

170 FERC ¶ 61,040
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

NorthWestern Corporation

Docket Nos. ER19-1943-000
ER19-1943-001

ORDER ON COMPLIANCE

(Issued January 24, 2020)

1. On May 22, 2019, as amended on July 11, 2019, NorthWestern Corporation (NorthWestern) submitted proposed revisions to its Montana Open Access Transmission Tariff (Tariff) in compliance with the requirements of Order Nos. 845 and 845-A,¹ which amended the Commission's *pro forma* Large Generator Interconnection Agreement (LGIA) and *pro forma* Large Generator Interconnection Procedures (LGIP).² As discussed below, we find that NorthWestern's filing partially complies with the requirements of Order Nos. 845 and 845-A. Accordingly, we accept NorthWestern's compliance filing, effective May 22, 2019, and direct NorthWestern to submit a further compliance filing within sixty (60) days of the date of this order.

I. Background

2. On April 19, 2018, the Commission issued Order No. 845, which revised the Commission's *pro forma* LGIA and the *pro forma* LGIP to improve certainty for interconnection customers, promote more informed interconnection decisions, and enhance the interconnection process. The Commission stated that it expects that these reforms will

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

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

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

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

4. Second, to promote more informed interconnection decisions, the Commission: (1) required transmission providers to outline and make public a method for determining

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

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

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

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

⁷ *Id.* P 3.

contingent facilities;⁸ (2) required transmission providers to list the specific study processes and assumptions for forming the network models used for interconnection studies;

(3) revised the definition of “Generating Facility” to explicitly include electric storage resources; and (4) established reporting requirements for aggregate interconnection study performance.⁹

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

II. NorthWestern’s Compliance Filing

6. NorthWestern states that it has revised Attachment M of its Tariff to include the *pro forma* tariff language adopted in Order Nos. 845 and 845-A, and that its proposed revisions fully comply with the Commission’s Order No. 845.¹²

7. NorthWestern states that its proposed Tariff revisions include the Commission’s

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

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

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

¹¹ *Id.* P 5.

¹² NorthWestern May 22, 2019 Compliance Filing at 2.

proposed language where Order No. 845 identifies specific language for incorporation into the *pro forma* tariff. In addition, Northwestern states that it proposes new language that addresses directives for which the Commission did not provide *pro forma* language. Specifically, NorthWestern explains that it proposes Tariff revisions for the following sections: (1) new LGIP section 3.8 – Identification of Contingent Facilities; (2) new LGIP section 4.4.4 – Modifications; (3) appendix 1 to the LGIP – Interconnection Request for a Large Generating Facility;¹³ and (4) appendix 5A to the LGIP – Surplus Interconnection Study Agreement, and LGIP section 3.3.1 – Surplus Interconnection Service Requests.¹⁴

8. NorthWestern requests that the proposed revisions to its Tariff become effective on May 22, 2019.¹⁵

III. Notice and Responsive Pleadings

9. Notice of NorthWestern’s compliance filing was published in the *Federal Register*, 84 Fed. Reg. 24,770 (2019), with interventions and protests due on or before June 12, 2019. Avangrid Renewables, LLC and NaturEner LLC filed timely motions to intervene.

10. On June 13, 2019, Commission staff issued a deficiency letter that requested additional clarification regarding NorthWestern’s procedure for allowing surplus interconnection service (Deficiency Letter). On July 11, 2019, NorthWestern filed its response to the Deficiency Letter, which included additional language to be added to its LGIP (Deficiency Response). Notice of NorthWestern’s Deficiency Response was published in the *Federal Register*, 84 Fed. Reg. 34,174 (2019), with interventions and protests due on or before August 1, 2019. None was filed.

IV. Discussion

A. Procedural Matters

11. Pursuant to Rule 214 of the Commission’s Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2019), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

B. Substantive Matters

12. As discussed below, we find that NorthWestern’s filing partially complies with the requirements of Order Nos. 845 and 845-A. Accordingly, we accept NorthWestern’s

¹³ *Id.*

¹⁴ Deficiency Response at 2.

¹⁵ NorthWestern, May 22, 2019 Compliance Filing at 3.

compliance filing, effective May 22, 2019, and direct NorthWestern to submit a further compliance filing within sixty (60) days of the date of this order.

1. Interconnection Customer's Option to Build

13. In Order No. 845, the Commission revised articles 5.1, 5.1.3, and 5.1.4 of the *pro forma* LGIA to allow interconnection customers to unilaterally exercise the option to build for stand alone network upgrades and the transmission provider's interconnection facilities, regardless of whether the transmission provider can complete construction of such facilities by the interconnection customer's proposed in-service date, initial synchronization date, or commercial operation date.¹⁶ Prior to Order No. 845, this option to build was available to an interconnection customer only if the transmission provider did not agree to the interconnection customer's preferred construction timeline.¹⁷ The Commission stated in Order No. 845 that this reform of the option to build will "benefit the interconnection process by providing interconnection customers more control and certainty during the design and construction phases of the interconnection process."¹⁸

14. In Order No. 845-A, the Commission granted rehearing and clarification of certain aspects of the revised option to build. Specifically, the Commission revised the definition of stand alone network upgrade in the *pro forma* LGIP and *pro forma* LGIA to: (1) state that, when there is a disagreement, the transmission provider must provide the interconnection customer a written technical explanation outlining why the transmission provider does not consider a specific network upgrade to be a stand alone network upgrade;¹⁹ and (2) clarify that the option to build does not apply to stand alone network upgrades on affected systems.²⁰ The Commission also made revisions to article 5.2 of the *pro forma* LGIA to allow transmission providers to recover oversight costs related to the

¹⁶ Order No. 845, 163 FERC ¶ 61,043 at PP 85-87.

¹⁷ *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, 104 FERC ¶ 61,103 at P 353 (2003), *order on reh'g*, Order No. 2003-A, 106 FERC ¶ 61,220, *order on reh'g*, Order No. 2003-B, 109 FERC ¶ 61,287 (2004), *order on reh'g*, Order No. 2003-C, 111 FERC ¶ 61,401 (2005), *aff'd sub nom. Nat'l Ass'n of Regulatory Util. Comm'rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007); *see also pro forma LGIP* § 5.1.3.

¹⁸ Order No. 845, 163 FERC ¶ 61,043 at P 85.

¹⁹ Order No. 845-A, 166 FERC ¶ 61,137 at P 68.

²⁰ *Id.* P 61.

interconnection customer's option to build.²¹ In addition, the Commission clarified that the revised option to build provisions apply to all public utility transmission providers, including those that reimburse the interconnection customer for network upgrades.²²

a. NorthWestern's Compliance Filing

15. NorthWestern proposes revisions to its *pro forma* LGIA amending articles 5.1, 5.1.3, and 5.2(12) to incorporate the *pro forma* LGIA revisions adopted by Order Nos. 845 and 845-A without modification.²³ Additionally, NorthWestern proposes revisions to its *pro forma* LGIP revising section 1 Definitions to incorporate the *pro forma* LGIP revisions adopted by Order Nos. 845 and 845-A without modification.²⁴

b. Commission Determination

16. We find that NorthWestern's proposed revisions regarding the option to build comply with the requirements of Order Nos. 845 and 845-A because NorthWestern adopts the Commission's *pro forma* LGIA and *pro forma* LGIP revisions without modification.

2. Dispute Resolution

17. In Order No. 845, the Commission revised the *pro forma* LGIP by adding new section 13.5.5, which establishes generator interconnection dispute resolution procedures that allow a disputing party to unilaterally seek non-binding dispute resolution.²⁵ The Commission established these new procedures because dispute resolution was previously unavailable when the parties did not mutually agree to pursue a binding arbitration under section 13.5 of the pre-Order No. 845 *pro forma* LGIP. The Commission further explained that participation in the new non-binding dispute resolution process in *pro forma* LGIP section 13.5.5 does not preclude disputing parties from pursuing binding arbitration after the conclusion of the non-binding dispute resolution process if they seek a binding result.²⁶

²¹ *Id.* P 75.

²² *Id.* P 33.

²³ NorthWestern, May 22, 2019 Compliance Filing at 2.

²⁴ *Id.*

²⁵ Order No. 845, 163 FERC ¶ 61,043 at P 133; *see also pro forma* LGIP § 13.5.5.

²⁶ Order No. 845, 163 FERC ¶ 61,043 at P 139.

a. **NorthWestern's Compliance Filing**

18. NorthWestern proposes revisions to its LGIP to add section 13.5.5, which it states adopts the Commission's *pro forma* LGIP provisions for dispute resolution as required by Order Nos. 845 and 845-A without modification.²⁷

b. **Commission Determination**

19. We find that NorthWestern's proposed LGIP revisions regarding dispute resolution comply with the requirements of Order Nos. 845 and 845-A because NorthWestern adopts the Commission's *pro forma* revisions without modification.

3. **Identification and Definition of Contingent Facilities**

20. In Order No. 845, the Commission added a new definition to section 1 of the *pro forma* LGIP, providing that contingent facilities shall mean those unbuilt interconnection facilities and network upgrades upon which the interconnection request's costs, timing, and study findings are dependent, and if delayed or not built, could cause a need for restudies of the interconnection request or a reassessment of the interconnection facilities and/or network upgrades and/or costs and timing.²⁸ The Commission also added new section 3.8 to the *pro forma* LGIP, which requires transmission providers to include, within section 3.8, a method for identifying the contingent facilities that they will provide to the interconnection customer at the conclusion of the system impact study and include in the interconnection customer's generator interconnection agreement.²⁹ The Commission specified that the method must be sufficiently transparent to determine why a specific contingent facility was identified and how it relates to the interconnection request.³⁰ The Commission stated that this transparency will ensure that the method is applied on a non-discriminatory basis.³¹ The Commission further required that transmission providers provide, upon the interconnection customer's request, the estimated network upgrade costs

²⁷ NorthWestern, May 22, 2019 Compliance Filing at 2.

²⁸ Order No. 845, 163 FERC ¶ 61,043 at P 218; *see also pro forma* LGIP § 1 (Definitions).

²⁹ Order No. 845, 163 FERC ¶ 61,043 at P 199.

³⁰ *Id.*; *see also pro forma* LGIP § 3.8.

³¹ Order No. 845, 163 FERC ¶ 61,043 at P 200.

and estimated in-service completion date associated with each identified contingent facility when this information is readily available and not commercially sensitive.³²

a. NorthWestern's Compliance Filing

21. NorthWestern adopts the *pro forma* LGIP definition of contingent facilities set forth in Order Nos. 845 and 845-A.³³ To comply with the requirement to include a method for identifying the contingent facilities that it will provide to the interconnection customer at the conclusion of the system impact study and include in the interconnection customer's generator interconnection agreement, NorthWestern proposes to revise its LGIP section 3.8 to provide a list of contingent facilities relevant to an interconnection request. NorthWestern proposes to develop the list by identifying: (1) any facilities that were modeled within the base case that are necessary for the proposed generating facility to operate; and (2) any higher-queued interconnection requests and generation interconnection agreements that require any interconnection facilities or network upgrades to be constructed and operational for interconnection of interconnection customer's proposed generating facility.³⁴ NorthWestern also adopts the *pro forma* LGIP language on the provision of estimated interconnection facility and/or network upgrade costs and estimated in-service completion date of each identified contingent facility upon request of the interconnection customer, when this information is readily available and not commercially sensitive.³⁵

b. Commission Determination

22. We find that the revised provisions that identify and describe NorthWestern's method for determining contingent facilities, as NorthWestern proposes in its LGIP, partially comply with the requirements of Order Nos. 845 and 845-A. We find that NorthWestern complies with the requirements of Order Nos. 845 and 845-A because NorthWestern has adopted the definition of contingent facilities without modification. Further, NorthWestern's proposed Tariff revisions comply with the requirements related to providing estimated network upgrade costs and estimated in-service completion dates associated with contingent facilities to the interconnection customer.

³² *Id.* P 199; *see also pro forma* LGIP § 3.8.

³³ NorthWestern, May 22, 2019 Compliance Filing at 4.

³⁴ *Id.*

³⁵ Northwestern OATT, Attachment M (2.5.0), LGIP § 3.8.

23. However, as specified in Order No. 845, transmission providers must include, in section 3.8 of their LGIPs, a method for determining contingent facilities.³⁶ The Commission required that this method must provide sufficient transparency to determine why a specific contingent facility was identified and how it relates to the interconnection request.³⁷ The Commission also required that a transmission provider's method to identify contingent facilities be transparent enough to ensure that it will be applied on a non-discriminatory basis.³⁸ NorthWestern's proposed Tariff revisions lack the requisite transparency required by Order Nos. 845 and 845-A because the proposed Tariff revisions do not detail the specific technical screens or analyses and the specific thresholds or criteria that NorthWestern will use as part of its method to identify contingent facilities.³⁹ Without this information, an interconnection customer will not understand how NorthWestern will evaluate potential contingent facilities to determine their relationship to an individual interconnection request.⁴⁰ Further, including provisions regarding specific thresholds or criteria in NorthWestern's LGIP will ensure NorthWestern's technical screens or analyses are applied to interconnection requests on a consistent, not unduly discriminatory or preferential basis. Accordingly, we direct NorthWestern to file, within sixty (60) days of the date of this order, a further compliance filing that includes in section 3.8 of its LGIP the method it will use to determine contingent facilities, including technical screens or analyses it proposes to use to identify these facilities. We also require that NorthWestern include the specific thresholds or criteria to achieve the level of transparency required by Order No. 845.

4. Transparency Regarding Study Models and Assumptions

24. In Order No. 845, the Commission revised section 2.3 of the *pro forma* LGIP to require transmission providers to maintain network models and underlying assumptions on either an Open Access Same-Time Information System (OASIS) site or a password-protected website. If the transmission provider posts this information on a password-protected website, a link to the information must be provided on its OASIS site. Revised *pro forma* LGIP section 2.3 also requires that "network models and underlying

³⁶ Order No. 845, 163 FERC ¶ 61,043 at P 199.

³⁷ *Id.* P 200.

³⁸ *Id.*

³⁹ The Commission declined to implement a standard threshold or criteria, such as a specific distribution factor threshold, because different thresholds may be more appropriate for different queue types and geographical footprints. *Id.* P 220.

⁴⁰ See *pro forma* LGIP § 3.8 ("The method shall be sufficiently transparent to determine why a specific Contingent Facility was identified").

assumptions reasonably represent those used during the most recent interconnection study and be representative of current system conditions.”⁴¹ In addition, the Commission revised *pro forma* LGIP section 2.3 to allow transmission providers to require interconnection customers, OASIS site users, and password-protected website users to sign a confidentiality agreement before the release of commercially sensitive information or critical energy infrastructure information (CEII).⁴²

25. In Order No. 845-A, the Commission reiterated that neither the Commission’s CEII regulations nor Order No. 845 precludes a transmission provider from taking necessary steps to protect information within its custody or control to ensure the safety and security of the electric grid.⁴³ The Commission also clarified that, to the extent any party would like to use the Commission’s CEII regulations as a model for evaluating entities that request network model information and assumptions (prior to signing a non-disclosure agreement), it may do so.⁴⁴ The Commission further clarified that the phrase “current system conditions” does not require transmission providers to maintain network models that reflect current real-time operating conditions of the transmission provider’s system. Instead, the network model information should reflect the system conditions currently used in interconnection studies.⁴⁵

a. NorthWestern’s Compliance Filing

26. NorthWestern proposes revisions to section 2.3 of its LGIP to adopt the Commission’s *pro forma* LGIP revisions regarding study models as required by Order Nos. 845 and 845-A without modification.⁴⁶

⁴¹ Order No. 845, 163 FERC ¶ 61,043 at P 236.

⁴² *Id.*; see also *pro forma* LGIP § 2.3.

⁴³ Order No. 845-A, 166 FERC ¶ 61,137 at P 84 (citing Order No. 845, 163 FERC ¶ 61,043 at P 241).

⁴⁴ Order No. 845-A, 166 FERC ¶ 61,137 at P 85 (citing 18 C.F.R. § 388.113(g)(5)(i) (2019)).

⁴⁵ *Id.* P 88.

⁴⁶ NorthWestern, May 22, 2019 Compliance Filing at 2.

b. Commission Determination

27. We find that NorthWestern’s proposed LGIP revisions regarding study models and assumptions comply with the requirements of Order Nos. 845 and 845-A because NorthWestern adopts the *pro forma* LGIP provisions without modification.

5. Definition of Generating Facility

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

Generating Facility shall mean Interconnection Customer’s device for the production *and/or storage for later injection* of electricity identified in the Interconnection Request, but shall not include the interconnection customer’s Interconnection Facilities.⁴⁷

The Commission found that this definitional change will reduce a potential barrier to large electric storage resources with a generating facility capacity above 20 MW that wish to interconnect pursuant to the terms in the *pro forma* LGIP and *pro forma* LGIA.⁴⁸

a. NorthWestern’s Compliance Filing

29. NorthWestern’s proposed revisions adopt the Commission’s *pro forma* LGIP and *pro forma* LGIA revised definition of a “Generating Facility” as required by Order Nos. 845 and 845-A without modification.⁴⁹

b. Commission Determination

30. We find that NorthWestern’s revisions regarding the definition of “Generating Facility” comply with the requirements of Order Nos. 845 and 845-A because NorthWestern adopts the Commission’s *pro forma* LGIP and *pro forma* LGIA revisions without modification.

⁴⁷ Order No. 845, 163 FERC ¶ 61,043 at P 275 (additions italicized); *see also pro forma* LGIP § 1.

⁴⁸ Order No. 845, 163 FERC ¶ 61,043 at P 275.

⁴⁹ NorthWestern, May 22, 2019 Compliance Filing at 2.

6. Interconnection Study Deadlines

31. In Order No. 845, the Commission modified the *pro forma* LGIP to add sections 3.5.2 and 3.5.3, which require transmission providers to calculate and maintain on their OASIS sites or public websites summary statistics related to the timing of the transmission provider's processing of interconnection studies and to update those statistics on a quarterly basis. In these sections, the Commission included bracketed Tariff language to be completed by the transmission provider in accordance with the timelines established for the various studies in their LGIPs.⁵⁰ The Commission also revised the *pro forma* LGIP to add section 3.5.4 to require transmission providers to file informational reports with the Commission if a transmission provider exceeds its interconnection study deadlines for more than 25 percent of any study type for two consecutive calendar quarters.⁵¹ In adopting these reporting requirements, the Commission found that the reporting requirements strike a reasonable balance between providing increased transparency and information to interconnection customers and not unduly burdening transmission providers.⁵² In Order No. 845-A, the Commission revised *pro forma* LGIP section 3.5.3 to clarify that the data reporting and retention requirements begin in the first calendar quarter of 2020.⁵³

a. NorthWestern's Compliance Filing

32. NorthWestern proposes revisions to its LGIP to add sections 3.5.2, 3.5.3, and 3.5.4 that incorporates the *pro forma* language of Order Nos. 845 and 845-A without modification. NorthWestern proposes Tariff revisions that replace the bracketed placeholders in *pro forma* LGIP sections 3.5.2.1, 3.5.2.2, and 3.5.2.3 with timelines that align with the timelines already in its Tariff to complete the feasibility, system impact, and facilities study, respectively.⁵⁴

b. Commission Determination

33. We find that the revised provisions that address NorthWestern's study deadline statistics and informational reporting requirements, as proposed in NorthWestern's LGIP,

⁵⁰ Order No. 845, 163 FERC ¶ 61,043 at P 305; *see also pro forma* LGIP § 3.5.2 and 3.5.3.

⁵¹ Order No. 845, 163 FERC ¶ 61,043 at P 305; *see also pro forma* LGIP § 3.5.4.

⁵² Order No. 845, 163 FERC ¶ 61,043 at P 307.

⁵³ Order No. 845-A, 166 FERC ¶ 61,137 at P 107.

⁵⁴ Northwestern OATT, Attachment M (2.5.0), LGIP §§ 3.5.2.1, 3.5.2.2, and 3.5.3.

comply with the requirements of Order Nos. 845 and 845-A. NorthWestern's proposed Tariff revisions adopt the language provided in Order No. 845 without modification and replace the bracketed placeholders in *pro forma* LGIP sections 3.5.2.1, 3.5.2.2, and 3.5.2.3 with timelines that align with the timelines already in its Tariff.

7. **Requesting Interconnection Service below Generating Facility Capacity**

34. In Order No. 845, the Commission modified sections 3.1, 6.3, 7.3, 8.2, and Appendix 1 of the *pro forma* LGIP to allow interconnection customers to request interconnection service that is lower than the proposed generating facility's capacity,⁵⁵ recognizing the need for proper control technologies and flexibility for transmission providers to propose penalties to ensure that the generating facility does not inject energy above the requested level of service.⁵⁶

35. The Commission required, in *pro forma* LGIP revised section 3.1, that transmission providers have a process in place to consider requests for interconnection service below the generating facility capacity. The Commission stipulated that such requests should be studied at the level of interconnection service requested for purposes of determining interconnection facilities, network upgrades, and associated costs, but that such requests may be subject to other studies at the full generating facility capacity to ensure safety and reliability of the system.⁵⁷ In addition, *pro forma* LGIP revised section 3.1 states that the interconnection customer is responsible for all study costs and interconnection facility and/or network upgrade costs required for safety and reliability. The Commission also required in *pro forma* LGIP revised section 3.1 that any necessary control technologies and/or protection systems be memorialized in the LGIA.

36. The Commission required, in *pro forma* LGIP revised sections 6.3, 7.3, and 8.2, that the feasibility, system impact, and facilities studies be performed at the level of interconnection service that the interconnection customer requests, unless the transmission provider is otherwise required to study the full generating facility capacity due to safety and reliability concerns. The Commission stated that, if the transmission provider determines that additional network upgrades are necessary based on these studies, it must specify which additional network upgrade costs are based on which studies and provide a

⁵⁵ The term generating facility capacity is defined as "the net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple energy production devices." *Pro forma* LGIA art. 1 (Definitions).

⁵⁶ Order No. 845, 163 FERC ¶ 61,043 at P 367; *see also pro forma* LGIP §§ 3.1, 6.3, 7.3, and 8.2 and *pro forma* LGIP App. 1.

⁵⁷ Order No. 845, 163 FERC ¶ 61,043 at PP 383-84.

detailed explanation of why the additional network upgrades are necessary.⁵⁸

37. Finally, the Commission revised sections 4.4.1 and 4.4.2 of the *pro forma* LGIP to allow an interconnection customer to reduce the size of its interconnection request either prior to returning to the transmission provider an executed system impact study agreement or an executed facilities study agreement.⁵⁹

a. NorthWestern's Compliance Filing

38. NorthWestern proposes revisions to its LGIP to adopt the Commission's proposed reforms to *pro forma* LGIP sections 3.1, 4.4.2, 6.3, 7.3, and 8.2, and Appendix 1 to incorporate the language set forth in Order Nos. 845 and 845-A without modification.⁶⁰

39. However, Northwestern's proposed Tariff revisions do not fully incorporate the *pro forma* LGIP language adopted by Order No. 845.⁶¹ Order No. 845 adopted the following language as the second sentence of the final paragraph in *pro forma* LGIP section 3.1:

These requests for Interconnection Service shall be studied at the level of Interconnection Service requested for purposes of Interconnection Facilities, Network Upgrades, *and associated costs*, but may be subject to other studies at the full Generating Facility Capacity to ensure safety and reliability of the system, with the study costs borne by the Interconnection Customer.⁶²

⁵⁸ *Id.* P 384. The Commission clarified that, if the transmission provider determines, based on good utility practice and related engineering considerations and after accounting for the proposed control technology, that studies at the full generating facility capacity are necessary to ensure safety and reliability of the transmission system when an interconnection customer requests interconnection service that is lower than full generating facility capacity, then it must provide a detailed explanation for such a determination in writing to the interconnection customer. *Id.*

⁵⁹ *Id.* P 406; *see also pro forma* LGIP §§ 4.4.1 and 4.4.2.

⁶⁰ NorthWestern, May 22, 2019 Compliance Filing at 2.

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

⁶² Order No. 845, 163 FERC ¶ 61,043 at P 347; *see also id.* P 367.

40. Finally, NorthWestern's section 4.4.1 does not include "up to" in the following provision:

Prior to the return of the executed Interconnection System Impact Study Agreement to Transmission Provider, modifications permitted under this Section shall include specifically: (a) a decrease of *up to* [emphasis added] 60 percent of electrical output (MW) of the proposed project, through either (1) a decrease in plant size or (2) a decrease in the Interconnection Service level ...⁶³

b. Commission Determination

41. We find that NorthWestern's proposed LGIP revisions that allow an interconnection customer to request interconnection service below its full generating facility capacity partially comply with the requirements of Order Nos. 845 and 845-A because they incorporate most of *pro forma* LGIP language without modification comply with the requirements of Order Nos. 845 and 845-A.

42. However, as discussed above, NorthWestern's revisions to section 3.1 of its LGIP omit some of the *pro forma* LGIP language required by Order No. 845.⁶⁴ Accordingly, we direct NorthWestern to file, within sixty (60) days of the date of this order, a further compliance filing that incorporates the *pro forma* revisions to section 3.1 of its LGIP, as required by Order No. 845. Additionally, as noted above, NorthWestern's LGIP section 4.4.1 does not include the phrase "up to." We find that without this phrase, interconnection customers' ability to request interconnection service below the generating facility's full capacity would be inappropriately limited. Accordingly, we direct NorthWestern to file, within sixty (60) days of the date of this order, a further compliance filing to include "up to" in its LGIP section 4.4.1, to align with the language in the Commission's *pro forma* LGIP section 4.4.1.

⁶³ Northwestern OATT, Attachment M (2.5.0), LGIP § 4.4.1.

⁶⁴ *Id.*; see also App. B. While *pro forma* LGIP § 3.1 adopted in Order No. 845 include the phrase "and associated costs", we recognize that the *pro forma* LGIP that was available on the Commission's website failed to include that language.

8. Provisional Interconnection Service

43. In Order No. 845, the Commission required transmission providers to allow all interconnection customers to request provisional interconnection service.⁶⁵ The Commission explained that interconnection customers may seek provisional interconnection service when available studies or additional studies, as necessary, indicate that there is a level of interconnection service that can occur to accommodate an interconnection request without the construction of any additional interconnection facilities and/or network upgrades, and the interconnection customer wishes to make use of that level of interconnection service while the facilities required for its full interconnection request are completed.⁶⁶ To implement this service, the Commission revised the *pro forma* LGIP and *pro forma* LGIA to add a definition for “Provisional Interconnection Service”⁶⁷ and for a “Provisional Large Generator Interconnection Agreement.”⁶⁸

44. In addition, the Commission added *pro forma* LGIA article 5.9.2, which details the terms for provisional interconnection service.⁶⁹ The Commission also explained that transmission providers have the discretion to determine the frequency for updating provisional interconnection studies to account for changes to the transmission system to reassess system capacity available for provisional interconnection service, and included bracketed tariff language to be completed by the transmission provider, to specify the frequency at which they perform such studies in their *pro forma* LGIA. The Commission stated that interconnection customers are responsible for the costs for performing these provisional interconnection studies.⁷⁰

a. NorthWestern’s Compliance Filing

45. NorthWestern’s proposed Tariff revisions adopt the Commission’s *pro forma* definitions related to provisional interconnection service and the *pro forma* language in LGIA article 5.9.2 without modification. NorthWestern proposes to fill in the bracketed

⁶⁵ Order No. 845, 163 FERC ¶ 61,043 at P 438.

⁶⁶ *Id.* P 441.

⁶⁷ *Pro forma* LGIP § 1 (Definitions); *pro forma* LGIA art. 1 (Definitions).

⁶⁸ *Id.* The Commission declined, however, to adopt a separate *pro forma* provisional large generator interconnection agreement. Order No. 845, 163 FERC ¶ 61,043 at P 444.

⁶⁹ Order No. 845, 163 FERC ¶ 61,043 at P 438; *see also pro forma* LGIP §5.9.2.

⁷⁰ Order No. 845, 163 FERC ¶ 61,043 at P 448.

section of article 5.9.2 to state that it will study and update the maximum permissible output of the generating facility subject to a provisional LGIA on an annual basis.⁷¹

b. Commission Determination

46. We find that NorthWestern's proposed LGIP and *pro forma* LGIA revisions regarding provisional interconnection service comply with the requirements of Order Nos. 845 and 845-A because NorthWestern proposes to adopt the Commission's *pro forma* LGIP and *pro forma* LGIA provisions without modification, except to fill in the bracketed section in *pro forma* LGIA article 5.9.2 to state that it will study and update the maximum permissible output of the generating facility subject to a provisional LGIA on an annual basis.

9. Surplus Interconnection Service

47. In Order No. 845, the Commission adopted *pro forma* LGIP sections 1, 3.3, and 3.3.1 and *pro forma* LGIA article 1 to establish surplus interconnection service, which the Commission defined as any unneeded portion of interconnection service established in an LGIA such that if the surplus interconnection service is utilized the total amount of interconnection service at the point of interconnection would remain the same.⁷² Surplus interconnection service enables a new interconnection customer to utilize the unused portion of an existing interconnection customer's interconnection service within specific parameters.⁷³ The Commission required transmission providers to revise their tariffs to include the new definition of surplus interconnection service in their *pro forma* LGIP and *pro forma* LGIA, and provide in the *pro forma* LGIP an expedited interconnection process outside of the interconnection queue for surplus interconnection service.⁷⁴ That expedited process must allow affiliates of the existing interconnection customer to use surplus interconnection service for another interconnecting generating facility and allow for the transfer of surplus interconnection service that the existing interconnection customer or one of its affiliates does not intend to use.⁷⁵ The transmission provider must perform reactive

⁷¹ Northwestern OATT, Attachment M (2.5.0), LGIP § 5.9.2.

⁷² Order No. 845, 163 FERC ¶ 61,043 at P 467; *see also pro forma* LGIP § 1 (Definitions); *pro forma* LGIP art. 1 (Definitions).

⁷³ Order No. 845, 163 FERC ¶ 61,043 at P 467; Order No. 845-A, 166 FERC ¶ 61,137 at P 119.

⁷⁴ Order No. 845, 163 FERC ¶ 61,043 at P 467; *see also pro forma* LGIP §§ 3.3 and 3.3.1.

⁷⁵ Order No. 845, 163 FERC ¶ 61,043 at P 483; *see also pro forma* LGIP § 3.3.

power, short circuit/fault duty, and stability analyses studies as well as steady-state (thermal/voltage) analyses as necessary to ensure evaluation of all required reliability conditions to provide surplus interconnection service and ensure the reliable use of surplus interconnection service.⁷⁶ The original interconnection customer must be able to stipulate the amount of surplus interconnection service that is available, designate when that service is available, and describe any other conditions under which surplus interconnection service at the point of interconnection may be used.⁷⁷ When the original interconnection customer, the surplus interconnection service customer, and the transmission provider enter into a surplus interconnection service agreement, the transmission provider must file the agreement with the Commission because any surplus interconnection service agreement will be an agreement under the transmission provider's open access transmission tariff.⁷⁸

a. NorthWestern's Compliance Filing

48. NorthWestern proposes revisions to sections 1, 3.3, 3.3.1, and 3.3.2 to its LGIP and article 1 of its LGIA that adopt the Commission's *pro forma* LGIP and *pro forma* LGIA revisions for surplus interconnection service as required by Order Nos. 845 and 845-A, without modification.

49. As outlined in its Deficiency Response, NorthWestern also proposes to add a process for designating and requesting surplus interconnection service, including a timeline for processing such requests. NorthWestern's proposed process allows an existing interconnection customer to (1) identify the amount of surplus interconnection service that is available, (2) designate when that service is available, and (3) describe any other conditions under which surplus interconnection service at the point of interconnection may be used.

50. NorthWestern's proposed Tariff revisions include provisions for an interconnection customer to request surplus interconnection service and acknowledgement of the request. This process, as provided for in section 3.3.2.2, requires that an interconnection customer requesting surplus interconnection service must submit: (1) a completed interconnection request; (2) a refundable deposit of \$5,000 to be applied toward the cost of the surplus interconnection study; and (3) the applicable generator required information form from the NorthWestern's OASIS.⁷⁹ Further, in section 3.3.2.3, NorthWestern proposes to

⁷⁶ Order No. 845, 163 FERC ¶ 61,043 at PP 455, 467.

⁷⁷ *Id.* P 481.

⁷⁸ *Id.* P 499.

⁷⁹ Northwestern OATT, Attachment M (2.5.0), LGIP § 3.3.2.2.

acknowledge receipt of the interconnection request within five (5) business days of receipt of the request.⁸⁰

51. Additionally, NorthWestern proposes to hold a scoping meeting with the existing interconnection customer and the surplus interconnection customer no later than ten (10) business days after NorthWestern receives information required in LGIP section 3.3.2.2, unless mutually agreed upon by the parties as provided for in 3.3.2.4.⁸¹ In LGIP section 3.3.2.6, NorthWestern also provides that it shall study surplus interconnection service outside of the non-surplus interconnection service queue and shall use reasonable efforts to complete the study within 90 calendar days of receiving the submitted information from the interconnection customer.⁸² In addition, the proposed revisions to section 3.3.1 list the studies NorthWestern will conduct for surplus interconnection service requests, which include reactive power, short circuit/fault duty, stability analyses, and any other appropriate studies.

52. NorthWestern also proposes a new surplus interconnection study agreement in Appendix 5A to its LGIP. NorthWestern will tender a surplus interconnection study agreement, including the scope of the surplus interconnection study, an agreement of studies to be completed to ensure reliability, and a good-faith estimate of the cost and timeframe for completing the surplus interconnection study. NorthWestern notes that surplus interconnection service is only available up to the amount that can be accommodated without requiring new network upgrades. If the study shows that network upgrades are required, surplus interconnection service is not available and will be denied.⁸³

53. NorthWestern includes in its LGIP section 3.3.3 that NorthWestern, the original/existing interconnection customer, and the surplus interconnection customer shall develop a surplus interconnection service agreement and other agreements as necessary to establish, among other things, the term of operation, the interconnection service limit, the mode of operation for energy production, and the roles and responsibilities of the parties for maintaining the operation of the facility. NorthWestern provides that it will file the surplus interconnection service agreement with the Commission. NorthWestern also proposes language in section 3.3.3 stating that NorthWestern is not required to execute an agreement for surplus interconnection service if the requested service does not meet the definition set forth in the Tariff or if the

⁸⁰ *Id.* § 3.3.2.3.

⁸¹ *Id.* § 3.3.2.4.

⁸² *Id.* § 3.3.2.6.

⁸³ Deficiency Response at 2.

interconnection customer does not agree to the terms of such service, including any requirements that may be identified by NorthWestern in the surplus interconnection study. If the surplus interconnection customer disputes an issue in the surplus interconnection service agreement, NorthWestern must file the unexecuted agreement with the Commission if requested to do so by the surplus interconnection customer.⁸⁴

b. Commission Determination

54. We find that NorthWestern's proposed provisions regarding surplus interconnection service comply with the requirements of Order Nos. 845 and 845-A because NorthWestern adopts the *pro forma* definition of surplus interconnection service and *pro forma* provisions in LGIP sections 3.3 and 3.3.1 without modification. We also find that NorthWestern's proposed process for evaluating surplus interconnection service complies with the requirements of Order Nos. 845 and 845-A. The process provides that NorthWestern will evaluate surplus interconnection service requests outside of its non-surplus interconnection queue. Additionally, as required by Order Nos. 845 and 845-A, NorthWestern's proposed process requires that the transmission provider, original interconnection customer, and surplus interconnection service customer file a surplus interconnection service agreement with the Commission that includes the terms and conditions of surplus interconnection service.

10. Material Modifications and Incorporation of Advanced Technologies

55. In Order No. 845, the Commission modified section 4.4.2(c) of the *pro forma* LGIP to allow an interconnection customer to incorporate certain technological advancements to its interconnection request, prior to the execution of the interconnection facilities study agreement,⁸⁵ without risking the loss of its queue position. The Commission required transmission providers to develop and include in their LGIPs a definition of permissible technological advancements that will create a category of technological changes that, by definition, do not constitute a material modification and, therefore, will not result in the loss of queue position. In addition, the Commission modified section 4.4.6 of the *pro forma* LGIP to require transmission providers to insert a technological change

⁸⁴ Northwestern OATT, Attachment M (2.5.0), LGIP § 3.3.3.

⁸⁵ While the Commission clarified that interconnection customers may submit a technological advancement request up until execution of the facilities study agreement, the Commission stated that it will permit transmission providers to propose rules limiting the submission of technological advancement requests to a single point in the study process (prior to the execution of a facilities study agreement), to the extent the transmission provider believes it appropriate. Order No. 845, 163 FERC ¶ 61,043 at P 536.

procedure that includes the requisite information and process that the transmission provider will follow to assess whether an interconnection customer's proposed technological advancement is a material modification.⁸⁶

56. The Commission required that the technological change procedure specify what technological advancements can be incorporated at various stages of the interconnection process and clearly identify which requirements apply to the interconnection customer and which apply to the transmission provider.⁸⁷ Additionally, the technological change procedure must state that, if the interconnection customer seeks to incorporate technological advancements into its proposed generating facility, it should submit a technological advancement request, and the procedure must specify the information that the interconnection customer must submit as part of that request.⁸⁸

57. The Commission also required that the technological change procedure specify the conditions under which a study will or will not be necessary to determine whether a proposed technological advancement is a material modification.⁸⁹ The Commission explained that the technological change procedure must also state that, if a study is necessary to evaluate whether a particular technological advancement is a material modification, the transmission provider shall clearly indicate to the interconnection customer the types of information and/or study inputs that the interconnection customer must provide to the transmission provider, including, for example, study scenarios, modeling data, and any other assumptions.⁹⁰ In addition, the Commission required that the technological change procedure explain how the transmission provider will evaluate the technological advancement request to determine whether it is a material modification.⁹¹

58. Further, the Commission required that the technological change procedure outline a time frame of no more than thirty (30) days after the interconnection customer submits a formal technological advancement request for the transmission provider to perform and complete any necessary additional studies.⁹² The Commission also found that, if the

⁸⁶ *Id.* P 518; *see also pro forma* LGIP § 4.4.6.

⁸⁷ Order No. 845, 163 FERC ¶ 61,043 at P 519.

⁸⁸ *Id.*

⁸⁹ *Id.*; Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

⁹⁰ Order No. 845, 163 FERC ¶ 61,043 at P 521.

⁹¹ *Id.*

⁹² *Id.* P 535.

transmission provider determines that additional studies are necessary to evaluate whether a technological advancement is a material modification, the interconnection customer must tender a deposit, and the transmission provider must specify the amount of the deposit in the transmission provider's technological change procedure.⁹³ In addition, the Commission explained that, if the transmission provider cannot accommodate a proposed technological advancement without triggering the material modification provision of the *pro forma* LGIP, the transmission provider must provide an explanation to the interconnection customer regarding why the technological advancement is a material modification.⁹⁴

59. In Order No. 845-A, the Commission clarified that: (1) when studies are necessary, the interconnection customer's technological change request must demonstrate that the proposed incorporation of the technological change will result in electrical performance that is equal to or better than the electrical performance expected prior to the technological change and will not cause any reliability concerns; (2) if the interconnection customer cannot demonstrate in its technological change request that the proposed technological change would result in equal or better electrical performance, the change will be assessed pursuant to the existing material modification provisions in the *pro forma* LGIP; (3) information regarding electrical performance submitted by the interconnection customer is an input into the technological change study, and this factor alone is not determinative of whether a proposed technological change is a material modification; and (4) the determination of whether a proposed technological change (that the transmission provider does not otherwise include in its definition of permissible technological advancements) is a material modification should include an analysis of whether the proposed technological change materially impacts the timing and costs of lower-queued interconnection customers.⁹⁵

a. NorthWestern's Compliance Filing

60. NorthWestern proposes revisions to its LGIP that include the following definition of permissible technological advancement:

a technological change to turbines, inverters, plant supervisory controls, or other technological advancements that is equal to or better than the electrical performance expected prior to the technological change, and which does not increase the

⁹³ *Id.* P 534. The Commission set the default deposit amount to \$10,000, but stated that a transmission provider may propose a reasonable alternative deposit amount in its compliance filing and include a justification supporting this alternative amount. *Id.*

⁹⁴ *Id.* P 522.

⁹⁵ Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

Interconnection Customer's requested Interconnection Service or cause any reliability concerns. A Permissible Technological Advancement is a technological change that (1) does not adversely alter the electrical characteristics of the Interconnection Request; (2) does not materially impact the transmission system with regard to short circuit capability limits, steady-state thermal and voltage limits, or dynamic system stability and response; (3) does not degrade the electrical characteristics of the generating equipment (e.g., the ratings, impedances, efficiencies, capabilities, and performance of the equipment under steady-state and dynamic conditions); or (4) does not include changes in either generation technology or fuel type.

61. NorthWestern's proposed revisions to LGIP section 4.4.6 sets forth its technological change procedure. NorthWestern states that the technological change procedure describes how NorthWestern will review a proposed technological change to determine whether such change is a permissible technological advancement and, if not, whether such change triggers the material modification provision.⁹⁶ Proposed LGIP section 4.4.6.1 provides that, following receipt of the interconnection customer's request to review a technological change in an interconnection request, NorthWestern shall evaluate the request and required technical information to determine whether the requested technological change is a permissible technological advancement. The proposed language also states that NorthWestern shall notify the interconnection customer within thirty (30) calendar days of the interconnection customer's completed request of NorthWestern's determination of whether the requested technological change is a permissible technological advancement. Proposed LGIP section 4.4.6.2 provides that, if the requested technological change is a permissible technological advancement and upon receipt of the interconnection customer's confirmation that it would like to proceed with the change, NorthWestern shall accommodate the change without considering the material modification provisions in the LGIP and shall update the model and study reports within 15 calendar days.⁹⁷

62. NorthWestern's proposed LGIP section 4.4.6.3 provides that if NorthWestern determines that the interconnection customer's requested technological change is not a permissible technological advancement, NorthWestern will provide a written explanation of its reasoning for its determination and advise the interconnection customer that it may either proceed under the material modification provisions of this LGIP or abandon its requested technological change. In proposed LGIP section 4.4.6.4, NorthWestern proposes

⁹⁶ NorthWestern May 22, 2019 Compliance Filing at 2.

⁹⁷ Northwestern OATT, Attachment M (2.5.0), LGIP § 4.4.6.2.

that the interconnection customer incur the costs for any permissible technological advancement analysis.⁹⁸

b. Commission Determination

63. We find that NorthWestern's proposed LGIP revisions to incorporate a definition of a permissible technological advancement and a technological change procedure partially comply with the requirements of Order Nos. 845 and 845-A. Specifically, we find that NorthWestern's proposed definition of a permissible technological advancement meets the Commission's requirement to provide a category of technological change that does not constitute a material modification.

64. However, NorthWestern fails to include provisions in its LGIP that outline the deposit requirements for a technological advancement request, as required by Order No. 845. Order No. 845 requires an interconnection customer to tender a deposit if the transmission provider determines that additional studies are needed to evaluate whether a proposed technological change is a material modification. Order No. 845 also states that the transmission provider in its technological change procedure should specify the amount of the deposit.⁹⁹ Accordingly, we direct NorthWestern to file, within sixty (60) days of the date of this order, a further compliance filing revising its LGIP to specify the deposit amount the interconnection customer must tender if NorthWestern determines that additional studies are needed to evaluate whether a technological change is a material modification.

65. Further, Order No. 845 requires that the technological change procedure explain how the transmission provider will evaluate the technological advancement request to determine whether it is a material modification.¹⁰⁰ NorthWestern's proposed LGIP revisions do not explain how it will evaluate the technological advancement request to determine whether it is a material modification. Accordingly, we direct NorthWestern to file, within sixty (60) days of the date of this order, a further compliance filing revising its LGIP to provide a more detailed explanation of the studies that NorthWestern will conduct to determine whether the technological advancement request will result in a material modification.

⁹⁸ *Id.* § 4.4.6.3.

⁹⁹ Order No. 845, 163 FERC ¶ 61,043 at P 534.

¹⁰⁰ *Id.* P 521.

The Commission orders:

(A) NorthWestern's proposed Tariff revisions are hereby accepted, effective May 22, 2019, subject to a further compliance filing, as discussed in the body of this order.

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

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.