

145 FERC ¶ 61,260
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Cheryl A. LaFleur, Acting Chairman;
Philip D. Moeller, John R. Norris,
and Tony Clark.

Midwest Independent Transmission
System Operator, Inc.

Docket No. ER12-309-005

ORDER CONDITIONALLY ACCEPTING COMPLIANCE FILING

(Issued December 19, 2013)

1. On September 26, 2012, the Midwest Independent Transmission System Operator, Inc. (MISO)¹ submitted a filing (Compliance Filing) to comply with the requirements of an order issued on March 30, 2012² concerning MISO's proposed revisions to the Generator Interconnection Procedures (GIP) in Attachment X of its Open Access Transmission, Energy and Operating Reserve Markets Tariff (Tariff). The March 30 Order, among other things, conditionally accepted MISO's proposal to implement a new class of Energy Resource Interconnection Service called Net Zero Interconnection Service,³ which allows a new generating facility to share the interconnection capacity of

¹ Effective April 26, 2013, MISO changed its name from "Midwest Independent Transmission System Operator, Inc." to "Midcontinent Independent System Operator, Inc."

² *Midwest Indep. Transmission Sys. Operator, Inc.*, 138 FERC ¶ 61,233 (2012) (March 30 Order).

³ *Id.* P 30 and P 253 & n.323. Net Zero Interconnection Service allows an interconnection customer to use interconnection capacity at an existing point of interconnection when that capacity is not being fully utilized by an existing generator. Under MISO's proposal, the existing generator and the new generator would work out a way to control the combined output of their combined units so that the total amount of combined output would not exceed the capacity limit of the existing generator at the interconnection point. According to MISO, with the output controlled, the net effect on output seen by the system would remain unchanged, thus the name of the interconnection service, "net zero."

an existing generating facility at the same point of interconnection.⁴ As discussed below, we conditionally accept MISO's Compliance Filing, subject to a further compliance filing due within 45 days of the issuance of this order.

I. Background

A. History of Interconnection Queue Issues

2. In Order No. 2003,⁵ 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.

3. In 2008, the Commission held a technical conference on interconnection queuing practices and queue-related issues that emerged after the issuance of Order No. 2003. This resulted in an order directing Regional Transmission Organizations (RTO) and Independent System Operators (ISO), including MISO, to develop and propose their own solutions to issues related to delays and backlogs in processing queues.⁶

4. In response to this directive, MISO proposed, and the Commission largely accepted, revisions to Attachment X of the Tariff to reform MISO's interconnection queue, subject to annual informational reports.⁷ These revisions modified MISO's GIP to limit delays caused by inactive projects in the queue. Significantly, 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 is making towards commercial operation, essentially a "first-ready, first-served"

⁴ *Id.* P 30.

⁵ *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).

⁶ *Interconnection Queuing Practices*, 122 FERC ¶ 61,252, at PP 8-9 (2008) (Conference Order).

⁷ *Midwest Indep. Transmission Sys. Operator, Inc.*, 124 FERC ¶ 61,183 (2008) (Queue Reform Order), *order on reh'g*, 127 FERC ¶ 61,294 (2009).

approach. MISO proposed further reforms in 2009, which are described in the March 30 Order.⁸

B. Initial Net Zero Interconnection Service Proposal

5. On November 1, 2011, MISO submitted a filing⁹ under section 205 of the Federal Power Act (FPA)¹⁰ instituting a third phase of interconnection queue reform and, as relevant here, proposing a new sub-class of Energy Resource Interconnection Service called Net Zero Interconnection Service.¹¹ As noted above, Net Zero Interconnection Service allows an interconnection customer to use interconnection capacity at an existing point of interconnection when that capacity is not being fully utilized by an existing generator. MISO proposed that an Energy Displacement Agreement and a Monitoring and Consent Agreement would govern the terms and conditions of Net Zero Interconnection Service. Under MISO's proposal, an interconnection customer seeking Net Zero Interconnection Service (Net Zero customer) would be required to enter into an Energy Displacement Agreement with the owner of the existing generating facility prior to submitting a request for Net Zero Interconnection Service if the customer is not the owner or subsidiary of the existing generator.¹² Additionally, under MISO's proposal, the Net Zero customer must also include a memorandum of understanding with the Local Balancing Authority and/or Transmission Owner to enter into a Monitoring and Consent Agreement upon execution of a Generator Interconnection Agreement (GIA) in its request for Net Zero Interconnection Service. MISO further explained that when the existing generating facility ceases to exist, the GIA for Net Zero Interconnection Service would terminate by its own terms because the Energy Displacement Agreement with the

⁸ March 30 Order, 138 FERC ¶ 61,233 at P 9.

⁹ MISO November 1, 2011 filing proposing revisions to MISO Tariff Attachment X (GIP), Docket No. ER12-309-000 (November 2011 Filing). The November 2011 Filing was supplemented on January 30, 2012 and February 9, 2012.

¹⁰ 16 U.S.C. § 824d (2012).

¹¹ This proposal was submitted as part of a larger queue reform effort to reduce backlogs in MISO's generator interconnection queue. *See generally* March 30 Order, 138 FERC ¶ 61,233 at PP 9-16.

¹² *See* November 2011 Filing at proposed revised Tariff section 3.3.1 and Laverty Test. at 37-38.

existing generating facility would terminate when that generating facility ceases to exist.¹³

6. MISO asserted that Net Zero Interconnection Service is consistent with Order No. 2003 because it enables existing generators to better use their existing rights to capacity on the transmission system.¹⁴ In support of its proposal, MISO stated that the Commission previously approved the creation of conditional Energy Resource Interconnection Service and conditional Network Resource Interconnection Service as a means to enhance the use of existing system capacity.¹⁵

C. March 30 Order

7. On March 30, 2012, the Commission conditionally accepted MISO's proposed Net Zero Interconnection Service because, as modified by the March 30 Order, "it has the potential to foster the efficient use of the transmission system."¹⁶ While the Commission recognized the benefits of this service, it also expressed three main categories of concerns with MISO's proposed implementation: (1) lack of studies of existing resources during off-peak hours; (2) competitive implications; and (3) transparency.¹⁷ First, the Commission required MISO to explain in detail in its Tariff how it will address Net Zero projects that would interconnect at the same point as existing generators that were not studied under off-peak conditions.¹⁸ Second, the Commission expressed concern about the potential competitive implications of the way MISO proposed to implement this service, and directed MISO to provide Net Zero Interconnection Service in a manner that is just and reasonable and not unduly discriminatory or preferential.¹⁹ Third, the Commission found MISO's proposal did not provide a clear and consistent way for notifying potential Net Zero customers of Net Zero opportunities or describing the selection process, nor did MISO require the filing of rates (compensation), terms and

¹³ November 2011 Filing at n.57.

¹⁴ *Id.* at Transmittal Letter at 6 and Lavery Test. at 37.

¹⁵ *Id.* at Transmittal Letter at 6 (citing *Midwest Indep. Transmission Sys. Operator, Inc.*, 116 FERC ¶ 61,306, at PP 2-3, 29-32 (2006)).

¹⁶ March 30 Order, 138 FERC ¶ 61,233 at P 30.

¹⁷ *Id.* PP 298-302.

¹⁸ *Id.* P 298.

¹⁹ *Id.* P 300.

conditions of this service.²⁰ Therefore, the Commission directed MISO to submit a compliance filing addressing these concerns.²¹ On September 26, 2012, MISO submitted the Compliance Filing, which is the focus of this proceeding and is discussed in detail below.

II. Notice and Responsive Pleadings

8. Notice of the Compliance Filing was published in the *Federal Register*, 77 Fed. Reg. 60,975 (2012), with interventions or protests due on or before October 17, 2012.

9. Great River Energy filed a timely motion to intervene. Comments were filed by Xcel Energy Services Inc. (Xcel), E.ON Climate & Renewables North America, LLC (E.ON), Wind on the Wires (WOW), and Geronimo Wind Energy (Geronimo).

III. Discussion

A. Procedural Matters

10. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2013), the timely, unopposed motion to intervene filed by Great River Energy serves to make it a party to this proceeding.²²

B. Standard of Review

11. The Commission assesses a non-RTO or non-ISO Transmission Provider request to deviate from the standard generator interconnection procedures outlined in Order No. 2003 under the "consistent with or superior to" rationale.²³ However, the Commission applies an "independent entity" standard to evaluate RTOs' and ISOs' proposed revisions

²⁰ *Id.* P 301.

²¹ *Id.* P 302.

²² We note that commenters intervened at an earlier stage of this proceeding and are parties to this case.

²³ Order No. 2003, FERC Stats. & Regs. ¶ 31,146 at P 826. This is the same standard the Commission uses to assess variations from the Open Access Transmission Tariff. *Id.* If, however, the proposed variation is in response to established reliability requirements, a Transmission Provider may seek to justify its variation via the regional difference rationale. *Id.*

to these standard generator interconnection procedures.²⁴ Under this standard, RTOs and ISOs are entitled to more flexibility than non-independent entities to deviate from the *pro forma* interconnection procedures. This is primarily because RTOs and ISOs do not have affiliated generation and, thus, are less likely than non-independent entities to favor one generator over another. 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. 2003.²⁵

C. Substantive Matters

12. As explained below, we conditionally accept MISO's Compliance Filing, subject to further compliance due within 45 days of issuance of this order, because, as modified, it satisfies the independent entity standard.

1. Ensuring That Net Zero Interconnection Service Is Offered on a Transparent and Non-Discriminatory Basis

a. November 2011 Filing

13. In its November 2011 Filing, MISO proposed Tariff revisions to allow the interconnection of a new generator (i.e., the Net Zero customer), with the consent of the existing generator, at the same point of interconnection, such that their combined net output remains the same.²⁶ This new service would essentially facilitate the allocation of an existing interconnection customer's unused interconnection capacity to the new generator, providing an alternative to the GIP in Attachment X to the MISO Tariff. Furthermore, as noted in paragraph 5 above, MISO proposed that the terms and conditions of this Net Zero Interconnection Service would be governed by an Energy Displacement Agreement and a Monitoring and Consent Agreement. MISO stated that a Net Zero customer that is not the owner or a subsidiary of the owner of the existing generating facility would be required to execute an Energy Displacement Agreement with the owner of the existing generating facility before submitting a request for Net Zero Interconnection Service. Additionally, MISO required the Net Zero customer to include with its request for Net Zero Interconnection Service a memorandum of understanding

²⁴ *Id.* PP 822-827; Order No. 2003-A, FERC Stats. & Regs. ¶ 31,160 at P 759. *See also* Queue Reform Order, 124 FERC ¶ 61,183 at P 31; Conference Order, 122 FERC ¶ 61,252 at P 13.

²⁵ Conference Order, 122 FERC ¶ 61,252 at P 13, n.10.

²⁶ November 2011 Filing, Transmittal Letter at 5.

with the Transmission Owner to enter into a Monitoring and Consent Agreement upon execution of a GIA.

b. March 30 Order

14. In the March 30 Order, the Commission found that Net Zero Interconnection Service would promote more efficient use of existing interconnection capacity by allowing a Net Zero customer to use interconnection capacity at an existing point of interconnection when that capacity is not being fully utilized by an existing generator.²⁷ The Commission noted that Net Zero Interconnection Service would “increase energy supply and lower wholesale prices for customers by increasing the number and variety of new generation that will compete in the wholesale electricity market,” in accordance with the goals of Order No. 2003.²⁸

15. While the Commission recognized these benefits, it shared some of the concerns raised by protesters. The Commission recognized the possibility that a Net Zero customer could share a point of interconnection with an existing generator that was not studied under the same conditions under which the Net Zero customer would operate. For example, if a Net Zero customer were a wind generator, it would likely operate in off-peak hours, and the fact that the existing generator was not studied under those off-peak conditions could prove problematic. Therefore, on compliance, the Commission required MISO to provide Tariff language detailing how it would address Net Zero customers interconnecting with existing generators that were not studied under off-peak conditions.²⁹

16. The Commission also noted potential competitive implications based on the manner in which MISO proposed to implement Net Zero Interconnection Service. In particular, the Commission found that MISO’s proposal created opportunities for undue discrimination and preferential treatment.³⁰ Under MISO’s November 2011 proposal, prior to submitting a request for Net Zero Interconnection Service to MISO, the Net Zero customer must have entered into a memorandum of understanding with the relevant Transmission Owner to enter into a Monitoring and Consent Agreement upon execution

²⁷ March 30 Order, 138 FERC ¶ 61,233 at PP 294-295.

²⁸ *Id.* P 294 & n.377 (citing Order No. 2003, FERC Stats. & Regs. ¶ 31,146 at P 1).

²⁹ *Id.* P 298.

³⁰ *Id.* P 299.

of a GIA.³¹ Further, MISO's proposal stated that if the Net Zero customer seeking Net Zero Interconnection Service was not the owner or a subsidiary of the owner of the existing generator at the point of interconnection, then that potential Net Zero customer must enter into an Energy Displacement Agreement with the owner of the existing generator.³² The requirement to enter into an Energy Displacement Agreement, however, did not apply to affiliates. The Commission found that these features of MISO's proposal gave an existing generator and Transmission Owner the ability to pick and choose among potential interconnection customers, granting access to Net Zero Interconnection Service to some customers and not to others.³³ While MISO argued that an existing generator must have business discretion to choose which interconnection customer to pair with at a shared point of interconnection, the Commission stated that "once an existing generator decides to [enter into a Net Zero arrangement], that service must be provided in a manner that is just and reasonable and not unduly discriminatory or preferential."³⁴ The Commission found that the manner in which MISO proposed to implement Net Zero Interconnection Service did not meet that standard.³⁵

17. In addition to highlighting the competitive implications raised by the November 2011 Filing, the Commission also expressed concern regarding the lack of transparency in MISO's proposal. First, the Commission stated that MISO's proposal failed to provide a clear and consistent way in which a potential Net Zero generator could identify opportunities for Net Zero Interconnection Service or how such a generator would be chosen for such service.³⁶ Additionally, the Commission observed that MISO proposed to leave many of the rates, terms, and conditions of obtaining Net Zero Interconnection Service to the individual agreement of the parties and did not propose to require the filing of these agreements with the Commission. MISO asserted that any compensation that an existing generator receives as a result of Net Zero Interconnection Service should simply be left to the parties, and MISO did not propose to require disclosure of the compensation paid for this service.³⁷ Further, MISO did not expect Energy Displacement Agreements

³¹ *Id.*

³² *Id.*

³³ *Id.*

³⁴ *Id.* P 300.

³⁵ *Id.*

³⁶ *Id.* P 301.

³⁷ *Id.*

and Monitoring and Consent Agreements to be filed with the Commission.³⁸ The Commission reminded MISO, however, that the Commission previously “identified interconnection as an element of transmission service and, as a result, rates, terms and conditions of such service must be filed with the Commission under section 205 of the FPA.”³⁹

18. Accordingly, to address these competitive implications and lack of transparency concerns, the Commission ordered MISO to revise its Tariff “to implement additional procedures that ensure that Net Zero Interconnection Service is offered on a fair, transparent, and nondiscriminatory basis and that comply with the filing requirements of FPA section 205.”⁴⁰ While the Commission gave MISO flexibility to develop a workable approach to address these concerns, the Commission nevertheless emphasized that it expected MISO to “be informed by prior Commission efforts to promote open access and eliminate undue discrimination in other contexts.”⁴¹ The Commission identified several of these efforts where it had imposed various standards and safeguards against preferential treatment and non-transparent procedures, specifically in the context of standardizing interconnection procedures by requiring the filing of *pro forma* interconnection documents, reassigning firm point-to-point transmission capacity,⁴² releasing firm capacity on natural gas pipelines,⁴³ and authorizing market-based rate authority.⁴⁴ The Commission did not, however, prescribe exactly what sort of process it expected MISO to develop, given these past efforts.

³⁸ *Id.*

³⁹ *Id.*

⁴⁰ *Id.* P 302.

⁴¹ *Id.*

⁴² *Id.* P 303 (citing *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890, FERC Stats. & Regs. ¶ 31,241, at PP 815-818 (2007)).

⁴³ *Id.* P 204 (citing *Pipeline Service Obligations and Revisions to Regulations Governing Self-Implementing Transportation; and Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol*, Order No. 636, FERC Stats. & Regs. ¶ 30,939 (1992)).

⁴⁴ *Id.* PP 303-305.

c. **Compliance Filing**

19. MISO proposes several revisions to comply with the Commission's directive to offer Net Zero Interconnection Service on a fair, transparent, and non-discriminatory basis. MISO adds proposed section 3.3.1.1 to the GIP, which enumerates additional requirements for a Net Zero Interconnection Service request. These additional requirements include the following:

- (1) Existing generators seeking a Net Zero customer must post on MISO's website the name of this existing generating facility, the state and county of the existing generating facility, and a valid e-mail address and phone number to contact the representative of the existing generating facility.⁴⁵
- (2) The System Impact Study performed for the existing generator must be submitted with a Net Zero Interconnection Service request.
- (3) An executed Energy Displacement Agreement must be submitted with a Net Zero Interconnection Service request if the Net Zero customer is not affiliated with the existing generator.
- (4) An executed Monitoring and Consent Agreement must be submitted with a Net Zero Interconnection Service request.
- (5) If either the Energy Displacement Agreement or the Monitoring and Consent Agreement is no longer in effect before the GIA is executed, the request for Net Zero Interconnection Service shall be deemed to have been withdrawn.

20. MISO also proposes to add *pro forma* Monitoring and Consent Agreement and Energy Displacement Agreement documents in GIP Appendices 11 and 12, respectively. In the transmittal letter to the Compliance Filing, MISO notes that these two agreements may be filed either as stand-alone documents with the Commission or in the Electric Quarterly Report (EQR).⁴⁶

⁴⁵ This requirement does not apply, however, "to Interconnection Requests for which a GIA has been executed with an effective date prior to the effective date granted by the Commission for the revisions to the GIP filed in Docket No. ER12-309 (January 1, 2012)." In the transmittal letter to its Compliance Filing, MISO states that this requirement thus would not apply to the Prairie Rose GIA conditionally accepted in Docket No. ER12-188. Compliance Filing, Transmittal Letter at 3.

⁴⁶ *Id.*, Transmittal Letter at 3-4.

21. Additionally, in Appendix I to the GIP in the Tariff, MISO proposes to require the Net Zero customer to submit a monthly report to MISO showing the prior month's output (in 15 minute increments), as well as the combined (existing generating facility and Net Zero generating facility) real-time offers (in MW) and cleared energy injection. Appendix I also provides what will transpire if the interconnection service limit is exceeded. Specifically, under Appendix I, MISO reserves the right to curtail and/or disconnect the Net Zero generator if the sum of the simultaneous energy output of the existing and new generating facilities or the sum of the emergency and/or economic maximum offer limits of the facilities exceeds the existing generator's interconnection service limit.

d. Comments

22. In general, all commenters – E.ON, Geronimo, WOW and Xcel – support the policy of Net Zero Interconnection Service. Additionally, E.ON, Geronimo and Xcel express concern and request clarification about certain specific aspects of the policy as proposed by MISO.

23. Specifically, WOW asserts that MISO's filing provides a consistent, more efficient and less contentious process for implementing MISO's Net Zero Interconnection Service policy.⁴⁷ WOW states that Net Zero Interconnection Service fosters more efficient use of available capacity on the transmission system and helps accommodate increased development of wind and other generation until transmission upgrades can be built.⁴⁸ WOW adds that the *pro forma* Energy Displacement Agreement and Monitoring and Consent Agreement will help ensure that Net Zero customers are treated equitably. It also points out that transparency is improved by requiring the posting of Net Zero Interconnection Service opportunities as well as reporting the combined output of the existing generator and Net Zero customer.⁴⁹

24. E.ON, however, requests additional information on the competitive process surrounding the selection of a Net Zero customer. While acknowledging that MISO developed certain provisions in its Compliance Filing to address concerns for transparency and preferential treatment, E.ON nevertheless requests further detail on how MISO proposes to implement these provisions, such as: (1) what process will take place once MISO posts that an existing generating customer is willing to entertain a "suitable proposal," i.e., will any market participant have the opportunity to respond and, if so,

⁴⁷ WOW Comments at 4.

⁴⁸ *Id.* at 5.

⁴⁹ *Id.* at 4.

how much time will be provided for the response and what detail must be provided in any response; (2) what criteria will be applied to determine how a generator will be selected as a Net Zero customer among all interested respondents; and (3) whether MISO or the existing generating customer will choose the winning applicant.⁵⁰ E.ON also states that transparency could be improved by the following features: (1) knowing what safeguards, consistent with Commission precedent, will be in place to ensure that an existing generating customer does not unduly prefer its affiliate for Net Zero Interconnection Service at its site; and (2) clarifying how this process ensures that Net Zero Interconnection Service is not offered to some customers and not to others.⁵¹

25. In addition, commenters express concerns regarding MISO's proposed procedures for addressing what happens in the event that the interconnection service limit is exceeded. Under MISO's proposed Tariff revisions, if the interconnection service limit is exceeded, MISO requires immediate curtailment and the development of an "action plan" that must be approved by the Transmission Provider, Transmission Owner and/or applicable Local Balancing Authority.⁵² E.ON asks the Commission to direct MISO to clarify what must be included in this action plan.⁵³ E.ON also requests further information regarding the ramifications associated with exceeding the interconnection service limit, such as whether penalties will be assessed, and, if so, whether penalties would be assessed to the existing generator or to the Net Zero customer.⁵⁴

26. Xcel recommends removal of the provision giving MISO the option to curtail a Net Zero customer if the sum of the Net Zero customer's and existing generating facility's maximum *offers* (in MW) exceed the existing generating facility's interconnection service limit.⁵⁵ While Xcel agrees that MISO should have the option to curtail if the interconnection service *limit* is exceeded,⁵⁶ Xcel states that limiting *offers* (MW) in real time is unnecessary and unduly burdensome because it would be difficult

⁵⁰ E.ON Comments at 3 (footnote omitted).

⁵¹ *Id.* (footnote omitted).

⁵² *See* MISO Tariff, Attachment X (GIP), Appendix 11 (proposed Monitoring and Consent Agreement).

⁵³ E.ON Comments at 1-2.

⁵⁴ *Id.* at 2.

⁵⁵ Xcel Comments at 3.

⁵⁶ *Id.* at 3-4

for the Net Zero customer and existing generating facility to coordinate offers in real time.⁵⁷ Xcel also notes that in Appendix I, MISO reserves the right to curtail if the interconnection service *limit* is exceeded, but the Monitoring and Consent Agreement states that the Net Zero customer must curtail immediately.⁵⁸ Xcel supports the approach whereby MISO retains the right to curtail if the *limit* is exceeded, but is not obligated to do so, thus giving MISO discretion and the opportunity to investigate the cause of the interconnection service being exceeded.⁵⁹

27. Similarly, Geronimo argues that allowing the existing generator to terminate an Energy Displacement Agreement due to exceeding the interconnection service limit, even if the Tariff violation (i.e., exceeding the interconnection service limit) is caused by events outside of the Net Zero customer's control, is tantamount to terminating the GIA.⁶⁰ Geronimo asserts that, if the existing generator, rather than the Net Zero customer, were responsible for exceeding the interconnection service limit, termination at the will of the existing generator could be considered unduly discriminatory.⁶¹ Geronimo contends that this potential outcome is especially objectionable if, under the Energy Displacement Agreement, the existing generating facility is responsible for coordinating the combined output of its generation and the Net Zero customer's generation.⁶² Geronimo asserts that Appendix I and other Tariff provisions appropriately address

⁵⁷ *Id.* at 3.

⁵⁸ *Id.* at 4.

⁵⁹ *Id.*

⁶⁰ Geronimo Comments at 3-5 (citing section 2.3.1.1 of the GIA). Geronimo also argues that the Energy Displacement Agreement's definition of "reliability service limit violation" is vague in that "it does not specify the integration period over which the flow at the point of interconnection is to be measured during the fifteen-minute interval..." *Id.* at 3. Further, Geronimo states that the term "Interconnection Customer reliability service limit violation," which is not defined in the agreement, should be clarified if it is intended to mean a reliability service limit violation caused by the Interconnection Customer.

⁶¹ *Id.* at 4 (citing FPA § 205, 16 U.S.C. § 824d(b)).

⁶² *Id.* (citing *Cal. Indep. Sys. Operator Corp.*, 109 FERC ¶ 61,006 (2004) (directing the elimination of penalties assessed due to actions outside the control of the penalized party)).

potential remedies if such a violation occurs.⁶³ In addition, Geronimo states that other Tariff sections address penalties in the case of repeat violations.⁶⁴ Pointing out that the Tariff already provides remedies for such violations, Geronimo asks the Commission to require MISO to justify why these existing remedies are not sufficient to address this type of Net Zero Interconnection Service violations.⁶⁵ Ultimately, Geronimo requests deletion of the provision in the Energy Displacement Agreement that broadly allows the existing generating facility to terminate the Energy Displacement Agreement unilaterally.⁶⁶ In the alternative, Geronimo asks the Commission to clarify the provision so that it applies only to events caused by the Net Zero customer and to allow the Net Zero customer to cure in a way substantially similar to other interconnection customers.⁶⁷

28. Finally, Xcel and Geronimo both object to the proposed reporting requirements as overly burdensome.⁶⁸ While acknowledging the importance of operating within the proper interconnection capacity limits, they argue that MISO already has the information necessary to satisfy the reporting requirement and insist that MISO could instead monitor this information itself.⁶⁹

⁶³ See Geronimo Comments at 5 (noting that Appendix I to the GIP authorizes MISO to curtail the Net Zero customer immediately if the interconnection service limit is exceeded).

⁶⁴ MISO Tariff § 40.3.4.a imposes a penalty on Market Participants who have Excessive Energy, meaning that they have exceeded a Resource Tolerance Band for four or more consecutive Dispatch Intervals by, for example, over-injecting power. See *id.* § 40.3.4.b.i; see also *id.* § 1.210 (Excessive Energy Threshold); § 1.656 (Tolerance Band). Section 40.3.4.b.i of MISO's Tariff provides a formula for calculating this penalty: the Market Participant must pay the value of its energy injection for the hour when the violation occurred multiplied by an "Excessive/Deficiency Charge Rate." See also Geronimo Comments at 5 n.7.

⁶⁵ Geronimo Comments at 5.

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ Xcel Comments at 4-5; Geronimo Comments at 6.

⁶⁹ Xcel Comments at 5; Geronimo Comments at 6.

e. **Commission Determination**

29. We conditionally accept MISO's proposed Tariff revisions, subject to a further compliance filing, due within 45 days of the issuance of this order, as discussed below.

i. **Posting Requirements and Transparency**

30. We conditionally accept, subject to compliance, MISO's proposed posting requirement because it generally provides "a clear and consistent way in which generators seeking Net Zero Interconnection Service may identify opportunities for Net Zero Interconnection Service,"⁷⁰ as required by the March 30 Order. Posting the contact information and the location of the existing generator seeking a Net Zero customer is a step towards enabling potential Net Zero customers to recognize these opportunities.

31. However, not only did the Commission require a clear and consistent way by which potential Net Zero customers may identify Net Zero Interconnection Service opportunities, but the Commission also required MISO to provide a clear and consistent way for potential Net Zero customers to understand "how such a generator would be chosen for such service."⁷¹ Because MISO has not addressed how a Net Zero customer would be chosen for such service, we find that MISO has not fully complied with the Commission's March 30 Order. We agree with E.ON that more transparency is required for compliance.⁷² Therefore, we direct MISO to file tariff revisions that ensure transparency regarding how a Net Zero customer would be selected. Specifically, MISO must revise its Tariff to reflect that it will post on its website: (1) a description of the selection process that will take place between the time that MISO posts that an existing generating customer is offering Net Zero service and the time a Net Zero Customer is selected, including a timeline and the selection criteria developed by the existing generating facility; (2) whether MISO or the existing generating customer will choose the winning applicant; and (3) when and how the identity of the winning applicant will be disclosed. We find that these additional specifications would satisfy the March 30 Order's requirement that MISO "implement additional procedures that ensure that Net Zero Interconnection Service is offered on a fair, transparent, and non-discriminatory basis."⁷³

⁷⁰ March 30 Order, 138 FERC ¶ 61,233 at P 301.

⁷¹ *Id.*

⁷² E.ON Comments at 2-3.

⁷³ March 30 Order, 138 FERC ¶ 61,233 at P 302.

ii. **Energy Displacement Agreement and Monitoring and Consent Agreement**

32. We conditionally accept, subject to modification, MISO's proposed Tariff language in section 3.3.1.1 of the GIP requiring the Energy Displacement Agreement and the Monitoring and Consent Agreement to be submitted with the interconnection request. However, we require MISO to revise the provision to require *all* Net Zero customers to enter into an Energy Displacement Agreement, not just those interconnecting Net Zero customers who are not affiliated with the existing generator. In the March 30 Order, the Commission stated that only requiring an Energy Displacement Agreement for non-affiliates is an example of allowing the "existing generator and Transmission Owner the ability to grant access to this service to some customers and not to others."⁷⁴ Moreover, affiliated generators may not be perfectly coordinated, may have divergent or competing interests, and may be operated and dispatched by different entities. Thus, it is important to clearly define the operational relationship between these interconnection capacity-sharing generators. In addition, some of the terms and conditions identified in Appendix I apply only to Net Zero customers who have executed an Energy Displacement Agreement with the existing generator.⁷⁵ As such, these terms and conditions would not have applied to a Net Zero customer who is affiliated with an existing generator, since the Net Zero customer would not have been required to execute an Energy Displacement Agreement. Therefore, we find there is an opportunity for unduly discriminatory or preferential treatment among Net Zero customers. On compliance, we therefore direct MISO to take the following actions: (1) remove the requirement that the Energy Displacement Agreement should only be executed if the Net Zero customer is not affiliated with the existing generator; and (2) revise section 3.3.1.1(5) to ensure that there are no differing requirements for affiliated and non-affiliated Net Zero customers in terms of executing Energy Displacement Agreements or the application of Energy Displacement Agreements.⁷⁶

⁷⁴ *Id.* P 299.

⁷⁵ *See, e.g.*, Compliance Filing, Appendix I, subsections (1) – (3) (for example, limiting the output of the existing generator and the Net Zero customer to the amount in the existing generator's GIA and reserving MISO the right to curtail immediately).

⁷⁶ For example, in proposed section 3.3.1.1(5), MISO includes language specifying that the Energy Displacement Agreement would apply to non-affiliated Net Zero customers only. Also, Appendix I includes language indicating that certain terms and conditions apply only to Net Zero customers who have executed an Energy Displacement Agreement with the existing generator. These examples and other instances of similar language must be revised.

33. We also conditionally accept the *pro forma* Monitoring and Consent Agreement and Energy Displacement Agreement documents attached as Appendices 11 and 12, respectively, to the GIP, subject to modification. We agree with E.ON that further detail is needed on the action plan required by the Monitoring and Consent Agreement. The *pro forma* Monitoring and Consent Agreement simply states that, if the interconnection service limit is exceeded, the Net Zero customer must immediately curtail and develop an “action plan” for approval.⁷⁷ There is no additional information, however, regarding details of the plan. On compliance, we therefore require MISO to provide additional language in the *pro forma* Monitoring and Consent Agreement on the following matters: (1) what constitutes an acceptable action plan; (2) which entity should receive the action plan and what entity(ies), if any, has or have the ultimate authority to approve the action plan; (3) the time frame for developing and receiving approval of the action plan;⁷⁸ and (4) what happens if an action plan is deficient.

34. We also share commenters’ concerns related to controlling the combined output of the Net Zero customer’s generator and the existing generator, and curtailment, should the interconnection service limit be exceeded. The *pro forma* Monitoring and Consent Agreement and Energy Displacement Agreement documents are unclear in terms of how curtailment takes place. For example, both of the agreements provide that the “[Net Zero] Interconnection Customer shall monitor and control at all times the net injection at the Point of Interconnection such that the sum of the simultaneous energy output of the Generating Facility and the existing generating facility shall not exceed the Interconnection Service Limit in Attachment A of this Agreement.”⁷⁹ However, the Energy Displacement Agreement requires the parties to select whether the existing generator or the Net Zero customer “shall be solely responsible for the coordinated automatic generation control of the combined output of Interconnection Customer’s Generating Facility and existing generating facility.”⁸⁰ The option to allow the parties to select who will be responsible for the “coordinated automatic generation control of the combined output” seems to contradict the requirement in both of the Agreements that the Net Zero customer must monitor and control the sum of the combined output. On compliance, we require MISO to revise these *pro forma* agreements to clarify whether

⁷⁷ See proposed Monitoring and Consent Agreement, Appendix 11, Attachment X (GIP).

⁷⁸ E.ON Comments at 1-2.

⁷⁹ Proposed Monitoring and Consent Agreement, Appendix 11, Attachment X and proposed Energy Displacement Agreement, Appendix 12, Attachment X.

⁸⁰ Proposed Energy Displacement Agreement, Appendix 12, Attachment X.

parties have the option to decide who will monitor the combined output, or whether monitoring the combined output rests solely on the Net Zero customer.

35. Additionally, as Xcel notes, in Appendix I, MISO reserves the right to curtail the Net Zero customer immediately if the interconnection service limit is exceeded, but the Monitoring and Consent Agreement provides that the Net Zero customer must curtail immediately in such circumstance. We find, however, that the curtailment provisions in the Monitoring and Consent Agreement and Appendix I are in fact consistent with one another. We agree that the Net Zero customer should have the obligation to curtail immediately when the interconnection service limit is exceeded, as stated in the Monitoring and Consent Agreement. In Appendix I where it states that “MISO reserves the right to curtail,” we find that this is consistent with MISO’s obligations as balancing authority to curtail a customer to maintain system reliability. MISO reserves the ability to curtail a customer when it is operating in a manner that can compromise system reliability; Appendix I does not, as Xcel suggests, mean that MISO has “the absolute obligation” to curtail that would interfere with the Net Zero customer’s obligation to immediately curtail.⁸¹ We therefore reject Xcel’s suggestion that a better approach would be to allow MISO to reserve the right to curtail because we disagree with their interpretation of this language.

36. We also share the concerns raised by Geronimo regarding termination of the Energy Displacement Agreement. As noted above, Geronimo argues that allowing the existing generator to terminate an Energy Displacement Agreement when the interconnection service limit is exceeded, even if the violation is caused by events outside of the Net Zero customer’s control, is tantamount to terminating the GIA.⁸² We agree and find the termination provision particularly problematic if, under the Energy Displacement Agreement, the existing generating facility is chosen to be the party responsible for monitoring and coordinating the combined output of both facilities. We find that it is unjust and unreasonable and unduly discriminatory to allow the existing generator to terminate the Energy Displacement Agreement if the Net Zero customer is not at fault because this would unfairly penalize the Net Zero customer for reasons beyond its control.⁸³ Therefore on compliance, we require MISO to revise the *pro forma* Energy Displacement Agreement to clarify that the existing generator may seek to

⁸¹ Xcel Comments at 4.

⁸² Geronimo Comments at 3-5 (citing section 2.3.1.1 of the GIA).

⁸³ See, e.g., *Cal. Indep. Sys. Operator Corp.*, 109 FERC ¶ 61,006 (2004) (finding a proposed uninstructed deviation penalty unreasonable when generators generate less than their minimum operating levels and tolerance bands in response to a system disturbance that is outside the operators’ control).

terminate the Energy Displacement Agreement if the Net Zero customer violates the interconnection service limit (these limits are governed by termination provisions under the GIA).⁸⁴ We further direct MISO to revise the Energy Displacement Agreement to address whether/how the Net Zero customer may cure such breach, similar to other interconnection customers, prior to the Existing Generator seeking termination.

37. Additionally, we note that neither existing generators nor Net Zero customers who are parties to the Energy Displacement or the Monitoring and Consent Agreements are excused from their obligation to satisfy the applicable, mandatory and enforceable bulk power system operating requirements set forth in the North American Electric Reliability Corporation's reliability standards.

38. Finally, we accept MISO's proposed Tariff language in section 3.3.1.1(5) stating that if either the Energy Displacement Agreement or the Monitoring and Consent Agreement are no longer in effect before the GIA is executed, the request for Net Zero Interconnection Service shall be deemed to have been withdrawn.

iii. Appendix I

39. We conditionally accept MISO's proposal to require the Net Zero customer to submit a monthly report containing, by 15-minute increment, the prior month's combined real-time offers (MW) and cleared energy injection.⁸⁵ This reporting is consistent with the March 30 Order's emphasis on promoting transparency and eradicating undue discrimination in the provision of Net Zero Interconnection Service.⁸⁶ As noted above, Xcel and Geronimo challenge this reporting requirement as overly burdensome. They assert that MISO already has such information available, so MISO should be able to generate this reporting data on its own. We conclude that, although MISO may have access to this information, it may not be in readily accessible and analyzable format. Moreover, we find this reporting requirement to be reasonable because the parties involved in the sharing of capacity will bear the responsibility to ensure that the sum of

⁸⁴ The Energy Displacement Agreement is a *pro forma* agreement that becomes an Exhibit to a future GIA between the Net Zero customer, the existing generator and MISO. Under both the Energy Displacement Agreement and the future GIA, jurisdictional service is provided under MISO's Tariff. Thus, at such time that an existing generator seeks to terminate the Energy Displacement Agreement and/or the future GIA, such termination application must be filed with the Commission. *See* 18 C.F.R. § 35.15 (2013) (Notices of cancellation or termination).

⁸⁵ Proposed revisions to Appendix I, Attachment X.

⁸⁶ *See* March 30 Order, 138 FERC ¶ 61,233 at PP 302-305.

the simultaneous energy output of the combined facilities does not exceed the interconnection service limit. We are concerned, however, that MISO's proposal does not require the Net Zero customer and the existing generating facility to cooperate to ensure the accuracy of the reports. While we would expect such cooperation, nevertheless, in an abundance of caution, we require MISO on compliance to modify Appendix I, subsection 4) to add the following sentence: "The existing generating facility and the Interconnection customer shall cooperate consistent with other provisions in the Tariff to the extent necessary to ensure accuracy of the report."

40. Finally, we conditionally accept MISO's proposal to give MISO the option to curtail a Net Zero customer if the sum of the Net Zero customer's and existing generating facility's maximum offer limits exceeds the existing generating facility's interconnection service limit.⁸⁷ Xcel objects to this provision because, in its view, limiting offers in real time is unduly burdensome because it would be difficult for the Net Zero customer and existing generating facility to coordinate these real-time offers. We disagree.⁸⁸ The real concern here is ensuring that the generating facilities' combined output does not exceed the interconnection service limit during real time. We find it is reasonable to give MISO, as the system operator, flexibility to have the option to curtail offers in such circumstances.

iv. Compensation Arrangements

41. In the March 30 Order, the Commission stated that it "has identified interconnection as an element of transmission service and, as a result, rates, terms and conditions of such service must be filed with the Commission under section 205 of the FPA."⁸⁹ We are unable to identify any language in the Compliance Filing, however, addressing the requirement that compensation arrangements between the existing generator and the Net Zero customer be filed with the Commission. Thus, on compliance, we require MISO to provide Tariff language stating that such compensation arrangements must be filed with the Commission.

v. Study Requirements

42. MISO proposes Tariff language in section 3.3.1.1 requiring the System Impact Study performed for the existing generator to be submitted with the interconnection

⁸⁷ Xcel Comments at 3.

⁸⁸ *Id.* Xcel assumes that the Net Zero customer is a dispatchable intermittent resource and the existing generating facility is a conventional generation resource.

⁸⁹ March 30 Order, 138 FERC ¶ 61,233 at P 51 & n.74.

request. We conditionally accept this provision, subject to MISO providing additional clarifying revisions to Appendix I to the GIP. Specifically, section 1.4.k of Appendix I provides that, if the interconnection service request is for Net Zero Interconnection Service, the (Net Zero) interconnection customer must “attach a copy of the System Impact Study (or equivalent) for the existing generating facility[.]” We find the term “or equivalent” to be vague and ambiguous in this context. Accordingly, we require MISO to either: (1) remove “(or equivalent)[;.]” or (2) explain what such an equivalent would be, how it would provide the same information as contained in a System Impact Study, and under what circumstances a System Impact Study would not be available.

43. Additionally, in the March 30 Order, the Commission stated that it shared concerns raised by protesters regarding the potential lack of studies for existing generators examining off-peak conditions, and required MISO to provide “tariff language that details how it will address net zero projects that wish to interconnect to existing generators that were not studied under off-peak conditions.”⁹⁰ The Compliance Filing did not comply with this directive. Instead, MISO proposes to require that the Interconnection Customer must include the System Impact Study performed for the existing generating facility with its application and that the Transmission Provider will use that System Impact Study to appropriately scope the Interconnection Customer’s System Impact Study described in Section 8.3 of the GIP. However, this language does not expressly detail how MISO will handle the potential interconnection of Net Zero customers to existing generators that were not studied under off-peak conditions.

44. Therefore, on compliance, we direct MISO to either: (1) provide language requested in our March 30 Order; or (2) if the System Impact Study requirement in section 3.3.1.1 of the GIP and discussed above is intended to respond to this issue, explain how this requirement will address Net Zero customers who will be sharing a point of interconnection with an existing generator that was not studied under off-peak conditions.

2. Miscellaneous Issues

45. We direct MISO to address several additional items in the compliance filing to be submitted within 45 days of the issuance of this order. First, MISO is directed to change the word “herby” at the beginning of the third line of the proposed *pro forma* Monitoring and Consent Agreement to “hereby.” Second, throughout the Compliance Filing different terms are used to describe the interconnection limit of the existing generator and the Net Zero customer. For example, there are some instances where the phrase “net MW and MVA capability”⁹¹ is used, and others where “total megawatt, megavar and

⁹⁰ *Id.* P 298 (emphasis added).

⁹¹ Compliance Filing, Attachment X, Section 1, definition of Net Zero

megavolt-ampere output at the Point of Interconnection”⁹² is used. There also appear to be typographical errors where “MVA” is repeated when the correct term used should be “MVAR.”⁹³ In addition, the terms “total Generating Facility Capacity,”⁹⁴ “net generating capability,”⁹⁵ and “Interconnection Service limit”⁹⁶ seem to be used interchangeably. We direct MISO to revise these and other instances as necessary to ensure the consistent use of definitions. Finally, regarding Geronimo’s comments discussing the vagueness of the terms “reliability service limit violation” and “Interconnection Customer reliability service limit violation,” we agree that these terms are vague and therefore direct MISO to provide Tariff revisions to more specifically define these terms.

The Commission orders:

(A) The Compliance Filing is hereby conditionally accepted, as discussed in the body of this order.

Interconnection Service; *id.*, Attachment X, Appendix 6, Article 1, definition of Net Zero Interconnection Service.

⁹² *Id.*, Attachment X, Appendix 11 (Monitoring and Consent Agreement); *id.*, Attachment X, Appendix 12 (Energy Displacement Agreement); *id.*, Attachment X, Appendix 6 to GIP (GIA), Appendix I to GIA.

⁹³ *Id.*, Attachment X, Appendix 11.

⁹⁴ *Id.*, Attachment X, Section 1, definition of Energy Displacement Agreement; *id.*, Attachment X, Appendix 6, Article 1, definition of Energy Displacement Agreement.

⁹⁵ *Id.*, Attachment X, Appendix 6, section 4.1.3.

⁹⁶ *Id.*, Attachment X, Appendices 11 and 12.

(B) MISO is hereby directed to submit a compliance filing within 45 days of the date of this order, as discussed in the body of this order.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.