

169 FERC ¶ 61,141
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

Golden Spread Electric Cooperative, Inc.

Docket No. ER19-1900-001

ORDER ON COMPLIANCE

(Issued November 22, 2019)

1. On May 20, 2019, as amended on July 11, 2019 and clarified on July 25, 2019, Golden Spread Electric Cooperative, Inc. (Golden Spread) submitted proposed revisions to its 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 Golden Spread's filing partially complies with the requirements of Order Nos. 845 and 845-A. Accordingly, we accept Golden Spread's compliance filing, effective May 20, 2019, and direct Golden Spread to submit a further compliance filing within 60 days of the date of this order.

I. Background

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

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

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

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 article 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." *Id*.

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. Golden Spread’s Compliance Filing

6. Golden Spread proposes changes to its LGIP and *pro forma* LGIA (Attachments M and N of its Tariff, respectively) in order to implement the changes directed by Order Nos. 845 and 845-A. Golden Spread states that its LGIP and *pro forma* LGIA mirror the Commission’s *pro forma* LGIP and *pro forma* LGIA, and that it proposes to implement

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 section 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.

the Commission's requirements without modification. Golden Spread requests that the proposed revisions to its Tariff become effective on May 20, 2019.¹²

III. Notice and Responsive Pleadings

7. Notice of Golden Spread's compliance filing was published in the *Federal Register*, 84 Fed. Reg. 24,129 (2019), with interventions and protests due on or before June 10, 2019. None was filed.

8. On June 13, 2019, Commission staff issued a deficiency letter that requested additional clarification regarding Golden Spread's procedure for enabling new interconnection customers to utilize surplus interconnection service (Deficiency Letter). On July 11, 2019, Golden Spread filed an amendment to the May 20, 2019 filing in its response to the Deficiency Letter (Deficiency Response). Notice of Golden Spread'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. On July 25, 2019, Golden Spread submitted a clarification to its Deficiency Response.

IV. Discussion

9. As discussed below, we find that Golden Spread's filing partially complies with the requirements of Order Nos. 845 and 845-A. Accordingly, we accept Golden Spread's compliance filing, effective May 20, 2019, and direct Golden Spread to submit a further compliance filing within 60 days of the date of this order, as discussed in the body of this order.

1. Interconnection Customer's Option to Build

10. 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.¹³ 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.¹⁴ The

¹² Golden Spread May 20, 2019 Filing at 1 and 3.

¹³ Order No. 845, 163 FERC ¶ 61,043 at PP 85-87.

¹⁴ *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,

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.”¹⁵

11. 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 upgrades 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;¹⁶ and (2) clarify that the option to build does not apply to stand alone network upgrades on affected systems.¹⁷ The Commission also made revisions to article 5.2 of the *pro forma* LGIA to allow transmission providers to recover oversight costs related to the interconnection customer’s option to build.¹⁸ 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.¹⁹

a. Golden Spread’s Compliance Filing

12. Golden Spread has revised the definition of stand alone network upgrades in its LGIP and *pro forma* LGIA as required by Order Nos. 845 and 845-A. Golden Spread proposes revisions to articles 5.1, 5.1.3, 5.1.4, and 5.2 of its *pro forma* LGIA to implement the changes to the Commission’s *pro forma* LGIA set forth in Order Nos. 845 and 845-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), *cert. denied*, 552 U.S. 1230 (2008); *see also pro forma* LGIP section 5.1.3.

¹⁵ Order No. 845, 163 FERC ¶ 61,043 at P 85.

¹⁶ Order No. 845-A, 166 FERC ¶ 61,137 at P 68.

¹⁷ *Id.* P 61.

¹⁸ *Id.* P 75.

¹⁹ *Id.* P 33.

b. Commission Determination

13. We find that the revised definition and option to build provisions that Golden Spread proposes in its LGIP and *pro forma* LGIA adopt the Commission's revisions and thus comply with the requirements of Order Nos. 845 and 845-A.

2. Dispute Resolution

14. 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.²⁰ 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.²¹

a. Golden Spread's Compliance Filing

15. Golden Spread proposes revisions to add section 13.5.5 to its LGIP to implement the changes to the Commission's *pro forma* LGIP set forth in Order Nos. 845 and 845-A.

b. Commission Determination

16. We find that the revised dispute resolution procedures that Golden Spread proposes to add to its LGIP adopt the Commission's revisions to the *pro forma* LGIP and thus comply with the requirements of Order Nos. 845 and 845-A.

3. Identification and Definition of Contingent Facilities

17. 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

²⁰ Order No. 845, 163 FERC ¶ 61,043 at P 133; *see also pro forma* LGIP section 13.5.5.

²¹ Order No. 845, 163 FERC ¶ 61,043 at P 139.

facilities and/or network upgrades and/or costs and timing.²² 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.²³ 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.²⁴ The Commission stated that this transparency will ensure that the method is applied on a non-discriminatory basis.²⁵ The Commission further required that transmission providers provide, upon the interconnection customer's request, the estimated network upgrade costs and estimated in-service completion date associated with each identified contingent facility when this information is readily available and not commercially sensitive.²⁶

a. Golden Spread's Compliance Filing

18. Golden Spread proposes to revise its LGIP to define contingent facilities as 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. Golden Spread also proposes revisions to its LGIP to add a new section 3.8 to implement the changes to the Commission's *pro forma* LGIP set forth in Order Nos. 845 and 845-A. Specifically, Golden Spread proposes language stating that the system impact study will identify any contingent facilities, explain how each contingent facility was identified, and how it relates to the interconnection request. Golden Spread also proposes to provide, upon the request of the interconnection customer, the estimated costs and timelines to construct any necessary interconnection facilities and/or network upgrades when available and not commercially sensitive.

²² *Id.* P 218; *see also pro forma* LGIP section 1 (Definitions).

²³ Order No. 845, 163 FERC ¶ 61,043 at P 199.

²⁴ *Id.* ; *see also pro forma* LGIP section 3.8.

²⁵ Order No. 845, 163 FERC ¶ 61,043 at P 200.

²⁶ *Id.* P 199; *see also pro forma* LGIP section 3.8.

b. Commission Determination

19. We find that Golden Spread's proposed definition of contingent facilities adopts the Commission's revisions to the *pro forma* LGIP and thus complies with the requirements of Order Nos. 845 and 845-A.

20. We also find that the proposed provisions that identify and describe Golden Spread's method for determining contingent facilities, as Golden Spread proposes in its LGIP, partially comply with the requirements of Order Nos. 845 and 845-A. Golden Spread'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.

21. However, as specified in Order No. 845, transmission providers must include, in section 3.8 of their LGIPs, a method for determining contingent facilities. The Commission required that this method must provide sufficient transparency to determine why a specific contingent facility was identified and how it relates to the interconnection request. 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.²⁷ Golden Spread's proposed Tariff revisions lack the requisite transparency required by Orders No. 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 Golden Spread will utilize as part of its method to identify contingent facilities.²⁸ Without this information, an interconnection customer will not understand how Golden Spread will evaluate potential contingent facilities to determine their relationship to an individual interconnection request.²⁹ Further, including provisions regarding specific thresholds or criteria in Golden Spread's LGIP will ensure Golden Spread's technical screens or analyses will be applied to interconnection requests on a consistent and not unduly discriminatory or preferential basis. Accordingly, we direct Golden Spread to file, within 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

²⁷ Order No. 845, 163 FERC ¶ 61,043 at P 200.

²⁸ 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.

²⁹ See *pro forma* LGIP section 3.8 ("The method shall be sufficiently transparent to determine why a specific Contingent Facility was identified").

facilities. We also require that Golden Spread include the specific thresholds or criteria to achieve the level of transparency required by Order No. 845.

22. Additionally, Golden Spread appears to omit language that explicitly requires the transmission provider to provide this information to the interconnection customer. Accordingly, we direct Golden Spread to file, within 60 days of the date of issuance of this order, a further compliance filing that implements the following revision to section 3.8 of its LGIP (new text in italics):

Upon request of the Interconnection Customer, *the Transmission Provider shall provide* the estimated costs and timelines to construct Interconnection Facilities and/or Network Upgrades of each Contingent Facility when available and not commercially sensitive.

4. Transparency Regarding Study Models and Assumptions

23. In Order No. 845, the Commission revised section 2.3 of the *pro forma* LGIP to require transmission providers to maintain network models and underlying assumptions on either an Open Access Same-Time Information System (OASIS) site or a password-protected website. If the transmission provider posts this information on a password-protected website, a link to the information must be provided on its OASIS site. Revised *pro forma* LGIP section 2.3 also requires that “network models and underlying assumptions reasonably represent those used during the most recent interconnection study and be representative of current system conditions.”³⁰ 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).³¹

24. 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.³² The Commission also clarified that, to the extent any

³⁰ Order No. 845, 163 FERC ¶ 61,043 at P 236.

³¹ *Id.*; see also *pro forma* LGIP section 2.3.

³² Order No. 845-A, 166 FERC ¶ 61,137 at P 84 (citing Order No. 845, 163 FERC ¶ 61,043 at P 241).

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.³³ 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.³⁴

a. Golden Spread’s Compliance Filing

25. Golden Spread proposes revisions to section 2.3 of its LGIP to implement the changes to the Commission’s *pro forma* LGIP set forth in Order Nos. 845 and 845-A.

b. Commission Determination

26. We find that the revised study model provisions that Golden Spread proposes in its LGIP adopt the Commission’s revisions to the *pro forma* LGIP and thus comply with the requirements of Order Nos. 845 and 845-A.

5. Definition of Generating Facility

27. 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.³⁵

³³ *Id.* P 85 (citing 18 C.F.R. § 388.113(g)(5)(i)).

³⁴ *Id.* P 88.

³⁵ Order No. 845, 163 FERC ¶ 61,043 at P 275 (additions italicized); *see also pro forma* LGIP section 1 (Definitions).

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.³⁶

a. Golden Spread’s Compliance Filing

28. Golden Spread proposes revisions to section 1 of its LGIP and article 1 of its *pro forma* LGIA to implement the changes to the Commission’s *pro forma* LGIP set forth in Order Nos. 845 and 845-A.

b. Commission Determination

29. We find that the revised provisions related to the definition of a “Generating Facility” that Golden Spread proposes in its LGIP and *pro forma* LGIA adopt the Commission’s revisions to the *pro forma* LGIP and LGIA and thus comply with the requirements of Order Nos. 845 and 845-A.

6. Interconnection Study Deadlines

30. 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.³⁷ 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.³⁸ 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

³⁶ *Id.* P 275.

³⁷ Order No. 845, 163 FERC ¶ 61,043 at P 305; *see also pro forma* LGIP section 3.5.2 and 3.5.3.

³⁸ Order No. 845, 163 FERC ¶ 61,043 at P 305; *see also pro forma* LGIP section 3.5.4.

unduly burdening transmission providers.³⁹ 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 2020.⁴⁰

a. Golden Spread's Compliance Filing

31. Golden Spread proposes revisions to add sections 3.5.2, 3.5.2.1, 3.5.2.2, 3.5.2.3, and 3.5.2.4 to its LGIP to implement the changes to the Commission's *pro forma* LGIP set forth in Order Nos. 845 and 845-A. Specifically, Golden Spread proposes to base its reporting metrics on study duration timeframes that match the timeframes for the various interconnection studies described in sections 6.3, 7.4, and 8.3 of its LGIP.

b. Commission Determination

32. We find that the LGIP revisions proposed by Golden Spread related to study deadline statistics and informational reporting requirements implement the changes to the Commission's *pro forma* LGIP and appropriately incorporate the study duration timeframes articulated in Golden Spread's LGIP, and thus comply with the requirements of Order Nos. 845 and 845-A.

7. Requesting Interconnection Service below Generating Facility Capacity

33. 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,⁴¹ 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.⁴²

³⁹ *Id.* P 307.

⁴⁰ Order No. 845-A, 166 FERC ¶ 61,137 at P 107.

⁴¹ 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.

⁴² Order No. 845, 163 FERC ¶ 61,043 at P 367; *see also pro forma* LGIP sections 3.1, 6.3, 7.3, and 8.2 and *pro forma* LGIP Appendix 1.

34. The Commission required, in revised *pro forma* LGIP 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.⁴³ 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 revised *pro forma* LGIP section 3.1 that any necessary control technologies and/or protection systems be memorialized in the LGIA.

35. The Commission required, in revised *pro forma* LGIP 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 detailed explanation of why the additional network upgrades are necessary.⁴⁴

36. 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.⁴⁵

⁴³ Order No. 845, 163 FERC ¶ 61,043 at PP 383-84.

⁴⁴ *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.*

⁴⁵ *Id.* P 406; *see also pro forma* LGIP sections 4.4.1 and 4.4.2.

a. Golden Spread's Compliance Filing

37. Golden Spread proposes revisions to sections 3.1, 4.4.1, 4.4.2, 6.3, 7.3, 8.2, and Appendix 1 in its LGIP to implement the changes to the Commission's *pro forma* LGIP set forth in Order Nos. 845 and 845-A. However, Golden Spread's proposed Tariff revisions do not fully incorporate the *pro forma* LGIP language adopted by Order No. 845.⁴⁶ 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.⁴⁷

b. Commission Determination

38. We find that Golden Spread's proposed revisions partially comply with the requirements of Order Nos. 845 and 845-A because they incorporate most of the language required by those Orders without modification. However, as discussed above, Golden Spread's revisions to section 3.1 of its LGIP omit some of the *pro forma* LGIP language required by Order No. 845.⁴⁸ Accordingly, we direct Golden Spread to file, within 60 days of the date of this order, a further compliance filing that incorporates the *pro forma* revisions to section 3.1 of its LGIP, as required by Order No. 845.

8. Provisional Interconnection Service

39. In Order No. 845, the Commission required transmission providers to allow all interconnection customers to request provisional interconnection service.⁴⁹ The

⁴⁶ See Order No. 845-A, 166 FERC ¶ 61,137 at P 117.

⁴⁷ Order No. 845, 163 FERC ¶ 61,043 at P 347; *see also id.* P 367. The italics indicate language adopted by Order No. 845 that Golden Spread's Tariff revisions failed to include. We recognize, however, that the *pro forma* LGIP that was available on the Commission's website failed to include that language.

⁴⁸ *Id.* PP 347, 367, and Appendix B.

⁴⁹ Order No. 845, 163 FERC ¶ 61,043 at P 438.

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.⁵⁰ To implement this service, the Commission revised the *pro forma* LGIP and *pro forma* LGIA to add a definition for “Provisional Interconnection Service”⁵¹ and for a “Provisional Large Generator Interconnection Agreement.”⁵²

40. In addition, the Commission added *pro forma* LGIA article 5.9.2, which details the terms for provisional interconnection service.⁵³ 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.⁵⁴ The Commission stated that interconnection customers are responsible for the costs for performing these provisional interconnection studies.⁵⁵

a. Golden Spread’s Compliance Filing

41. Golden Spread proposes to revise its LGIP and *pro forma* LGIA to implement the changes to the Commission’s *pro forma* LGIP and LGIA set forth in Order Nos. 845 and 845-A. As part of its revisions, Golden Spread proposes to add article 5.9.2 to its *pro forma* LGIA, as required by Order Nos. 845 and 845-A, and proposes no changes to

⁵⁰ *Id.* P 441.

⁵¹ *Pro forma* LGIP section 1 (Definitions); *pro forma* LGIA article 1 (Definitions).

⁵² *Pro forma* LGIP section 1 (Definitions); *pro forma* LGIP article 1 (Definitions). 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.

⁵³ Order No. 845, 163 FERC ¶ 61,043 at P 438; *see also pro forma* LGIP section 5.9.2.

⁵⁴ Order No. 845, 163 FERC ¶ 61,043 at P 448

⁵⁵ *Id.*

the bracketed placeholder in the following sentence: “[t]he maximum permissible output of the Generating Facility in the Provisional Large Generator Interconnection Agreement shall be studied and updated [*on a frequency determined by Transmission Provider and at the Interconnection Customer’s expense*].”⁵⁶

b. Commission Determination

42. We find that the proposed revisions to Golden Spread’s LGIP and *pro forma* LGIA to establish provisional interconnection service partially comply with the requirements of Order Nos. 845 and 845-A. Golden Spread’s proposed Tariff revisions adopt the Commission’s required *pro forma* definition of provisional interconnection service, and with the requirement to establish the terms of service specified in *pro forma* LGIA article 5.9.2 and thus comply with the requirements of Order Nos. 845 and 845-A.

43. However, we find that Golden Spread has failed to comply with the requirement to replace the bracketed placeholder in article 5.9.2 of its *pro forma* LGIA with language specifying the frequency with which it will study and update the maximum output of a generating facility in a provisional LGIA. Accordingly, we direct Golden Spread to file, within 60 days of the date of issuance of this order, a further compliance filing that revises article 5.9.2 of its *pro forma* LGIA to include a frequency or other specific trigger for updating provisional interconnection studies.

9. Surplus Interconnection Service

44. 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.⁵⁷ Surplus interconnection service enables a new interconnection customer to utilize the unused portion of an existing interconnection customer’s interconnection service within specific parameters.⁵⁸ 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

⁵⁶ *Pro forma* LGIA article 5.9.2 (emphasis supplied).

⁵⁷ Order No. 845, 163 FERC ¶ 61,043 at P 467; *see also pro forma* LGIP section 1 (Definitions); *pro forma* LGIP article 1 (Definitions).

⁵⁸ Order No. 845, 163 FERC ¶ 61,043 at P 467; Order No. 845-A, 166 FERC ¶ 61,137 at P 119.

process outside of the interconnection queue for surplus interconnection service.⁵⁹ 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.⁶⁰ The transmission provider must perform reactive power, short circuit/fault duty, and stability analyses studies as well as steady-state (thermal/voltage) analyses as necessary to ensure evaluation of all required reliability conditions to provide surplus interconnection service and ensure the reliable use of surplus interconnection service.⁶¹ 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.⁶² When the original interconnection customer, the surplus interconnection service customer, and the transmission provider enter into agreements for surplus interconnection service, they must be filed by the transmission provider with the Commission, because any surplus interconnection service agreement will be an agreement under the transmission provider's open access transmission tariff.⁶³

a. Golden Spread's Compliance Filing

45. Golden Spread proposes revisions to its *pro forma* LGIA and sections 3.3 and 3.3.1 of its LGIP to implement the changes to the Commission's *pro forma* LGIP and LGIA set forth in Order Nos. 845 and 845-A. Golden Spread also proposes to add a new section 3.3.2 to its LGIP to provide a process for evaluating surplus interconnection service requests. Golden Spread proposes that the original interconnection customer or its affiliate will have 10 days to exercise its priority right over a third party to surplus interconnection service at a point of interconnection. Once this right has been either exercised, waived, released, or transferred, the request will be studied pursuant to the criteria in section 3.3.1 of the LGIP. Golden Spread further proposes to require a \$10,000 study deposit within five business days of execution of the agreement, and that any difference in actual cost will be paid by or refunded to the surplus interconnection

⁵⁹ Order No. 845, 163 FERC ¶ 61,043 at P 467; *see also pro forma* LGIP sections 3.3 and 3.3.1.

⁶⁰ Order No. 845, 163 FERC ¶ 61,043 at P 483; *see also pro forma* LGIP section 3.3.

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

⁶² *Id.* P 481.

⁶³ *Id.* P 499.

customer. Golden Spread proposes to perform surplus interconnection studies outside of the regular interconnection study queue, to complete the studies within 60 calendar days after execution of the study agreement and receipt of the study deposit, and to communicate the results to the surplus interconnection customer as soon as practicable.

b. Commission Determination

46. We find that Golden Spread's proposed revisions partially comply with the surplus interconnection service requirements of Order Nos. 845 and 845-A. We find that Golden Spread's proposed revisions to its LGIP and *pro forma* LGIA related to the definition of surplus interconnection service and the procedure for submitting surplus interconnection service requests adopt the Commission's revisions to the *pro forma* LGIP and LGIA and thus comply with the requirements of Order Nos. 845 and 845-A. In addition, we find that Golden Spread's proposed revisions to section 3.3.2 in its LGIP also comply with the requirements to establish an expedited process outside of the interconnection queue and to propose a process for evaluating and transferring surplus interconnection service.

47. However, although Golden Spread's surplus interconnection service proposal provides that the transmission provider and interconnection customer will enter into a study agreement, the proposal is silent regarding whether the original interconnection customer, the surplus interconnection service customer, and the transmission provider will enter into an agreement for surplus interconnection service prior to the commencement of service. Order No. 845 requires transmission providers to file with the Commission any agreements for surplus interconnection service entered into by the original interconnection customer, the surplus interconnection service customer, and the transmission provider, as such agreements will be under the transmission provider's open access transmission tariff.⁶⁴ Accordingly, we direct Golden Spread to submit a further compliance filing, within 60 days of the date of this order, that revises section 3.3.2 of its LGIP to provide that the original interconnection customer, the surplus interconnection service customer, and the transmission provider will enter into an agreement for surplus interconnection service prior to the commencement of service.

10. Material Modifications and Incorporation of Advanced Technologies

48. 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,⁶⁵ without risking the loss of its queue position. The

⁶⁴ *Id.*

⁶⁵ While the Commission clarified that interconnection customers may submit a

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.⁶⁶ In addition, the Commission modified section 4.4.6 of the *pro forma* LGIP to require transmission providers to insert a technological change procedure that includes the requisite information and process that the transmission provider will follow to assess whether an interconnection customer's proposed technological advancement is a material modification.⁶⁷

49. 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.⁶⁸ 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.⁶⁹

50. 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.⁷⁰ 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,

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. *Id.* P 536.

⁶⁶ Order No. 845, 163 FERC ¶ 61,043 at P 518.

⁶⁷ *Id.*; *see also pro forma* LGIP section 4.4.6.

⁶⁸ *Id.* P 519.

⁶⁹ *Id.*

⁷⁰ *Id.*; Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

modeling data, and any other assumptions.⁷¹ 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.⁷²

51. Further, the Commission required that the technological change procedure outline a time frame of no more than 30 days after the interconnection customer submits a formal technological advancement request for the transmission provider to perform and complete any necessary additional studies.⁷³ The Commission also found that, if the transmission provider determines that additional studies are necessary to evaluate whether a technological advancement is a material modification, the interconnection customer must tender a deposit, and the transmission provider must specify the amount of the deposit in the transmission provider's technological change procedure.⁷⁴ 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.⁷⁵

52. 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

⁷¹ Order No. 845, 163 FERC ¶ 61,043 at 521.

⁷² *Id.*

⁷³ *Id.* P 535; Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

⁷⁴ *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.*

⁷⁵ *Id.* P 522.

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.⁷⁶

a. Golden Spread's Compliance Filing

53. In section 1 of its LGIP, Golden Spread proposes to define a permissible technological advancement as a new, upgraded, updated, or improved technology that an interconnection customer intends to utilize in the design, construction, or operation of generation or transmission facilities that does not (a) include a change in the generation technology or fuel type or (b) constitute a material modification.

54. In addition, Golden Spread proposes to add the following new language to section 4.4.6 of its LGIP in order to establish a technological change procedure:

In accordance with Section 4.4.2, at any time before the conclusion of the System Impact Study the Interconnection Customer may submit proposed modifications to the Large Generating Facility's technology. The proposed modifications should include an analysis and other supporting information to explain how its proposed modifications affects its original Interconnection Request. If it is determined that the proposed modifications do not change the technical specifications for the Large Generating Facility submitted by the Interconnection Customer to the Transmission Provider, the modifications shall be deemed a Permissible Technological Advancement and no further action shall be required. If the modifications do change the submitted technical specifications, the Transmission Provider may request a supplemental study deposit of \$10,000. Upon receipt of the supplemental study deposit, the Transmission Provider shall update the studies related to the request. If the study results are such that the previously identified Interconnection Facilities and Network Upgrades are adequate, the modification to the Large Generating Facility's technology shall be deemed a Permissible Technological Advancement and no further action shall be required. If the study results are impacted such that the previously identified Interconnection Facilities or Network Upgrades are inadequate remedies for identified system impacts, the modification to the Large Generating Facility's technology shall be deemed a Material Modification in accordance with Section 4.4.3.

⁷⁶ Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

b. Commission Determination

55. We find that Golden Spread'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 Golden Spread'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.

56. With respect to the timing of incorporating technological change requests, in Order No. 845, the Commission stated that establishing a reasonable cut-off point for allowing technological advancements would enhance the transmission provider's ability to tender an interconnection service agreement and, consequently, would not delay other projects.⁷⁷ However, we find that Golden Spread has not justified its proposal to accept technological change requests up until the conclusion of the system impact study rather than prior to the execution of the facilities study agreement as required by Order No. 845. Accordingly, we direct Golden Spread to file, within 60 days of the date of this order, a further compliance filing that justifies its proposal.

57. Golden Spread's technological change procedure states that an interconnection customer may submit "proposed modifications to the Large Generating Facility's technology." However, Order No. 845 required the technological change procedure to state that the interconnection customer should submit a technological advancement request if it seeks to incorporate technological advancements into its proposed generating facility.⁷⁸ Requiring the interconnection customer to submit a technological change request provides clarity with regard to whether the transmission provider is evaluating the request under the new technological change procedure, or the existing material modification assessment procedures. Therefore, we direct Golden Spread to submit a further compliance filing, within 60 days of the date of this order, that revises its technological change procedure to state that an interconnection customer should submit a technological advancement request if it seeks to incorporate the technological advancements into its proposed generating facility.

58. We also find that the use of the undefined term "technical specifications" in Golden Spread's proposed technological change procedure makes it unclear how Golden Spread will determine whether a proposed technological change is a permissible technological advancement. Accordingly, we direct Golden Spread to submit a further compliance filing, within 60 days of the date of this order, that revises section 4.4.6 of its

⁷⁷ Order No. 845, 163 FERC ¶ 61,043 at P 536.

⁷⁸ *Id.* P 519.

LGIP to clarify how it will assess changes to a generating facility's technical specifications.

59. Further, Order No. 845-A required that the transmission provider determine whether the proposed technological change is a material modification within 30 days of an interconnection customer submitting a technological change request.⁷⁹ We find that Golden Spread's technological change procedure does not provide a timeline for informing the interconnection customer of its determination. Therefore, we direct Golden Spread to submit a further compliance filing, within 60 days of the date of this order, that revises its proposed technological change procedure to provide that it will reach its determination and inform the interconnection customer within 30 days of receiving a technological change request.

60. In addition, because Golden Spread's filing is silent on whether it will provide an explanation to the interconnection customer regarding why the technological advancement is a material modification, we reiterate that the transmission provider is required to do so if it cannot accommodate a proposed technological advancement without triggering the material modification provision of the *pro forma* LGIP.⁸⁰

11. Additional Compliance Requirements

61. In the Commission's Errata Notice, issued on May 13, 2019, the Commission made various corrections to internal section references in the *pro forma* LGIP. We find that Golden Spread has neglected to implement one of these required changes, and accordingly direct Golden Spread to revise the first sentence of Appendix B, section 8.3 of its LGIP to read: "Transmission Provider shall coordinate the Interconnection Facilities Study with any Affected System pursuant to Section 3.6 above."⁸¹

62. In addition, we note that the discussion of the timeline and requirements for surplus interconnection service studies in Golden Spread's proposed section 3.3.2 of its LGIP contains a ministerial error. We direct Golden Spread to revise section 3.3.2 of its LGIP to read "Any difference in actual cost will be paid by, or refunded to, the surplus Interconnection Customer."

⁷⁹ Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

⁸⁰ Order No. 845, 163 FERC ¶ 61,043 at PP 522.

⁸¹ Errata Notice, 167 FERC ¶ 61,123 at P 13.

The Commission orders:

(A) Golden Spread's compliance filing is hereby accepted, effective May 20, 2019, subject to a further compliance filing, as discussed in the body of this order.

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

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.