days from the date of this order, to make this change.

The Commission orders:

(A) MISO's proposed Tariff revisions are hereby accepted, subject to condition, to be effective January 4, 2017, as discussed in the body of this order.

(B) MISO is hereby directed to submit a compliance filing within 60 days of the issuance of this order, as discussed in the body of this order.

(C) MISO is hereby directed to submit semi-annual informational reports for a period of two years describing the number and types of customers that experience changes in cost estimates for network upgrades greater than 25 percent over the course of the DPP, as discussed in the body of this order.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.