

133 FERC ¶ 61,252
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Marc Spitzer, Philip D. Moeller,
John R. Norris, and Cheryl A. LaFleur.

Midwest Independent Transmission System Operator, Inc. Docket Nos. ER11-22-000
ER11-22-001

ORDER CONDITIONALLY ACCEPTING INTERCONNECTION AGREEMENT

(Issued December 23, 2010)

1. On October 4, 2010, as amended on October 25, 2010,¹ Midwest Independent Transmission System Operator, Inc. (Midwest ISO) filed, pursuant to section 205 of the Federal Power Act,² an unexecuted Generator Interconnection Agreement³ (proposed GIA) among Midwest ISO, as the Transmission Provider, Elbridge Wind Farm, LLC (Elbridge), as the Interconnection Customer, and Michigan Electric Transmission Company (METC), as the Transmission Owner. In this order, the Commission conditionally accepts the proposed GIA, to become effective October 5, 2010, as discussed below.

I. Background

2. The proposed GIA governs the interconnection of Elbridge's wind generation facility, which Midwest ISO has designated as Elbridge Project H075 (Project H075), to METC's transmission system. Project H075 is a 43.2 megawatt (MW) generating facility, to be constructed in Oceana County, Michigan, which, as originally proposed by Elbridge, includes 24 Vestas V 90 wind turbines that are rated at 1.8 MW each.

¹ On October 25, 2010, Midwest ISO resubmitted the October 4, 2010 filing to correct the security level of the electronic filing to reflect public and non-public versions of the filing.

² 16 U.S.C. § 824d (2006).

³ The proposed GIA is designated in the Midwest ISO Open Access Transmission, Energy and Operating Reserve Markets Tariff (Tariff) as Substitute Original Service Agreement No. 2254, Midwest ISO FERC Electric Tariff, Fifth Revised Vol. No. 1.

According to the proposed GIA, Appendix B, Milestones, the project will be placed in service by August 7, 2012, with commercial operation scheduled to begin on November 16, 2012. The total cost of transmission owner interconnection facilities and network upgrades is estimated at nearly \$1.45 million.⁴

3. According to Midwest ISO, the proposed GIA conforms to its *pro forma* Generator Interconnection Agreement (*pro forma* GIA). Midwest ISO states that Elbridge has agreed to the terms of the proposed GIA, except for: Appendix A, Exhibit A14 (Voltage Guidelines) and Appendix C, Section 1.11 (Power Factor Design Criteria).⁵ Midwest ISO further states that it cannot accept Elbridge's informal request to change the wind turbine design from Vestas V90 1.8 MW wind turbines to allow either Vestas V90 or Vestas V100 wind turbines.⁶ Midwest ISO states that Elbridge requested that the proposed GIA be filed unexecuted because of these disagreements.⁷

II. Notice of Filing And Responsive Pleadings

4. Notices of Midwest ISO's October 4, 2010 and October 25, 2010, filings were published in the *Federal Register*, 75 Fed. Reg. 63,460 and 68,338 (2010), with comments, interventions, and protests due on or before October 25, 2010, and November 15, 2010, respectively. Timely motions to intervene, without substantive comment, were filed by Detroit Edison Company, Consumers Energy Company, Iberdrola Renewables, Inc. (Iberdrola), METC, Invenergy Wind Development, LLC (Invenergy), and NextEra Energy Resources, LLC. Elbridge filed a timely motion to intervene and protest. In response to the second notice, Iberdrola and Invenergy filed a joint protest. Midwest ISO filed an answer to Elbridge's protest. Elbridge filed an answer to Midwest ISO's answer. American Wind Energy Association (AWEA) and Wind on the Wires (WOW) filed a timely motion to intervene and joint protest in response to the second notice that also addressed Midwest ISO's answer. Midwest ISO also filed an answer to the Iberdrola and Invenergy joint protest, the AWEA and WOW joint protest and Elbridge's answer (November 30 Answer). On December 1, 2010, Midwest ISO Transmission Owners (Midwest ISO TO) filed an untimely motion to intervene and answer. On December 13, 2010, Elbridge filed an Answer to the November 30 Answer.

⁴ Proposed GIA, Appendix A.

⁵ Midwest ISO Transmittal Letter at 3–8.

⁶ *Id.* at 8–9.

⁷ *Id.* at 2.

III. Discussion

A. Procedural Matters

5. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2010), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2010), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We will accept Midwest ISO's answer to Elbridge's protest, Elbridge's answer to Midwest ISO's answer, and Midwest ISO's answer to the two joint protests and to Elbridge's answer because they provided information that assisted us in our decision-making process. We will also accept the motion to intervene out of time and answer of Midwest ISO TOs based on the early stage of the proceeding and Midwest ISO TO's acceptance of the record as it stands.

B. Midwest ISO's Filing

6. Midwest ISO states that Appendix A, Exhibit A14 (Voltage Guidelines)⁸ and Appendix C, Section 1.11 (Power Factor Design Criteria)⁹ implement Article 9 of the *pro*

⁸ Appendix A, Exhibit A14 (Voltage Guidelines) reads as follows:

Reactive power and voltage regulation will be per [Transmission Operator] and Transmission Provider directives. Interconnection Customer will operate the Generating Facility to a voltage schedule of 141 kV (1.022 pu) with a bandwidth of +/- 3 kV (0.022 pu) at the Point of Interconnection (POI) utilizing the Generating Facility's required power factor design capability, as indicated in Section 1.11 of Appendix C. The Interconnection Customer will regulate the Generating Facility's voltage to the specified set-point within the defined bandwidth stated above using a combination of generator step-up tap connections, load tap changing transformers, static capacitor banks and/or dynamic reactive resources. The [Transmission Operator] may, at any time request a variance from the schedule in response to system operating/security requirements.

⁹ Appendix C, Section 1.11 (Power Factor Design Criteria), reads as follows:

Interconnection Customer's Generating Facility is designed to be capable of maintaining power factor of 0.90 lagging to 0.93 leading at the Point of Interconnection. Interconnection Customer agrees to operate its Generating Facility, as directed, to produce or absorb reactive

(continued...)

forma GIA and are appropriately included in the proposed GIA. Midwest ISO argues that an interconnection customer must meet operations requirements under Article 9 of the *pro forma* GIA for both power factor design criteria (Article 9.6.1) and voltage schedules (Article 9.6.2). Midwest ISO acknowledges that these requirements apply differently to wind generators under Order Nos. 661 and 661-A,¹⁰ but argues that wind generators are not exempt from the requirement that the interconnection customer meet the voltage schedules in Article 9.6.2, and be able to operate over an entire power factor range, if doing so is necessary to meet the appropriate voltage schedule.¹¹

7. In this regard, Midwest ISO notes the distinction between dynamic and static voltage support, stating that the Commission determined that wind generators would only need to have the capability to provide sufficient dynamic (as opposed to static) voltage support, if the need is demonstrated by a System Impact Study. Midwest ISO asserts, however that, "... a wind generator only needs to be capable of providing dynamic reactive power if demonstrated by a System Impact Study, but may be required to operate over an entire power factor range (providing static voltage support as necessary) in order to meet a voltage schedule."¹²

8. Midwest ISO further states that, in accordance with the Facilities Study for Project H075,¹³ Elbridge must meet a scheduled voltage for operation at a power factor other than 1.0 (unity), which in turn requires operation over the entire power factor range¹⁴ on a steady state basis. Midwest ISO adds that, since Project H075 can meet the voltage schedule with the facility's power factor capability, no upgrades to add reactive

power at the Point of Interconnection within the design limitations of the Generating Facility.

¹⁰ *Interconnection for Wind Energy*, Order No. 661, FERC Statutes and Regulations, Regulations Preambles 2001-2005 ¶ 31,186, *order on reh'g*, Order No. 661-A, FERC Statutes and Regulations, Regulations Preambles 2001-2005 ¶ 31,198 (2005) (Order Nos. 661 and 661-A).

¹¹ Midwest ISO Transmittal Letter at 3.

¹² *Id.* at 5.

¹³ Midwest ISO includes the Facility Study for Project H075 as Exhibit A2 to the October 4 filing, and noted that portions of the study contain Critical Energy Infrastructure Information (CEII).

¹⁴ METC established that the power factor requirements for generators in the METC/CONS control area to be .90 lagging to .93 leading effective May 6, 2010.

compensation are currently needed and, therefore, Elbridge's concerns are not yet ripe for Commission review. However, Midwest ISO explains that if, in the future, Project H075 can no longer maintain the appropriate voltage schedule listed in Appendix A, Exhibit A14, Elbridge would be required to add additional reactive compensation at that time. Midwest ISO asserts that requiring such future upgrades to meet the voltage schedule is contemplated by Article 9.6.2 of the proposed GIA and Order Nos. 661 and 661-A.¹⁵

9. Midwest ISO further states that it disagrees with Elbridge that no other power factor should apply to Project H075 based on an unclear posting on Midwest ISO's website. Midwest ISO points out that Article 9.6.1 of the *pro forma* GIA permits the use of a different power factor when "the Transmission Provider has established different requirements that apply to all generators in the Local Balancing Authority on a comparable basis."¹⁶ According to Midwest ISO, METC applies its power factor range to all generators in the Local Balancing Authority and explains that a ministerial error in Midwest ISO's website posting that incorrectly states that the METC power factor requirement does not apply to wind generators should not confuse the application of proper standards to Project H075. Midwest ISO adds that the METC power factor is and has always been shown correctly on METC's website.¹⁷ Midwest ISO also argues that NERC Reliability Standards require that the interconnection customer follow these voltage schedules,¹⁸ specifically, Standard VAR-002-1.1a – Generator Operation for Maintaining Network Voltage Schedule, which includes requirements for a generator operator to maintain generator voltage R2¹⁹ and also requires the generator owner to

¹⁵ Midwest ISO Transmittal Letter at 6.

¹⁶ *Id.* at 7.

¹⁷ *Id.* at 7-8 (citing the METC power factor requirement listing, *available at* <http://www.itctransco.com/aboutus/corporatefamily/metc.html>).

¹⁸ Midwest ISO Transmittal Letter at 8.

¹⁹ Standard VAR-002-1.1a requirement R2 states the following:

Unless exempted by the Transmission Operator, each Generator Operator shall maintain the generator voltage or Reactive Power output (within applicable Facility Ratings (note 1, when a generator is operating in manual control, reactive power capability may change based on stability considerations and this will lead to a change in the associated Facility Ratings) as directed by the Transmission Operator.

provide the transmission operator with certain equipment settings related to voltage regulation.

10. Lastly, Midwest ISO asserts that it cannot accept Elbridge's informal request to allow substitution of Vestas V100 wind turbines for the V90 1.8 MW wind turbines initially described in the interconnection request. Midwest ISO states that on September 23, 2010, Elbridge revised the interconnection request to change the wind turbines to allow Vestas V100 and that the parties are now in the process of evaluating whether the change is a Material Modification.²⁰ Midwest ISO further explains that the interconnection customer has the option to submit a study showing that the change in equipment is not a Material Modification and that it will evaluate such a study when Elbridge submits one.²¹

11. Midwest ISO requests waiver of the 60-day notice requirement, pursuant to 18.C.F.R. § 35.3 of the Commission's regulations, to make the proposed unexecuted GIA effective October 5, 2010.

C. Protests

1. Elbridge's Protest

12. Elbridge protests Midwest ISO's attempt to require additional reactive power capability and Midwest ISO's refusal to change the wind turbine model designation in Appendix A of the proposed GIA. Elbridge argues that neither the System Impact Study nor any other study performed in connection with Project H075 established the need for additional reactive power capability to ensure safety or reliability of the transmission system as required by Order Nos. 661 and 661-A and Commission precedent.²² Elbridge asserts that the Commission expressly addressed the requirement for wind generating

²⁰ The Midwest ISO OATT, Attachment X, Generator Interconnection Procedures, Section 4.4 (Modifications) requires the Interconnection Customer to submit to the Transmission Provider, in writing, modifications to any information provided in the Interconnection Request. It also states that: "The Interconnection Customer shall retain its Queue Position if the modifications are in accordance with Sections 4.4.1, 4.4.4, or are determined not to be Material Modifications pursuant to Section 4.4.3." Material Modification is defined in Attachment X as those modifications that have a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

²¹ Midwest ISO Transmittal Letter at 8-9.

²² Elbridge Protest at 1-2, and 4.

plants to add additional reactive power capability in Order Nos. 661 and 661-A and determined that, because of the substantial cost required to add additional reactive power capability, the Power Factor Design Criteria in Article 9.6.1 of the *pro forma* GIA would not apply to a wind generating plant unless the System Impact Study indicated that additional reactive power capability is necessary to ensure the safety or reliability of the transmission system.²³ Elbridge states that not only did the System Impact Study for Project H075 not show the need for additional reactive power capability, it showed the converse, specifically, that no new voltage violations were caused by adding the Elbridge Wind project to the transmission system.²⁴

13. According to Elbridge, Article 9.6.2 establishes the operating requirements for the new generating facility, “[o]nce the Interconnection Customer has synchronized the generating facility with the Transmission System.”²⁵ Elbridge argues that it is not a design requirement, and adds that Article 9.6.2 requires each generating facility to operate to produce or absorb reactive power as directed by Midwest ISO, but only “within the design limitations of the Generating Facility set forth in Article 9.6.1.” Thus, Elbridge concludes, a new wind generating plant is required to follow Midwest ISO’s directions on voltage schedule as much as possible, but only within the design criteria and design limitations established in Article 9.6.1. According to Elbridge, if a wind generator is not required to add additional reactive power capability, it is still required to follow Midwest ISO’s directions to produce or absorb reactive power as best it can using the inherent capability of the wind generators themselves (within design limitations), but is not required to follow Midwest ISO’s direction if it cannot do so within the design capabilities of the generating facility.²⁶

14. Elbridge also objects to Midwest ISO’s interpretation of Article 9.6.2 to require it to add additional reactive power capability at any time in the future. Elbridge asserts that the Commission has considered and rejected this “future requirements” argument in response to rehearing requests of Order No. 661. According to Elbridge, the Commission concluded that the System Impact Study was the appropriate process for the transmission

²³ *Id.* at 5 (citing Order No. 661, FERC Stats. & Regs. ¶ 31,186 at P 38-58 and P 60-70; Order No. 661-A, FERC Stats. & Regs. ¶ 31,198 at P 36-52).

²⁴ *Id.* at 11.

²⁵ Elbridge Protest at 10.

²⁶ *Id.* (citing Articles 9.6.1 and 9.6.2 of Midwest ISO’s *pro forma* GIA and Appendix G; Order No. 661, FERC Stats. & Regs. ¶ 31,186; Order No. 661-A, FERC Stats. & Regs. ¶ 31,198).

provider to determine whether additional reactive power capability is needed to ensure safety or reliability.²⁷

15. Elbridge also disagrees with Midwest ISO's claim that Power Factor Design Criteria in Article 9.6.1 and Appendix G of the *pro forma* GIA applies only to dynamic reactive power capability. Elbridge argues that Power Factor Design Criteria apply to all additional reactive power capability for a wind generating plant, both static and dynamic reactive power capability.²⁸ According to Elbridge, Midwest ISO's interpretation of Article 9.6.1 would mean that, under Order Nos. 661 and 661-A, the transmission provider would be free to require every wind generating plant to add any amount of additional reactive power capability regardless of the outcome of the System Impact Study, as long as that capability is static. Elbridge also argues that the plain language of Article 9.6.1 and Appendix G of the *pro forma* GIA does not support an interpretation that the limitation for wind generating plants applies only to additional dynamic reactive power capability.

16. Elbridge points out that the Commission has addressed the limitation in Article 9.6.2 in prior proceedings. Specifically, Elbridge explains that, in *Dakota Wind*,²⁹ the new wind generator was concerned about complying with Article 9.6.2 below 100 kilowatts because it could not provide reactive power at all when the wind generators were producing less than 100 kilowatts. Elbridge states that the Commission concluded that the limitation in Article 9.6.2 ("within design limitations of the Generating Facility") addressed this concern, stating in pertinent part that:

In addition, we find that the *pro forma* interconnection language addresses Dakota Wind and FPL Energy's concern about not being able to provide reactive power when the wind generators are producing less than 100 kilowatts. The *pro forma* language states that "... Transmission Provider shall require Interconnection Customer to operate the Generating Facility to produce or absorb reactive power *within the design limitations of the Generating Facility...*" We find that the 100 kilowatt minimum output that Dakota Wind states its 1.5 megawatt wind generators need to meet the reactive power requirements is

²⁷ Elbridge Protest at 21–25.

²⁸ *Id.* at 25.

²⁹ See *Midwest Independent Transmission System Operator, Inc.*, 113 FERC ¶ 61,082 (2005) (*Dakota Wind*).

covered by the “within the design limitations of the Generating Facility” limitations in the *pro forma* language.³⁰

17. As indicated, although Elbridge requested that Midwest ISO evaluate its proposed change of the turbine design from Vestas V90 1.8 MW to Vestas V90 or V100 1.8 MW wind turbines, Appendix A, section 1 of the proposed GIA refers only to the Vestas V90 model. Elbridge explains that the purpose for its requested revision is to allow for incremental improvements in the efficiency of the Vestas turbine model. Elbridge further adds that the manufacturer, Vestas, confirmed the two turbine generator models are essentially interchangeable from an electrical standpoint. According to Elbridge, the only difference between the two models is an incremental improvement in blade design to more efficiently capture the wind at low wind speeds. Elbridge states that Vestas, the manufacturer, provided additional information in a letter to Midwest ISO dated October 19, 2010. Vestas confirmed that the two models are interchangeable in a project for system impact study considerations.³¹

2. Other Protests

18. In their joint protest, Iberdrola and Invenergy support the positions taken by Elbridge in this proceeding. They assert that, under the *pro forma* GIA, Midwest ISO must support any requirements for reactive power capability at a wind plant in the System Impact Study. They further argue that Midwest ISO’s assertion that any study, including the Facilities Study, can require reactive power capability is contrary to Commission policy. They point out that in Order No. 661, the Commission explicitly stated that the transmission provider’s System Impact Study must conclude that there is a need for reactive power capability before specific equipment to provide such capability can be required as part of the interconnection. Furthermore, Iberdrola and Invenergy note that the Commission reached this conclusion in order to minimize undue discrimination and prevent the frustration of a wind plant interconnection due to unnecessary requirements.³²

19. Iberdrola and Invenergy also challenge Midwest ISO’s assertion that it can require an interconnection customer to add additional reactive power capability in the future to meet changes in voltage schedule under Article 9.6.2 of the proposed GIA. They challenge Midwest ISO’s assertions that Article 9.6.2 provides for both changes to the voltage schedule over time and an ongoing obligation on the interconnection

³⁰ *Id.* P 20.

³¹ Elbridge Protest at 32–33.

³² Iberdrola and Invenergy Joint Protest at 4 (citing Order No. 661, FERC Stats. & Regs. ¶ 31,186 at P 50-51).

customer to meet voltage schedules. They acknowledge that Midwest ISO is correct that there is an ongoing obligation to meet voltage schedules. However, they point out that Article 9.6.2 specifically states that, “[o]nce the Interconnection Customer has synchronized the Generating Facility with the Transmission System, Transmission Provider shall require Interconnection Customer to operate the Generating Facility to produce or absorb reactive power within the design limitations of the Generating Facility set forth in Article 9.6.1....”³³

20. Finally, Iberdrola and Invenenergy assert that the Commission has already rejected the imposition of “future requirements” by requiring that transmission providers make a determination that additional reactive power capability is required for safety or reliability in the System Impact Study. They add that the Commission found that the System Impact Study will take into account the system’s current and future need for reactive power under reasonable anticipated assumptions. Midwest ISO’s position, they argue, would create an open-ended potential for future requirements.³⁴

21. AWEA and WOW also take issue with Midwest ISO’s position that wind generators must install static or dynamic reactive power control capability in order to follow voltage schedules absent a demonstrated need shown by the System Impact Study. They explain that the *pro forma* GIA only requires that wind plants follow voltage schedules to the extent that the reactive power capability they possess allows.

22. AWEA and WOW also argue that Midwest ISO is incorrect in its assertion that a transmission provider can specify a broader range of power factor control requirement for wind plants as long as the same requirement is imposed on all generators. They explain that Order No. 661-A explicitly limits the power factor control requirements for wind plants to +/- 0.95, and only if the need is demonstrated by a System Impact Study.³⁵

D. Midwest ISO Answer to Elbridge Protest

23. In its answer, Midwest ISO states that it received notice on October 25, 2010, that Project No. G418 had withdrawn from the interconnection queue and that the withdrawal of this higher queued project triggered the need to restudy Project H075. Midwest ISO states that both the System Impact Study and the Facilities Study for Project H075 need to be redone. Because Project H075 must be restudied, Midwest ISO states that the issues raised by the protestors are not ripe for review. Midwest ISO

³³ *Id.* at 5.

³⁴ *Id.* at 6.

³⁵ *Id.*

estimates that a new System Impact Study for Project H075 will take approximately four months from the date that METC is authorized to begin the restudy. The time required for a new Facilities Study for Project H075 is dependent upon the results of the restudy of the System Impact Study. Midwest ISO states that it is not withdrawing the filing at this time, but would file an amended GIA when the restudy is completed if Elbridge again refuses to execute an amended GIA.³⁶

24. Midwest ISO also responds to Elbridge's argument that, since the System Impact Study does not require reactive power under Article 9.6.1, no reactive power upgrades can be required, by stating that even though the System Impact Study does not show that a reactive power requirement is necessary at this time, the Facilities Study can demonstrate that operational requirements may require additional equipment to meet the appropriate voltage schedules. In this regard, Midwest ISO explains that the two studies serve different purposes³⁷ necessary to ensure a reliable interconnection and the results of both studies need to be considered.³⁸ According to Midwest ISO, the purpose of an Interconnection System Impact Study, among other things, is to "provide the requirements or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection [and] will provide a preliminary list of facilities." The scope of the later-performed Facilities Study undertaken for each project is to "specify and estimate the cost of the required equipment, engineering, procurement and construction work needed to implement the conclusions of the System Planning and Analysis Review [including the Interconnection System Impact System for a given project] in accordance with Good Utility Practice to physically and electrically connect the Interconnection Facilities to the Transmission or Distribution System." The review in the Facilities Study includes "identify[ing] the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment."

25. Midwest ISO states that Commission precedent does not preclude the inclusion of language in Appendix A, Exhibit A14 and Appendix C, Section 1.11 to address operating issues for wind generators that are identified in the Facilities Study, even if resolving these issues may require reactive compensation. Midwest ISO notes that section 2.1 of the System Impact Study states that, "some reactive source may be required to meet [METC's] operating voltage schedule." The System Impact Study also states that

³⁶ Midwest ISO Answer at 4-5.

³⁷ *Id.* at 6.

³⁸ *Id.* at 5-6.

“these findings are based on the turbine and transformer information supplied by the developers. The results are subject to review and may vary if any significant changes to these assumptions occur.”³⁹

26. Midwest ISO states that Elbridge selectively quotes from Article 9.6.2 of the proposed GIA to omit the ongoing requirement to meet voltage schedules that applies to wind generators. Midwest ISO argues that the Article 9.6.2 requirement applies to all generators and Order Nos. 661 and 661-A did not exempt wind generators from this requirement.⁴⁰

27. Lastly, Midwest ISO acknowledges additional evidence that Elbridge has provided in its protest regarding its request to use different wind turbines. In its answer, however, Midwest ISO states that Project H075 will need to be restudied due to withdrawal of the higher queued Project G418. Midwest ISO states that it understands that METC will evaluate the turbine change proposed by Elbridge in the restudy for Project H075.⁴¹

E. Elbridge Answer to Midwest ISO Answer

28. In its answer to Midwest ISO’s answer, Elbridge renews its request that the Commission address the issues raised in its protest regarding Midwest ISO’s attempt to require additional reactive power capability without making the required showing that the reactive power capability is needed for safety or system reliability. Elbridge reiterates that Midwest ISO’s position is contrary to the requirements of the *pro forma* GIA, Commission Order Nos. 661 and 661-A, and Commission precedent. Elbridge states that the reactive power capability requirement issues for a wind generating plant that are raised by several protestors in this proceeding are ripe for decision. It adds that there is no guarantee that Midwest ISO will remove these erroneous requirements in future amendments to the proposed GIA.⁴²

29. Elbridge requests that the Commission direct Midwest ISO to incorporate changes requested by Elbridge, and make a compliance filing to remove the additional unsubstantiated reactive power capability requirements.

³⁹ *Id.* at 6-7.

⁴⁰ *Id.* at 8

⁴¹ *Id.* at 12.

⁴² Elbridge Answer at 2-3.

30. Based on Midwest ISO's commitment to address the turbine model in the restudy, and its commitment to work with Midwest ISO to review and revise the proposed GIA, if needed, based on those results, Elbridge requests that the Commission not address the turbine model at this time.⁴³

F. November 30 Answer

31. In its November 30 answer, Midwest ISO claims that the policy issues Iberdrola and Invenergy raise are not ripe for Commission decision until the necessary restudies are completed.⁴⁴

32. Midwest ISO responds to AWEA and WOW's contention that Order No. 661-A limits the power factor requirement for wind generators to 0.95 leading to 0.95 lagging by explaining that the Midwest ISO tariff contains an "independent entity variation" that requires generators (including wind generators) to meet a different power factor range if that range applies to all generators in a region on a comparable basis.⁴⁵ Midwest ISO also disagrees with AWEA and WOW's contention that Order Nos. 661 and 661-A only require wind generators to "try" to follow the voltage schedule. Midwest ISO states that, contrary to AWEA and WOW's assertions, the Commission has not eliminated a wind generator's obligation to follow voltage schedules since it is required of all generators pursuant to Article 9.6.2 of the *pro forma* GIA.⁴⁶

33. Midwest ISO states that it would not object if the Commission rejected the proposed GIA without prejudice, subject to refile upon completion of restudy of the Interconnection System Impact Study and the Facilities Study. if the Commission determines that this is appropriate. Midwest ISO also states that it would not object to having the agreement accepted and suspended by the Commission subject to amendment based on the outcome of the restudy of the Interconnection System Impact Study and the Facilities Study. And lastly, Midwest ISO states that it agrees with Elbridge that the turbine change proposed by Elbridge can be evaluated by METC as part of these restudies.⁴⁷

⁴³ *Id.* at 6.

⁴⁴ Midwest ISO November 30 Answer at 3.

⁴⁵ *Id.* at 5

⁴⁶ *Id.* at 6.

⁴⁷ *Id.* at 7.

G. Midwest ISO TOs Motion to Intervene and Answer

34. In their answer, Midwest ISO TOs state they agree with Midwest ISO that the October 4 filing does not present any issues that need resolved at this time. Midwest ISO TOs acknowledge that, as Midwest ISO notes, a higher queued project was withdrawn, necessitating the restudy of lower queued projects, including Project H075. They also add in their answer that depending on the results of the restudy, Midwest ISO may be required to amend the GIA with Elbridge. Midwest ISO TOs also state that the parties can address the need to add upgrades at a later date if and when this becomes an issue.⁴⁸

H. Commission Determination

35. Midwest ISO filed the proposed unexecuted GIA at the request of Elbridge for review because of a dispute over language in Appendix A, Exhibit A14 (Voltage Guidelines) as well as in Appendix C, Section 1.11 (Power Factor Design Criteria). As discussed below, we will conditionally accept the unexecuted GIA to become effective October 5, 2010, as requested, and direct Midwest ISO to revise certain sections of the appendices, specifically: (1) Appendix A, Exhibit A14 (Voltage Guidelines); and (2) Appendix C, Section 1.11 (Power Factor Design Criteria), as not supported based on the record developed in this proceeding, and because they directly conflict with determinations the Commission made in Order Nos. 661 and 661-A. We note our acceptance here is without prejudice to Midwest ISO amending the unexecuted GIA as necessary based on the outcome of the restudy of Project H075. Likewise, we note that the issue of the change in turbine rotor model will also be addressed in the restudy and need not be addressed in the compliance filing ordered below.

36. In Order No. 661, the Commission adopted standard technical requirements and procedures for the interconnection of wind plants, to be included in Appendix G to the Large Generator Interconnection Agreement and Appendix G to the Large Generator Interconnection Procedures. Specifically, the Commission adopted standards for low voltage ride-through and power factor design criteria (reactive power), and required that wind plants meet those standards only if the transmission provider shows, in the System Impact Study, that they are needed to ensure the safety or reliability of the transmission system.

37. Our review of the System Impact Study for Project H075 dated June 24, 2009, reveals no reactive source equipment is necessary to maintain the safety or reliability of the transmission system. The System Impact Study Report, Section 1 Conclusions, states, “[B]ased on the assumptions contained within this report, it is not expected that the proposed plant would cause any steady state voltage violations.” Furthermore, in that

⁴⁸ Midwest ISO TOs Answer at 7.

same section it states, “[S]tability results have shown that the interconnection of the H075 wind farm does not adversely impact the stability performance of the existing system.”⁴⁹ From these statements, we conclude that Project H075 can be interconnected with the METC transmission system without additional reactive capability or equipment.

38. We find that the Interconnection Facility Study, as defined in the Midwest ISO Tariff, Attachment X, Generator Interconnection Procedures⁵⁰ is not relevant to the arguments raised by Midwest ISO and the Midwest ISO TOs since its purpose is not to determine the impact of an interconnection request but the facilities necessary to safely and securely interconnect a new generator.

39. We also find Midwest ISO’s arguments to require Elbridge to meet future voltage schedule requirements to be misplaced. Despite its arguments to the contrary, Article 9.6.2 only requires the interconnection customer to operate the generating facility to produce or absorb reactive power within the design limitations of the generating facility set forth in Article 9.6.1. We also disagree with Midwest ISO’s assertion that Article 9.6.2 requires a wind interconnection customer to add reactive capability beyond Article 9.6.1 system impact study requirements if voltage schedules change in the future.

40. Accordingly, Midwest ISO is directed to remove from Appendix A, Exhibit A14 (Voltage Guidelines) and Appendix C, Section 1.11 (Power Factor Design Criteria) any requirement that Elbridge be designed to meet the power factor design criteria or that it maintain voltage regulation beyond that which the wind turbines are inherently capable of producing, and refile the GIA within 30 days.

⁴⁹ System Impact Study at 6, available at https://www.midwestiso.org/Library/Repository/Report/Generator%20Interconnection/H075_SIS_%20Report_6-25-09_Final%20Draft.pdf.

⁵⁰ “Interconnection Facilities Study shall mean a study conducted by the Transmission Provider, or its agent, for the Interconnection Customer(s) to determine a list of facilities (including Transmission Owner’s Interconnection Facilities, System Protection Facilities, and if such upgrades have been determined, Network Upgrades, Common Use Upgrades, and upgrades on Affected Systems, as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Generating Facilit(ies) with the Transmission System.” Section 1, Definitions, Attachment X, Generator Interconnection Procedures, Midwest ISO FERC Electric Tariff, Fifth Revised Vol. No. 1.

41. Finally, we grant waiver of the 60-day prior notice requirement and make the modified proposed GIA effective October 5, 2010, as requested.⁵¹

The Commission orders:

(A) The proposed GIA is conditionally accepted for filing, as discussed in the body of this order to become effective October 5, 2010, as requested.

(B) Midwest ISO is directed to make a compliance filing, as discussed in the body of the order, within 30 days of the date of this order.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.

⁵¹ See *Prior Notice and Filing Requirements Under Part II of the Federal Power Act*, 64 FERC ¶ 61,139, at 61,984, *order on reh'g*, 65 FERC ¶ 61,081 (1993).