169 FERC ¶ 61,143 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;

Richard Glick and Bernard L. McNamee.

Cheyenne Light, Fuel and Power Company

Docket No. ER19-1924-000

ORDER ON COMPLIANCE

(Issued November 21, 2019)

1. On May 22, 2019, Cheyenne Light, Fuel and Power Company (Cheyenne) submitted proposed revisions to its Open Access Transmission Tariff (Tariff) in compliance with the requirements of Order Nos. 845 and 845-A, which amended its Large Generator Interconnection Agreement (LGIA) and *pro forma* Large Generator Interconnection Procedures (LGIP). As discussed below, we find that Cheyenne's filing partially complies with the requirements of Order Nos. 845 and 845-A. Accordingly, we accept Cheyenne's compliance filing, effective May 22, 2019, and direct Cheyenne 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, errata notice, 167 FERC ¶ 61,124 (Order No. 845-A Errata Notice), 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

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.

- 4. Second, to promote more informed interconnection decisions, the Commission: (1) required transmission providers to outline and make public a method for determining contingent facilities; (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. Cheyenne's Compliance Filing

6. Cheyenne states that it adopts all of the Commission's *pro forma* LGIP and *pro forma* LGIA revisions as required by Order Nos. 845 and 845-A without

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.

modification. Cheyenne states that its revised LGIP and revised *pro forma* LGIA are contained in Attachment J and Appendix 6 of Attachment J of its Tariff, respectively.¹²

- 7. Cheyenne states that it 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, Cheyenne asserts that it proposes Tariff revisions for the following sections: (1) LGIP section 1—Definition of Permissible Technological Advancement; (2) LGIP section 4.4.4—Technological Change Procedure; (3) LGIP section 3.3.2—Surplus Interconnection Study and Agreement; (4) LGIP sections 3.8.1-3.8.2—Indentification of Contingent Facilities; and (5) *pro forma* LGIA article 5.9.2—Provisional Interconnection Service. ¹³
- 8. Cheyenne requests an effective date of May 22, 2019 for its proposed Tariff revisions. 14

III. Notice and Responsive Pleadings

9. Notice of Cheyenne's compliance filing was published in the *Federal Register*, 84 Fed. Reg. 24,770 (2019), with interventions and protests due on or before June 12, 2019. None was filed.

IV. Discussion

10. As discussed below, we find that Cheyenne's filing partially complies with the requirements of Order Nos. 845 and 845-A. Accordingly, we accept Cheyenne's compliance filing, effective May 22, 2019, and direct Cheyenne to submit a further compliance filing within 60 days of the date of this order.

1. Interconnection Customer's Option to Build

11. 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

¹² Cheyenne May 22, 2019 Compliance Filing at 2 (Filing).

¹³ *Id.* at 2-3.

¹⁴ *Id.* at 1.

synchronization date, or commercial operation date.¹⁵ 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.¹⁶ 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."¹⁷

12. 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; ¹⁸ and (2) clarify that the option to build does not apply to stand alone network upgrades on affected systems. ¹⁹ 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. ²⁰ 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. ²¹

¹⁵ Order No. 845, 163 FERC ¶ 61,043 at PP 85-87.

¹⁶ 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, at P 45, 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.

¹⁷ Order No. 845, 163 FERC ¶ 61,043 at P 85.

¹⁸ Order No. 845-A, 166 FERC ¶ 61,137 at P 68.

¹⁹ *Id.* P 61.

²⁰ *Id.* P 75.

²¹ *Id.* P 33.

a. Cheyenne's Compliance Filing

13. Cheyenne's proposed Tariff revisions adopt the Commission's *pro forma* LGIP and *pro forma* LGIA revisions for the option to build as required by Order Nos. 845 and 845-A without modification.²²

b. Commission Determination

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

2. <u>Dispute Resolution</u>

15. 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.²³ 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.²⁴

a. Cheyenne's Compliance Filing

16. Cheyenne's proposed Tariff revisions adopt the Commission's *pro forma* LGIP revisions for dispute resolution as required by Order Nos. 845 and 845-A without modification.²⁵

²² Filing at 2; see also Cheyenne OATT, Attachment J (4.0.0), App. 6, LGIA articles 1 (Definitions), 5.1 (Options), 5.1.3 (Option to Build), 5.1.4 (Negotiated Option) and LGIP section 1 (Definitions).

 $^{^{23}}$ Order No. 845, 163 FERC \P 61,043 at P 133; see also pro forma LGIP section 13.5.5.

²⁴ Order No. 845, 163 FERC ¶ 61,043 at P 139.

²⁵ Filing at 2; *see also* Cheyenne OATT, Attachment J (4.0.0), LGIP section 13.5.5 (Non-Binding Dispute Resolution Procedures).

b. Commission Determination

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

3. <u>Identification and Definition of Contingent Facilities</u>

18. In Order No. 845, the Commission added a new definition to section 1 of the pro forma LGIP, providing that contingent facilities shall mean those unbuilt interconnection facilities and network upgrades upon which the interconnection request's costs, timing, and study findings are dependent, and if delayed or not built, could cause a need for restudies of the interconnection request or a reassessment of the interconnection facilities and/or network upgrades and/or costs and timing.²⁶ 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.²⁷ 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.²⁸ The Commission stated that this transparency will ensure that the method is applied on a non-discriminatory basis.²⁹ 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.³⁰

a. Cheyenne's Compliance Filing

19. Cheyenne proposes Tariff revisions to its LGIP in sections 3.8.1 and 3.8.2 for identifying contingent facilities. Cheyenne explains that it will identify contingent

 $^{^{26}}$ Order No. 845, 163 FERC \P 61,043 at P 218; see also pro forma LGIP section 1 (Definitions).

²⁷ Order No. 845, 163 FERC ¶ 61,043 at P 199.

²⁸ Id.; see also pro forma LGIP section 3.8.

²⁹ Order No. 845, 163 FERC ¶ 61,043 at P 200.

³⁰ Id. P 199; see also pro forma LGIP section 3.8.

facilities by reviewing and accounting for the following: (1) planned network upgrades associated with interconnection customers with higher queue priority; and/or (2) coordination with applicable affected system parties to determine what contingent facilities have been identified through affected system studies; and/or (3) other planned transmission projects unrelated to any interconnection requests. Cheyenne further explains that any such planned upgrades will be identified and listed in the system impact study if such projects, 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.³¹

20. Cheyenne states that contingent facilities will be identified in the system impact study and again at the conclusion of the facilities study for a given interconnection request. In addition, Cheyenne states that it will document contingent facilities in Appendix A of the interconnection customer's LGIA.³²

b. <u>Commission Determination</u>

21. We find that Cheyenne's proposed LGIP revisions regarding the definition of contingent facilities comply with the requirements of Order Nos. 845 and 845-A, whereas Cheyenne's proposed LGIP revisions that identify and describe its method for determining contingent facilities partially complies. 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.³³ 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.³⁴ Cheyenne'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 Cheyenne will use

³¹ Filing at 6; *see also* Cheyenne OATT, Attachment J (4.0.0), LGIP sections 3.8.1 and 3.8.2 (Identification of Contingent Facilities).

³² Filing at 6-7.

³³ Order No. 845, 163 FERC ¶ 61,043 at P 199.

³⁴ *Id.* P 200.

as part of its method to identify contingent facilities.³⁵ Without this information, an interconnection customer will not understand how Cheyenne will evaluate potential contingent facilities to determine their relationship to an individual interconnection request.³⁶ Further, including provisions regarding specific thresholds or criteria in Cheyenne's LGIP will ensure Cheyenne's technical screens or analyses will be applied to interconnection requests on a consistent, not unduly discriminatory or preferential basis. Accordingly, we direct Cheyenne to file, within 60 days of the date of this order, a further compliance filing that includes the technical screens or analyses and the specific thresholds or criteria to achieve the level of transparency required by Order No. 845.

4. Transparency Regarding Study Models and Assumptions

- 22. 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."³⁷ 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).³⁸
- 23. 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

³⁵ 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.

³⁶ See pro forma LGIP section 3.8 ("The method shall be sufficiently transparent to determine why a specific Contingent Facility was identified").

³⁷ Order No. 845, 163 FERC ¶ 61,043 at P 236.

³⁸ *Id.*; see also pro forma LGIP section 2.3.

and security of the electric grid.³⁹ 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.⁴⁰ 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.⁴¹

a. Cheyenne's Compliance Filing

24. Cheyenne's proposed Tariff revisions adopt the Commission's *pro forma* LGIP revisions for the revised study models as required by Order Nos. 845 and 845-A without modification.⁴²

b. Commission Determination

25. We find that Cheyenne's proposed LGIP revisions regarding study models comply with the requirements of Order Nos. 845 and 845-A because Cheyenne adopts the Commission's *pro forma* LGIP revisions without modification.

5. Definition of Generating Facility

26. 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

 $^{^{39}}$ Order No. 845-A, 166 FERC \P 61,137 at P 84 (citing Order No. 845, 163 FERC \P 61,043 at P 241).

⁴⁰ *Id.* P 85 (citing 18 C.F.R. § 388.113(g)(5)(i) (2019)).

⁴¹ *Id.* P 88.

 $^{^{42}}$ Filing at 2; see also Cheyenne OATT, Attachment J (4.0.0), LGIP section 2.3 (Base Case Data).

not include the interconnection customer's Interconnection Facilities. 43

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.⁴⁴

a. Cheyenne's Compliance Filing

27. Cheyenne's proposed Tariff revisions adopt the Commission's *pro forma* LGIP and *pro forma* LGIA definition of "Generating Facility" as required by Order Nos. 845 and 845-A without modification. 45

b. Commission Determination

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

6. Interconnection Study Deadlines

29. 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. 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

 $^{^{43}}$ Order No. 845, 163 FERC ¶ 61,043 at P 275 (additions italicized); see also pro forma LGIP section 1.

⁴⁴ Order No. 845, 163 FERC ¶ 61,043 at P 275.

⁴⁵ Filing at 2; *see also* Cheyenne OATT, Attachment J (4.0.0), LGIP section 1 (Definitions) and App. 6, LGIA article 1 (Definitions).

 $^{^{46}}$ Order No. 845, 163 FERC \P 61,043 at P 305; see also pro forma LGIP section 3.5.2 and 3.5.3.

interconnection study deadlines for more than 25 percent of any study type for two consecutive calendar quarters.⁴⁷ 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.⁴⁸ 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 2020.⁴⁹

a. Cheyenne's Compliance Filing

30. Cheyenne states that it adopts the Commission's *pro forma* LGIP statistics revisions as required by Order Nos. 845 and 845-A without modification. Additionally, Cheyenne proposes Tariff revisions that replace the bracketed placeholders in *pro forma* LGIP sections 3.5.2.1, 3.5.2.2, and 3.5.2.3 with timelines that align with the timelines already in its Tariff to complete the feasibility, system impact, and facilities studies, respectively. S1

b. Commission Determination

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

⁴⁷ Order No. 845, 163 FERC ¶ 61,043 at P 305; see also pro forma LGIP section 3.5.4.

⁴⁸ Order No. 845, 163 FERC ¶ 61,043 at P 307.

⁴⁹ Order No. 845-A, 166 FERC ¶ 61,137 at P 107.

⁵⁰ Filing at 2; *see also* Cheyenne OATT, Attachment J (4.0.0), LGIP sections 3.5.2 (Study Statistics), 3.5.3, and 3.5.4.

⁵¹ Filing at 2; *see also* Cheyenne OATT, Attachment J (4.0.0), LGIP sections 3.5.2.1 (Interconnection Feasibility Studies Processing Time), 3.5.2.2 (Interconnection System Impact Studies Processing Time), and 3.5.2.3 (Interconnection Facilities Studies Processing Time).

7. Requesting Interconnection Service below Generating Facility Capacity

- 32. 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,⁵² 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.⁵³
- 33. 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.⁵⁴ 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.
- 34. 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

⁵² 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 article 1 (Definitions).

 $^{^{53}}$ 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 App. 1.

⁵⁴ Order No. 845, 163 FERC ¶ 61,043 at PP 383-84.

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.⁵⁵

35. 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.⁵⁶

a. Cheyenne's Compliance Filing

36. Cheyenne's proposed Tariff revisions adopt the Commission's *pro forma* LGIP revisions regarding a request for interconnection service below full generating capacity as required by Order Nos. 845 and 845-A without modification.⁵⁷ However, Cheyenne's proposed Tariff revisions do not fully incorporate the *pro forma* LGIP language adopted by Order No. 845.⁵⁸ 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

⁵⁵ *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.*

⁵⁶ Id. P 406; see also pro forma LGIP sections 4.4.1 and 4.4.2.

⁵⁷ Filing at 2; *see also* Cheyenne OATT, Attachment J (4.0.0), LGIP sections 3.1 (General), 4.4.1, 4.4.2 (Modifications), 6.3 (Interconnection Feasibility Study Procedures), 7.3 (Scope of Interconnection System Impact Study), 8.2 (Scope of Interconnection Facilities Study), and App. 1 (Interconnection Request for a Large Generating Facility).

⁵⁸ See Order No. 845-A, 166 FERC ¶ 61,137 at P 117.

Generating Facility Capacity to ensure safety and reliability of the system, with the study costs borne by the Interconnection Customer.⁵⁹

b. <u>Commission Determination</u>

37. We find that Cheyenne'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 Cheyenne adopts most of the Commission's *pro forma* LGIP revisions without modification. However, as discussed above, Cheyenne's revisions to section 3.1 of its LGIP omit some of the *pro forma* LGIP language required by Order No. 845. Accordingly, we direct Cheyenne 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

38. In Order No. 845, the Commission required transmission providers to allow all interconnection customers to request provisional interconnection service. 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. To implement this service, the Commission revised the *pro forma* LGIP and *pro forma* LGIA to add a definition for "Provisional"

 $^{^{59}}$ 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 Black Hills Colorado'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.

⁶⁰ *Id.* PP 347, 367, and Appendix B.

⁶¹ *Id.* P 438.

⁶² *Id.* P 441.

Interconnection Service" and for a "Provisional Large Generator Interconnection Agreement." ⁶⁴

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

a. Cheyenne's Compliance Filing

40. Cheyenne's proposed Tariff revisions adopt the Commission's *pro forma* definition of provisional interconnection service and *pro forma* language in LGIA article 5.9.2 without modification. Cheyenne also proposes to revise article 5.9.2 to state that it will update provisional interconnection studies "if necessary, on an annual basis." Cheyenne states in its filing that the annual update is "subject to the caveat that annual restudies would be accomplished, if necessary given changes (or lack of changes), within the system during that annual period." Cheyenne asserts that its proposal appropriately provides for consistency across all interconnection customers, as required by the Commission, yet balances the possibility that there may be no need to conduct a re-study,

⁶³ Pro forma LGIP section 1 (Definitions); pro forma LGIA article 1 (Definitions).

⁶⁴ *Pro forma* LGIP section 1 (Definitions); *pro forma* LGIA 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.

 $^{^{65}}$ Order No. 845, 163 FERC \P 61,043 at P 438; see also pro forma LGIP section 5.9.2.

⁶⁶ Order No. 845, 163 FERC ¶ 61,043 at P 448.

⁶⁷ *Id*.

⁶⁸ Cheyenne OATT, Attachment J (4.0.0), App. 6, LGIA article 5.9.2 (Provisional Interconnection Service).

⁶⁹ Filing at 7.

due to a lack of changes on the system, and that the re-study expense would otherwise be borne by the interconnection customer.⁷⁰

b. Commission Determination

We find that Chevenne's proposed LGIP revisions regarding provisional 41. interconnection service provisions comply with the requirements of Order Nos. 845 and 845-A. However, we find that Cheyenne's proposed revisions to *pro forma* LGIA article 5.9.2 partially comply with the requirements of Order Nos. 845 and 845-A because those revisions do not identify when it will or will not be necessary to update provisional interconnection studies. Cheyenne's filing suggests that an annual re-study will not be necessary if no changes to the system occurred during the annual period.⁷¹ We find that this proposal would be reasonable. However, Cheyenne did not include this information in its proposed Tariff revisions. Instead, Cheyenne's proposed revisions state only that it will conduct updated provisional interconnection studies "if necessary, on an annual basis."⁷² Chevenne's proposed Tariff language creates uncertainty regarding the frequency for updating provisional interconnection studies. Accordingly, we direct Cheyenne to file, within 60 days of the date of this order, a further compliance filing that revises its pro forma LGIA article 5.9.2 to include the explanation Cheyenne provided in its filing that an annual re-study will not be necessary if no changes to the system occurred during the annual period.

9. Surplus Interconnection Service

42. 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.⁷³ Surplus interconnection service enables a new interconnection customer to utilize the unused portion of an existing interconnection customer's interconnection service within specific

⁷⁰ *Id*.

⁷¹ *Id*.

⁷² Cheyenne OATT, Attachment J (4.0.0), App. 6, LGIA article 5.9.2 (Provisional Interconnection Service).

 $^{^{73}}$ Order No. 845, 163 FERC ¶ 61,043 at P 467; see also pro forma LGIP section 1 (Definitions); pro forma LGIA article 1 (Definitions).

parameters.⁷⁴ 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.⁷⁵ 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. ⁷⁶ 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.⁷⁷ 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.⁷⁸ 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.⁷⁹

a. Cheyenne's Compliance Filing

43. Cheyenne's proposed Tariff revisions adopt the Commission's *pro forma* LGIP and *pro forma* LGIA revisions for surplus interconnection service as required by Order Nos. 845 and 845-A without modification. Cheyenne explains that it proposes to include some key items, which relate more closely to "terms and conditions" of interconnection

 $^{^{74}}$ Order No. 845, 163 FERC \P 61,043 at P 467; Order No. 845-A, 166 FERC \P 61,137 at P 119.

 $^{^{75}}$ Order No. 845, 163 FERC \P 61,043 at P 467; see also pro forma LGIP sections 3.3 and 3.3.1.

 $^{^{76}}$ Order No. 845, 163 FERC \P 61,043 at P 483; see also pro forma LGIP section 3.3.

⁷⁷ Order No. 845, 163 FERC ¶ 61,043 at PP 455, 467.

⁷⁸ *Id.* P 481.

⁷⁹ *Id.* P 499.

service in section 3.3.2 of its LGIP. Specifically, in section 3.3.2, Cheyenne provides that a surplus interconnection customer will need to execute an appropriate study agreement and provide a study deposit of \$10,000 within five business days after execution of that study agreement. Further, in Cheyenne's proposal, the study agreement will state that the surplus interconnection customer shall compensate the transmission provider for the actual cost of the studies referenced in the Commission's *pro forma* LGIP section 3.3.1, and that any difference between the deposit and the actual cost of the studies shall be paid by, or refunded to, the surplus interconnection customer, as appropriate.⁸⁰

44. Cheyenne states that the studies conducted under section 3.3.1 of its LGIP will be completed outside the interconnection queue within 60 calendar days of the interconnection customer's execution of the surplus interconnection study agreement. In addition, Cheyenne provides that, if studies determine that network upgrades would be necessary to facilitate the surplus interconnection service, it will deny the surplus interconnection request. Cheyenne states that its proposed revisions require that the transmission provider, original interconnection customers, and surplus interconnection customers develop a surplus interconnection service agreement and other agreements, as necessary, and file such agreements with the Commission. Cheyenne proposes that the surplus interconnection service agreement will establish, among other things, conditions such as the term of operation, the interconnection service limit, and the mode of operation for energy production (i.e., common or singular operation) and the roles and responsibilities of the parties for maintaining the operation of the facility within the parameters of the surplus interconnection service agreement.

b. <u>Commission Determination</u>

45. We find that Cheyenne's proposed LGIP and *pro forma* LGIA revisions regarding surplus interconnection service comply with the requirements of Order Nos. 845 and 845-A. Cheyenne adopts the *pro forma* LGIP and *pro forma* LGIA revisions for surplus

⁸⁰ Filing at 5-6; *see also* Cheyenne OATT, Attachment J (4.0.0), LGIP section 3.3.2 (Surplus Interconnection Study and Agreement).

⁸¹ Filing at 5.

⁸² *Id*.

⁸³ *Id.* at 6; *see also* Cheyenne OATT, Attachment J (4.0.0), LGIP section 3.3.2 (Surplus Interconnection Study and Agreement).

⁸⁴ Filing at 5; *see also* Cheyenne OATT, Attachment J (4.0.0), LGIP section 3.3.2 (Surplus Interconnection Study and Agreement).

interconnection service as required by Order Nos. 845 and 845-A without modification. Cheyenne's proposed process meets the requirements of Order Nos. 845 and 845-A because Cheyenne will evaluate surplus interconnection service requests outside of its non-surplus interconnection queue. Additionally, as required by Order Nos. 845 and 845-A, Cheyenne's proposed process requires that the transmission provider, original interconnection customer, and surplus interconnection service customer will file a surplus interconnection service agreement with the Commission that includes the terms and conditions of surplus interconnection service.

10. <u>Material Modifications and Incorporation of Advanced Technologies</u>

- 46. In Order No. 845, the Commission modified section 4.4.2(c) of the *pro forma* LGIP to allow an interconnection customer to incorporate certain technological advancements to its interconnection request, prior to the execution of the interconnection facilities study agreement, 85 without risking the loss of its queue position. The Commission required transmission providers to develop and include in their LGIPs a definition of permissible technological advancements that will create a category of technological changes that, by definition, do not constitute a material modification and, therefore, will not result in the loss of queue position. In addition, the Commission modified section 4.4.6 of the *pro forma* LGIP to require transmission providers to insert a technological change 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. 87
- 47. 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

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

⁸⁶ *Id.* P 518.

⁸⁷ Id.; see also pro forma LGIP section 4.4.6.

and which apply to the transmission provider.⁸⁸ 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.⁸⁹

- 48. 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. 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. 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.
- 49. 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. 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. In addition, the

⁸⁸ Order No. 845, 163 FERC ¶ 61,043 at P 519.

⁸⁹ Id.

⁹⁰ *Id.*; Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

⁹¹ Order No. 845, 163 FERC ¶ 61,043 at 521.

⁹² *Id*.

⁹³ *Id.* P 535; Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

⁹⁴ Order No. 845, 163 FERC ¶ 61,043 at P 534. The Commission set the default deposit amount to \$10,000, but stated that a transmission provider may propose a

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.⁹⁵

50. In Order No. 845-A, the Commission clarified that: (1) when studies are necessary, the interconnection customer's technological change request must demonstrate that the proposed incorporation of the technological change will result in electrical performance that is equal to or better than the electrical performance expected prior to the technological change and will not cause any reliability concerns; (2) if the interconnection customer cannot demonstrate in its technological change request that the proposed technological change would result in equal or better electrical performance, the change will be assessed pursuant to the existing material modification provisions in the pro forma LGIP; (3) information regarding electrical performance submitted by the interconnection customer is an input into the technological change study, and this factor alone is not determinative of whether a proposed technological change is a material modification; and (4) the determination of whether a proposed technological change (that the transmission provider does not otherwise include in its definition of permissible technological advancements) is a material modification should include an analysis of whether the proposed technological change materially impacts the timing and costs of lower-queued interconnection customers. 96

a. Cheyenne's Compliance Filing

51. Cheyenne proposes the following definition of permissible technological advancement:

Permissible Technological Advancement shall mean an advancement in turbines, inverters, plant supervisory controls, or other advancement that achieves cost or grid performance efficiencies and (1) does not increase the Interconnection Customer's requested Interconnection Service, (2) does not cause any adverse impacts to the Transmission System, (3) does not cause any reliability concerns, (4) does not

reasonable alternative deposit amount in its compliance filing and include a justification supporting this alternative amount. *Id*.

⁹⁵ *Id.* P 522.

⁹⁶ Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

degrade the electrical characteristics of the generating equipment (including but not limited to, the ratings, impedances, efficiencies, capabilities, and performance of the equipment under steady-state or dynamic conditions), and (5) does not change the generation technology or fuel type.⁹⁷

Cheyenne maintains that this proposed definition accomplishes the Commission's requirement that transmission providers identify a category of technological advancements that will not constitute a material modification and will not require a study. Repense states, similarly, that its proposed definition ensures that a permissible technological advancement will not degrade the electric characteristics of generating equipment, will not increase interconnection service, and will not include a change in generation or fuel type. 99

52. In addition, Cheyenne states that its proposed technological change procedure in section 4.4.4 of its LGIP complies with the requirements of, and incorporates the guidance in, Order Nos. 845 and 845-A. 100 According to Cheyenne's proposed Tariff revisions, an interconnection customer must submit a written technological advancement request to incorporate a proposed technological advancement into its generating facility prior to the return of the interconnection facilities studies agreement. 101 The interconnection customer must also provide documentation that demonstrates that the proposed technological advancement would result in electrical performance that is equal

¹⁰⁰ *Id.* at 4-5. Cheyenne explains that, to fully endorse the *pro forma* changes to LGIP section 4.4.2 and include its technological change procedure in section 4.4.4, its proposed revisions reflect a ministerial edit to its LGIP to combine in section 4.4.3 its prior LGIP section 4.4.3 and section 4.4.4. Cheyenne states that this minor clerical adjustment to combine formerly separate sections into one section allows LGIP section 4.4.4 to be used for the specific purpose of identifying Cheyenne's technological change procedure as required by Order Nos. 845 and 845-A. *Id.* at n.14.

⁹⁷ Cheyenne OATT, Attachment J (4.0.0), LGIP section 1 (Definitions).

⁹⁸ Filing at 3.

⁹⁹ Id.

¹⁰¹ The technological advancement request must, among other things, include a description of the proposed technological advancement and identify the specific parameters in Attachment A to Appendix 1 of the LGIP that would change as a result of the proposed technological advancement. Cheyenne OATT, Attachment J (4.0.0), LGIP section 4.4.4 (Technological Change Procedure).

to, or better than, the electrical performance expected prior to the proposed technological advancement and would not cause any reliability concerns. The proposed Tariff revisions provide that if the proposed technological advancement is a permissible technological advancement, then no study will be necessary and it will not be considered a material modification. However, if the proposed technological advancement is not a permissible technological advancement, the transmission provider will review the technological advancement request and any effect on lower queued projects to determine whether a study is necessary and whether the proposed technological advancement is considered a material modification. ¹⁰²

53. Cheyenne's proposed Tariff revisions state that if a study is necessary, the transmission provider will notify the interconnection customer and will conduct the evaluation pursuant to LGIP section 4.4.3. The interconnection customer is required to provide a study deposit of \$10,000 within five business days of being notified that a study is required, and is required to compensate the transmission provider for the actual cost of the study or studies. Further, the proposed Tariff revisions provide that the study will be completed within 30 calendar days after the technological advancement request is submitted. If the transmission provider determines that the proposed technological advancement is a material modification, the interconnection customer may abandon the proposed technological advancement or proceed and lose its queue position. ¹⁰⁴

b. Commission Determination

- 54. We find that Cheyenne'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. First, we find that Cheyenne's proposed definition of permissible technological advancement meets the Commission's requirement to provide a category of technological advancement that does not constitute a material modification. ¹⁰⁵
- 55. As to Cheyenne's technological change procedure, we find that it partially complies with the requirements in Order Nos. 845 and 845-A to incorporate a technological change procedure. Order No. 845 requires that the technological change

¹⁰² *Id*.

¹⁰³ The difference between the deposit and the actual cost of the studies will be paid by, or refunded to, the interconnection customer as appropriate. *Id*.

 $^{^{104}} Id$

¹⁰⁵ Order No. 845, 163 FERC ¶ 61,043 at PP 530-31.

procedure "explain how the transmission provider will evaluate the technological advancement request to determine whether it is a material modification." Cheyenne's proposed LGIP revisions do not explain how it will evaluate the technological advancement request to determine whether it is a material modification. Accordingly, we direct Cheyenne to file, within 60 days of the date of this order, a further compliance filing that revises its LGIP to provide a more detailed explanation of the studies that it will conduct to determine whether the technological advancement request will result in a material modification.

56. In addition, because Cheyenne's filing is silent on whether Cheyenne 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. ¹⁰⁸

11. Additional Compliance Requirements

57. 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 Cheyenne did not implement one of these required changes and, accordingly, direct to file, within 60 days of the date of this order, a further compliance filing that renumbers the section proposing its technological change procedure from section 4.4.4 to section 4.4.6. ¹⁰⁹

The Commission orders:

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

¹⁰⁶ *Id.* P 521.

 $^{^{107}}$ Cheyenne OATT, Attachment J (4.0.0), LGIP section 4.4.4 (Technological Change Procedure).

¹⁰⁸ Order No. 845, 163 FERC ¶ 61,043 at P 522.

¹⁰⁹ Order No. 845-A Errata Notice, 167 FERC ¶ 61,124 at P 8.

(B) Cheyenne 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.

(SEAL)

Kimberly D. Bose, Secretary.