

170 FERC ¶ 61,113
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

Cube Yadkin Transmission LLC

Docket Nos. ER19-1956-000
ER19-1956-001

ORDER ON COMPLIANCE

(Issued February 20, 2020)

1. On May 22, 2019, as amended on July 15, 2019, Cube Yadkin Transmission LLC (Cube Yadkin) 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 Cube Yadkin's filing partially complies with the requirements of Order Nos. 845 and 845-A. Accordingly, we accept Cube Yadkin's compliance filing, effective May 22, 2019 and direct Cube Yadkin 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 obtaining interconnection service, and as a result, there will be fewer overall

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.

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 Order No. 845, 163 FERC ¶ 61,043 at 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." *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. Cube Yadkin’s Compliance Filing

6. Cube Yadkin states that it has incorporated all of the Commission’s *pro forma* LGIP and *pro forma* LGIA reforms as required by Orders No. 845 and 845-A.¹² Cube

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 Cube Yadkin Compliance Filing at 2 (Filing). Cube Yadkin’s Tariff section numbering differs from the Commission’s *pro forma* LGIP. Rather than beginning at section 1, Cube Yadkin’s LGIP begins at section 36. Cube Yadkin’s Tariff article numbering reflects the numbering contained in the Commission’s *pro forma* LGIA.

Yadkin states that it adopts without modification the following *pro forma* LGIP and *pro forma* LGIA reforms: interconnection customer's option to build, dispute resolution, definition of contingent facilities, transparency regarding study models and assumptions, definition of a generating facility, requesting interconnection service below generating facility capacity, and provisional interconnection service.¹³

7. Cube Yadkin proposes Tariff revisions in instances where the Commission requires modification to the *pro forma* LGIP and *pro forma* LGIA and afforded transmission providers the discretion to develop their own tariff language. Specifically, Cube Yadkin proposes Tariff revisions for the following reforms: identification of contingent facilities, interconnection study deadlines, surplus interconnection service, and material modifications and incorporation of advanced technologies. Cube Yadkin also proposes a minor modification to the definition of permissible technological advancement.¹⁴

8. Cube Yadkin requests that the Tariff revisions become effective on May 22, 2019.¹⁵

III. Notice and Responsive Pleadings

9. Notice of Cube Yadkin's compliance filing was published in the *Federal Register*, 84 Fed. Reg. 25,251 (2019), with interventions and protests due on or before June 12, 2019. None was filed.

10. On June 13, 2019, Commission staff issued a deficiency letter that requested additional clarification regarding Cube Yadkin's procedure for allowing surplus interconnection service (Deficiency Letter). On July 15, 2019, Cube Yadkin filed its response to the Deficiency Letter (Deficiency Response), amending its May 22, 2019 compliance filing. Notice of Cube Yadkin's Deficiency Response was published in the *Federal Register*, 84 Fed. Reg. 35,383 (2019), with interventions and protests due on or before August 5, 2019. None was filed.

IV. Discussion

11. As discussed below, we find that Cube Yadkin's filing partially complies with the requirements of Order Nos. 845 and 845-A. Accordingly, we accept Cube Yadkin's

¹³ *Id.* at 2.

¹⁴ *Id.*

¹⁵ *Id.*

compliance filing, effective May 22, 2019, and direct Cube Yadkin to submit a further compliance filing within 60 days of the date of this order.

A. Interconnection Customer's Option to Build

12. 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

13. 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

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), 552 U.S. 1230 (2008); *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.

the 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

1. Cube Yadkin's Compliance Filing

14. Cube Yadkin proposes revisions to revise the definition of stand alone network upgrade in its LGIP and *pro forma* LGIA to incorporate the revisions to the definition adopted by Order Nos. 845 and 845-A without modification.²³ Cube Yadkin also proposes revisions to its *pro forma* LGIA to amend articles 5.1, 5.1.3, 5.1.4 and 5.2 to incorporate the *pro forma* LGIA revisions adopted by Order Nos. 845 and 845-A without modification.²⁴

2. Commission Determination

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

B. Dispute Resolution

16. 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

²¹ *Id.* P 75.

²² *Id.* P 33.

²³ Cube Yadkin, OATT, pt. IV, § 36 Definitions (1.0.0).

²⁴ Cube Yadkin, OATT, pt. IV, app. 6 LGIA (1.0.0), arts. 5.1 Options, 5.1.3 Option to Build, 5.1.4 Negotiated Option, and 5.2 (12).

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

arbitration after the conclusion of the non-binding dispute resolution process if they seek a binding result.²⁶

1. Cube Yadkin's Compliance Filing

17. Cube Yadkin proposes revisions to its LGIP that adopt the dispute resolution language required by Order Nos. 845 and 845-A without modification.²⁷

2. Commission Determination

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

C. Identification and Definition of Contingent Facilities

19. In Order No. 845, the Commission added 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

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

²⁷ Cube Yadkin, OATT, pt. IV, § 48 Miscellaneous (1.0.0).

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.

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.³²

1. Cube Yadkin's Compliance Filing

20. Cube Yadkin adopts the Commission's *pro forma* LGIP definition of contingent facilities. Cube Yadkin proposes revisions to section 38.8 of its LGIP that adopt the Commission's *pro forma* language without modification. Cube Yadkin does not include any additional language detailing the specific method it will use to identify contingent facilities.³³

2. Commission Determination

21. We find that the revised provisions that identify and describe Cube Yadkin's method for determining contingent facilities, as Cube Yadkin proposes in its LGIP, partially comply with the requirements of Order Nos. 845 and 845-A. We find that Cube Yadkin complies with the requirement of Order Nos. 845 and 845-A because Cube Yadkin has adopted the definition of contingent facilities and the language regarding the need for the transmission provider to include in its LGIP a method for identification of contingent facilities without modification. Further, Cube Yadkin'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.

22. However, as specified in Order No. 845, transmission providers must include, in their LGIPs, a method for determining contingent facilities.³⁴ The Commission required that this method provide sufficient transparency to determine why a specific contingent facility was identified and how it relates to the interconnection request.³⁵ 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.³⁶ Cube Yadkin's proposed Tariff revisions lack the requisite transparency required

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

³³ Cube Yadkin, OATT, pt. IV, § 38.8 Identification of Contingent Facilities (1.0.0).

³⁴ Order No. 845, 163 FERC ¶ 61,043 at P 199.

³⁵ *Id.* P 200.

³⁶ *Id.*

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 Cube Yadkin will use as part of its method to identify contingent facilities. Without this information, an interconnection customer will not understand how Cube Yadkin will evaluate potential contingent facilities to determine their relationship to an individual interconnection request.³⁷ Further, including provisions regarding specific thresholds or criteria in Cube Yadkin's LGIP will ensure Cube Yadkin's technical screens or analyses will be applied to interconnection requests on a consistent, not unduly discriminatory or preferential basis.

23. We therefore direct Cube Yadkin to describe in section 38.8 of its LGIP the specific technical screens and/or analyses that it will employ to determine which facilities are contingent facilities. Further, we also direct Cube Yadkin to describe the specific triggering thresholds or criteria, including the quantitative triggers, that are applied to identify a facility as a contingent facility. In Order No. 845, 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.³⁸ However, if, for instance, a transmission provider chooses to use a distribution factor analysis as a technical screen for determining how a new generating facility impacts the surrounding electrically-relevant facilities, its tariff must specify the triggering percentage impact that causes a facility to be considered contingent. Similarly, if a transmission provider relies on the system impact study to identify which facilities the new generating facility will impact, it must specify in its tariff which power system performance attributes (voltages, power flows, etc.) violated a specific threshold of a facility³⁹ such that the transmission provider would conclude that the facility is contingent for the new generating facility. A transmission provider may use multiple screens or analyses as part of its method, but it must include a corresponding, specific triggering threshold or criterion to indicate how it will apply each screen or analysis.

24. Because Cube Yadkin has not provided the specificity outlined above and thus does not fully comply with the contingent facility requirements of Order Nos. 845 and 845-A, we direct Cube Yadkin to submit a further compliance filing, within 60 days of

³⁷ See *pro forma* LGIP § 3.8 ("The method shall be sufficiently transparent to determine why a specific Contingent Facility was identified.").

³⁸ Order No. 845, 163 FERC ¶ 61,043 at P 220.

³⁹ For example, a range for facility per unit voltage may constitute a specific triggering threshold, beyond which the transmission provider will identify the facility as contingent.

the date of this order, which adds in section 38.8 of Cube Yadkin's LGIP (1) the method Cube Yadkin will use to determine contingent facilities, including technical screens or analyses it proposes to use to identify these facilities, and (2) the specific thresholds or criteria it will use in its technical screens or analysis to achieve the level of transparency required by Order No. 845, as discussed above.

D. Transparency Regarding Study Models and Assumptions

25. 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.”⁴⁰ 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).⁴¹

26. 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.⁴² 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.⁴³ 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

⁴⁰ Order No. 845, 163 FERC ¶ 61,043 at P 236.

⁴¹ *Id.*; see also *pro forma* LGIP § 2.3.

⁴² Order No. 845-A, 166 FERC ¶ 61,137 at P 84 (citing Order No. 845, 163 FERC ¶ 61,043 at P 241).

⁴³ *Id.* P 85 (citing 18 C.F.R. § 388.113(g)(5)(i) (2019)).

system. Instead, the network model information should reflect the system conditions currently used in interconnection studies.⁴⁴

1. Cube Yadkin's Compliance Filing

27. Cube Yadkin proposes revisions to section 37.3 of its LGIP that incorporate the language adopted by Order Nos. 845 and 845-A without modification.⁴⁵

2. Commission Determination

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

E. Definition of Generating Facility

29. 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 follows:

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.⁴⁶

30. 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.⁴⁷

⁴⁴ *Id.* P 88.

⁴⁵ Cube Yadkin, OATT, pt. IV, § 37 (1.0.0).

⁴⁶ Order No. 845, 163 FERC ¶ 61,043 at P 275 (additions italicized); *see also pro forma* LGIP § 1 (Definitions).

⁴⁷ Order No. 845, 163 FERC ¶ 61,043 at P 275.

1. Cube Yadkin's Compliance Filing

31. Cube Yadkin proposes revisions to section 36 of its LGIP and article 1 its *pro forma* LGIA to incorporate the language adopted by Order Nos. 845 and 845-A without modification.⁴⁸

2. Commission Determination

32. We find that Cube Yadkin's revisions regarding the definition of a "Generating Facility" comply with the requirements of Order Nos. 845 and 845-A because Cube Yadkin adopts the Commission's *pro forma* LGIP and *pro forma* LGIA provisions without modification.

F. Interconnection Study Deadlines

33. 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.⁴⁹ 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

⁴⁸ Cube Yadkin, OATT, pt. IV, § 36 (1.0.0).

⁴⁹ Order No. 845, 163 FERC ¶ 61,043 at P 305; *see also pro forma* LGIP §§ 3.5.2, 3.5.3.

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

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

1. Cube Yadkin's Compliance Filing

34. Cube Yadkin proposes revisions to its LGIP that add new sections 38.5.2, 38.5.3, and 38.5.4 that incorporate the *pro forma* language of Order Nos. 845 and 845-A without modification.⁵⁴ Additionally, Cube Yadkin proposes Tariff revisions to LGIP section 38.5.2.1 to provide for a feasibility study completion deadline of 45 days; to LGIP section 38.5.2.2 to provide for a system impact study completion deadline of 90 days, and to LGIP section 38.5.2.3 to provide for a facilities study completion deadline of "90 or 180 days,(as applicable under Section 43.3) before the reporting quarter end."⁵⁵

2. Commission Determination

35. We find that the revised provisions that address Cube Yadkin's study deadline statistics and informational reporting requirements, as proposed in Cube Yadkin's LGIP, comply with the requirements of Order Nos. 845 and 845-A because Cube Yadkin proposes to include *pro forma* LGIP sections 3.5.2, 3.5.3, and 3.5.4 without modification, and to replace the bracketed placeholders with timelines that align with the timelines already in its Tariff.

G. Requesting Interconnection Service below Generating Facility Capacity

36. 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,⁵⁶ recognizing the need for proper control technologies and flexibility for transmission

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

⁵⁴ Cube Yadkin, OATT, pt. IV, § 38 Interconnection Requests (1.0.0).

⁵⁵ *Id.*

⁵⁶ 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).

providers to propose penalties to ensure that the generating facility does not inject energy above the requested level of service.⁵⁷

37. 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.⁵⁸ 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.

38. 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 detailed explanation of why the additional network upgrades are necessary.⁵⁹

39. 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

⁵⁷ Order No. 845, 163 FERC ¶ 61,043 at P 367; *see also pro forma* LGIP §§ 3.1, 6.3, 7.3, 8.2, *pro forma* LGIP app. 1.

⁵⁸ Order No. 845, 163 FERC ¶ 61,043 at PP 383-84.

⁵⁹ *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.

prior to returning to the transmission provider an executed system impact study agreement or an executed facilities study agreement.⁶⁰

1. Cube Yadkin's Compliance Filing

40. Cube Yadkin proposes revisions to its LGIP in sections 38.1, 39.4.1, 39.4.2, 41.3, 42.3, and 43.2 and Appendix 1 to incorporate the language set forth in Order Nos. 845 and 845-A without modification.⁶¹ However, Cube Yadkin's proposed Tariff revisions do not fully incorporate the *pro forma* LGIP language adopted by Order No. 845.⁶² 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.⁶³

2. Commission Determination

41. We find that Cube Yadkin'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 the *pro forma* LGIP language without modification. However, as discussed above, Cube Yadkin's revisions to section 38.1 of its LGIP omit some of the *pro forma* LGIP language required by Order No. 845.⁶⁴ Accordingly, we

⁶⁰ *Id.* P 406; *see also pro forma* LGIP §§ 4.4.1, 4.4.2.

⁶¹ Cube Yadkin, OATT, pt. IV, §§ 38 Interconnection Requests (1.0.0), 41 Interconnection Feasibility Study (1.0.0), 42 Interconnection System Impact Study (1.0.0), 43 Interconnection Facilities Study (1.0.0).

⁶² *See* Order No. 845-A, 166 FERC ¶ 61,137 at P 117.

⁶³ 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 Cube Yadkin'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.

⁶⁴ *Id.* PP 347, 367, and app. B.

direct Cube Yaddin 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.

H. Provisional Interconnection Service

42. 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

43. 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.⁷⁰ The

⁶⁵ *Id.* P 438.

⁶⁶ *Id.* P 441.

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

⁶⁸ *Pro forma* LGIP § 1 (Definitions); *pro forma* LGIA art. 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.

⁶⁹ *Id.* P 438; *see also pro forma* LGIP § 5.9.2.

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

Commission stated that interconnection customers are responsible for the costs for performing these provisional interconnection studies.⁷¹

1. Cube Yadkin's Compliance Filing

44. Cube Yadkin proposes revisions to 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.⁷² As part of its revisions, Cube Yadkin 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 the bracketed placeholder in the following sentence: "The 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*]."⁷³

2. Commission Determination

45. We find that the proposed revisions to Cube Yadkin's LGIP and *pro forma* LGIA to establish provisional interconnection service partially comply with requirements of Order Nos. 845 and 845-A. Cube Yadkin's proposed Tariff revisions comply because Cube Yadkin adopts the Commission's *pro forma* definition of provisional interconnection service and incorporates the Commission's *pro forma* LGIA article 5.9.2 without modification.

46. However, we find that Cube Yadkin 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 a frequency with which it will study and update the maximum output of a generating facility in a provisional LGIA. Accordingly, we direct Cube Yadkin to file, within 60 days of the date of this order, a further compliance filing that revises article

⁷¹ *Id.*

⁷² Cube Yadkin, OATT, pt. IV, § 36 Definitions (1.0.0); Cube Yadkin, OATT, pt. IV, app. 6 LGIA (1.0.0), art. 1 (Definitions); Cube Yadkin, OATT, pt. IV, app. 6 LGIA (1.0.0), art. 5.9.2.

⁷³ *Pro forma* LGIA art. 5.9.2 (emphasis supplied).

5.9.2 of its *pro forma* LGIA to specify a frequency for studying and updating the maximum permissible output of a generating facility subject to a provisional LGIA.⁷⁴

I. 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.⁷⁵ Surplus interconnection service enables a new interconnection customer to utilize the unused portion of an existing interconnection customer's interconnection service within specific parameters.⁷⁶ 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.⁷⁷ 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.⁷⁸ 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.⁷⁹ The original interconnection customer must be able to stipulate the amount of surplus interconnection service that is available, designate

⁷⁴ See Order No. 845, *pro forma* LGIA § 5.9.2 Provisional Interconnection Service (“The 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.]”).

⁷⁵ Order No. 845, 163 FERC ¶ 61,043 at P 467; *see also pro forma* LGIP § 1; *pro forma* LGIA art. 1 (Definitions).

⁷⁶ Order No. 845, 163 FERC ¶ 61,043 at P 467; Order No. 845-A, 166 FERC ¶ 61,137 at P 119.

⁷⁷ Order No. 845, 163 FERC ¶ 61,043 at P 467; *see also pro forma* LGIP §§ 3.3, 3.3.1.

⁷⁸ Order No. 845, 163 FERC ¶ 61,043 at P 483; *see also pro forma* LGIP § 3.3.

⁷⁹ Order No. 845, 163 FERC ¶ 61,043 at PP 455 and 467.

when that service is available, and describe any other conditions under which surplus interconnection service at the point of interconnection may be used.⁸⁰ 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.⁸¹

1. Cube Yadkin's Compliance Filing

48. Cube Yadkin proposes revisions to sections 36, 38.3, and 38.3.1 of its LGIP, and article 1 of its *pro forma* LGIA, to comply with the Commission's directives in Order Nos. 845 and 845-A. Cube Yadkin adopts the Commission's *pro forma* LGIP and *pro forma* LGIA revisions for surplus interconnection service contained in sections 1, 3.3, and 3.3.1 of the Commission's *pro forma* LGIP and article 1 of the Commission's *pro forma* LGIA, as required by Order Nos. 845 and 845-A, without modification.

49. In its Deficiency Response, Cube Yadkin proposes revisions to supplement the *pro forma* provisions of section 38.3 of its LGIP. Specifically, Cube Yadkin proposes to add a new section 38.3.2, and subsections, to its LGIP to explain its expedited interconnection process outside of the standard interconnection queue for the provision of surplus interconnection service. Cube Yadkin states that these new sections specify the studies and agreements that are necessary to provide surplus interconnection service.⁸²

50. Cube Yadkin adds new section 38.3.2 and sections 38.3.2.1 through 38.3.2.5 to describe the surplus interconnection service process in detail.⁸³ Cube Yadkin, in section 38.3.2, proposes Tariff language outlining the process by which a customer can submit a surplus interconnection service request. That section states:

To initiate a request for Surplus Interconnection Service, a requester must submit a request for Surplus Interconnection Service using the Surplus Interconnection Service template posted on the Transmission Provider's OASIS. If an existing Interconnection Customer seeks to transfer Surplus Interconnection Service to an affiliate or third party, such

⁸⁰ *Id.* P 481.

⁸¹ *Id.* P 499.

⁸² Deficiency Letter at 1-2.

⁸³ Cube Yadkin, OATT, pt. IV, § 38 Interconnection Requests (2.0.0).

arrangement shall be finalized prior to initiating a request for Surplus Interconnection Service, so that a complete request can be provided to Transmission Provider.⁸⁴

51. Cube Yadkin proposes new LGIP sections 38.3.2.1 through 38.3.2.5, which outline the study process for the provision of surplus interconnection service to a new interconnection customer, provide that requests for surplus interconnection services will be maintained in a separate queue from standard interconnection requests, provide the conditions necessary for eligibility for surplus interconnection service, as well as outline the process for the execution and submittal of a surplus interconnection service agreement. Cube Yadkin adds that, within five business days of receiving the surplus interconnection service study agreement, the requester shall execute and deliver the surplus interconnection service study agreement to the transmission provider.⁸⁵

52. Cube Yadkin further proposes that the surplus interconnection service queue position will be used to determine the order in which the transmission provider performs the surplus interconnection service impact studies. Cube Yadkin proposes to require the transmission provider to use “reasonable efforts” to complete the surplus interconnection service impact study within 60 calendar days of receipt of a completed request for surplus interconnection service, and to notify the surplus interconnection service requester if it anticipates that the relevant impact studies will not be completed within that time and provide an estimate of the expected date of completion.⁸⁶

53. Cube Yadkin proposes that a request for surplus interconnection service will not be approved if network upgrades are required to accommodate such a request. Cube Yadkin also proposes that if other directly assignable interconnection facilities are needed to connect the surplus interconnection service customer to the original interconnection customer’s interconnection facilities, the costs for, and construction of, those facilities are the sole responsibility of the requester. Cube Yadkin further proposes that any requested change made to the existing interconnection service will be treated as a new interconnection request, and that, if a request for surplus interconnection service would result in an assumption about the transmission system that the transmission provider has not already studied, including impacts to affected systems that were not previously accounted for in the interconnection process for the facilities over which the surplus

⁸⁴ *Id.* § 38.3.2.

⁸⁵ *Id.* § 38.3.2.5.

⁸⁶ *Id.* § 38.3.2.3.

interconnection service is sought, then the request shall be deemed a request for new interconnection service.⁸⁷

54. Cube Yadkin further proposes that if the transmission provider determines that no additional impact studies are required, determines that there are no impacts requiring additional interconnection facilities or network upgrades, or posts a final surplus interconnection facilities study report, the transmission provider will tender a draft agreement for surplus interconnection service.⁸⁸ Cube Yadkin provides that the original interconnection customer, the surplus interconnection customer (if not the original interconnection customer), and the transmission provider shall all be parties to the agreement for surplus interconnection service. Cube Yadkin also proposes revisions to Part IV, Appendix 6 of its LGIP that include information necessary to process a request for surplus interconnection service.⁸⁹ In addition, Cube Yadkin proposes that monitoring costs “including but not limited to construction cost, capital cost, and operating and maintenance costs” will be paid by the surplus interconnection customer.⁹⁰

2. Commission Determination

55. We find that Cube Yadkin’s proposed Tariff revisions regarding surplus interconnection service partially comply with the requirements of Order Nos. 845 and 845-A. Cube Yadkin adopts the *pro forma* definition of surplus interconnection service and *pro forma* provisions in LGIP sections 38.3 and 38.3.1 without modification. As required by Order Nos. 845 and 845-A, Cube Yadkin will evaluate surplus interconnection service requests outside of its non-surplus interconnection queue. Additionally, as required by Order Nos. 845 and 845-A, Cube Yadkin’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.

⁸⁷ *Id.* § 38.3.2.4.

⁸⁸ *Id.* § 38.3.2.5.

⁸⁹ *Id.*; Cube Yadkin, OATT, pt. IV, app. 6 LGIA (1.0.0).

⁹⁰ *Id.* § 38.3.2.5(4).

56. However, Cube Yadkin proposes that “any change made to the existing interconnection service will be treated as a new interconnection request.”⁹¹ Cube Yadkin also proposes that “if a request for surplus interconnection service would result in unstudied changes from the operating conditions assumed in the original interconnection service facilities study, including impacts to affected systems that were not previously accounted for in the interconnection process for the facilities over which the surplus interconnection service is sought, then the request shall be deemed a request for new interconnection service.”⁹² We find these two provisions to be inconsistent with Order Nos. 845 and 845-A, which allow a transmission provider to deny surplus interconnection service if it requires network upgrades,⁹³ but not for the reasons that Cube Yadkin proposes. Therefore, we direct Cube Yadkin to file, within 60 days of the date of this order, a further compliance filing that removes the two provisions in section 38.3.2.4 of its LGIP that require a surplus interconnection service request to be treated as a new request for interconnection service if it results in changes to interconnection service or unstudied changes. In addition, we find that Cube Yadkin has not sufficiently justified its proposal to require the surplus interconnection customer to pay for monitoring costs. Accordingly, we direct Cube Yadkin to remove section 38.3.2.5(4) of its LGIP requiring the surplus interconnection customer to pay for monitoring costs or to demonstrate that proposed section 38.3.2.5(4) is consistent with or superior to the requirements of Order Nos. 845 and 845-A.

J. Material Modifications and Incorporation of Advanced Technologies

57. 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,⁹⁴ without risking the loss of its queue position. The

⁹¹ Cube Yadkin, OATT, pt. IV, § 38.3.2.4 Surplus Interconnection Service Facilities Study (2.0.0). We note that “a change made to the existing interconnection service” could refer to a change in any terms of the interconnection customer’s LGIA, including changes to interconnection facilities, which are explicitly allowed by Order Nos. 845 and 845-A. Order No. 845-A, 166 FERC ¶ 61,137 at P 138, n. 283.

⁹² Cube Yadkin, OATT, pt. IV, § 38.3.2.4 Surplus Interconnection Service Facilities Study (2.0.0).

⁹³ Order No. 845, 163 FERC ¶ 61,043 at P 487; Order No. 845-A, 166 FERC ¶ 61,137 at P 138, n.283.

⁹⁴ 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

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.⁹⁵ 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.⁹⁶

58. 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.⁹⁷ 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.⁹⁸

59. 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.⁹⁹ 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.¹⁰⁰ In addition, the Commission required that

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.

⁹⁵ *Id.* P 518.

⁹⁶ *Id.*; *see also pro forma* LGIP § 4.4.6.

⁹⁷ Order No. 845, 163 FERC ¶ 61,043 at P 519.

⁹⁸ *Id.*

⁹⁹ *Id.*; Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

¹⁰⁰ Order No. 845, 163 FERC ¶ 61,043 at P 521.

the technological change procedure explain how the transmission provider will evaluate the technological advancement request to determine whether it is a material modification.¹⁰¹

60. 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.¹⁰² The Commission also found that, if the transmission provider determines that additional studies are needed 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.¹⁰³ 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.

61. 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

¹⁰¹ *Id.* P 521.

¹⁰² *Id.* P 535.

¹⁰³ *Id.* P 534. The Commission set the default deposit amount at \$10,000 but stated that a transmission provider may propose a reasonable alternative deposit amount in its compliance filing and include justification supporting this alternative amount. *Id.*

whether the proposed technological change materially impacts the timing and costs of lower-queued interconnection customers.¹⁰⁴

1. Cube Yadkin's Compliance Filing

62. Cube Yadkin proposes the following definition of permissible technological advancement:

Permissible Technological Advancement shall mean an advancement to turbines, inverters, plant supervisory controls or other technological advancements that do not increase the interconnection customer's requested interconnection service or cause any reliability concerns. A Permissible Technological Advancement 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), nor does it include changes in generation technology type or fuel type.

63. Cube Yadkin proposes revisions to section 39.4.2 of its LGIP that adopt the Commission's language in section 4.4.2 of the *pro forma* LGIP without modification.

64. Cube Yadkin proposes to include a new section 39.4.6 in its LGIP that describes the procedure by which an interconnection customer may, prior to the conclusion of the system impact study, submit modifications to its generating facility's technology. Cube Yadkin's proposed language in section 39.4.6 of its LGIP states that such modifications must include an analysis of how its proposed technological advancement would result in electrical performance that is equivalent to or better than the electrical performance expected prior to the change. Cube Yadkin's proposed section 39.4.6 of its LGIP further states that if the proposed technological advancement does not change the technical specifications for the 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. However, Cube Yadkin's proposed language in LGIP section 39.4.6 explains that if the modifications change the technical specifications of the generating facility, then all appropriate study models will be updated and re-run. According to Cube Yadkin's proposed language in section 39.4.6, if the study results are such that the previously identified interconnection facilities and network upgrades are adequate, the modification to the generating facility's technology shall be deemed a permissible technological advancement and no further action shall be required, but that if the study results are impacted such that the previously identified interconnection facilities or network upgrades are inadequate remedies for identified

¹⁰⁴ Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

system impacts, the modification to the generating facility's technology shall be deemed a material modification.¹⁰⁵

2. Commission Determination

65. We find that Cube Yadkin's proposed LGIP revisions to incorporate a definition of a permissible technological change and technological change procedure partially comply with the requirements of Order Nos. 845 and 845-A. Specifically, we find that Cube Yadkin's proposed definition of permissible technological advancement meets the Commission's requirement to provide a category of technological change that does not constitute a material modification. We also find that Cube Yadkin's proposed revisions to section 39.4.2 comply with the Commission's requirements in Order Nos. 845 and 845-A because they adopt the Commission's *pro forma* language without modification.

66. Order No. 845 requires 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.¹⁰⁶ However, Cube Yadkin's technological change procedure states that an interconnection customer "may submit modifications to the Large Generating Facility's technology."¹⁰⁷ Requiring the interconnection customer to submit a technological advancement 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 Cube Yadkin to file, within 60 days of the date of this order, a further compliance filing that revises its technological change procedure to state that, if it seeks to incorporate technological advancements into its proposed generating facility, an interconnection customer should submit a technological advancement request, rather than submit modifications to the generating facility's technology.

67. Order No. 845 requires an interconnection customer to tender a deposit if the transmission provider determines that additional studies are necessary to evaluate whether a technological change is a material modification. Order No. 845 states that the transmission provider should specify the amount of the deposit in its technological change procedure.¹⁰⁸ While Order No. 845 sets the default deposit amount at \$10,000, it allows the transmission provider to propose, with justification, a reasonable alternative

¹⁰⁵ Cube Yadkin, OATT, pt. IV, § 39.4.6 Technological Change Procedure (1.0.0).

¹⁰⁶ Order No. 845, 163 FERC ¶ 61,043 at P 519.

¹⁰⁷ Cube Yadkin, OATT, pt. IV, § 39.4.6 (Technological Change Procedure).

¹⁰⁸ Order No. 845, 163 FERC ¶ 61,043 at P 534.

amount.¹⁰⁹ However, Cube Yadkin fails to specify a deposit amount for a technological advancement request. Accordingly, we direct Cube Yadkin to file, within 60 days of the date of this order, a further compliance filing proposing the deposit amount the interconnection customer is required to tender to comply with the requirements of Order No. 845.

68. With regard to a deadline for the completion of a technological advancement request, Order No. 845 provides that the determination of whether a change is a material modification must be made within 30 days of the initial request.¹¹⁰ We find that Cube Yadkin's proposal contains no such deadline. Therefore, we direct Cube Yadkin to file, within 60 days of the date of this order, a further compliance filing that revises its proposed technological change procedure to provide that Cube Yadkin will determine whether or not a proposed technological advancement is a material modification within 30 calendar days of receipt of receipt of the initial request for a technological change assessment.

69. In addition, because Cube Yadkin's filing is silent on whether Cube Yadkin 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.¹¹¹

K. Additional Compliance Requirements

70. In the Errata Notice, issued on May 13, 2019,¹¹² the Commission made various corrections to the *pro forma* LGIP. We find that Cube Yadkin failed to implement one of these required changes, and accordingly direct Cube Yadkin to revise section 5(h) of Appendix B, Appendix 1 to the LGIP to read:

i. Requested capacity (in MW) of Interconnection Service (if lower than the Generating Facility Capacity)."¹¹³

¹⁰⁹ See *infra* note 97.

¹¹⁰ Order No. 845, 163 FERC ¶ 61,043 at P 535; Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

¹¹¹ Order No. 845, 163 FERC ¶ 61,043 at P 522.

¹¹² Errata Notice, 167 FERC ¶ 61,123.

¹¹³ *Id.* P 14.

The Commission orders:

(A) Cube Yadkin's compliance filing is hereby accepted, effective May 22, 2019, subject to a further compliance filing, as discussed in the body of this order.

(B) Cube Yadkin 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)

Nathaniel J. Davis, Sr.,
Deputy Secretary.