

170 FERC ¶ 61,115
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

El Paso Electric Company

Docket No. ER19-1953-000

ORDER ON COMPLIANCE

(Issued February 20, 2020)

1. On May 22, 2019, El Paso Electric Company (El Paso) 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 El Paso's filing partially complies with the requirements of Order Nos. 845 and 845-A. Accordingly, we accept El Paso's compliance filing, effective May 22, 2019 and direct El Paso 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 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,

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.

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 ten 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 contingent facilities;⁸ (2) required transmission providers to list the specific study

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

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

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.

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

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. El Paso’s Compliance Filing

6. El Paso states that it has incorporated the Commission’s *pro forma* LGIP and *pro forma* LGIA reforms in Attachment M of its Tariff as required by Order Nos. 845 and 845-A. El Paso states that the revised Tariff includes a number of new processes that were developed specifically for inclusion in the Tariff in the manner contemplated by the Commission in Order Nos. 845 and 845-A.¹²

7. El Paso also states that its revised Tariff includes certain modifications that it asserts are consistent with or superior to the changes adopted in Order Nos. 845 and 845-A. El Paso states that in most instances, the Commission has spoken to the

Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing.” *Pro forma* LGIP § 1.

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 El Paso May 22, 2019 Compliance Filing at 1-2 (Filing).

permissibility of such content in the rulemaking proceeding. El Paso states that in other instances, the revisions are made to coincide with and achieve greater consistency with other provisions within Attachment M of El Paso's Tariff.¹³

8. El Paso requests that the proposed Tariff revisions become effective on May 22, 2019.¹⁴

III. Notice and Responsive Pleadings

9. Notice of El Paso'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 El Paso's filing partially complies with the requirements of Order Nos. 845 and 845-A. Accordingly, we accept El Paso's compliance filing, effective May 22, 2019, and direct El Paso to submit a further compliance filing within 60 days of the date of this order.

A. Proposed Variations

11. As discussed further below, El Paso has proposed certain variations from the Commission's requirements in Order Nos. 845 and 845-A. The Commission explained in Order No. 845 that such variations would be reviewed under the same standard allowed by Order No. 2003.¹⁵ In Order No. 2003, when adopting the *pro forma* LGIA and LGIP, the Commission permitted transmission providers to seek variations from the *pro forma* LGIP and/or *pro forma* LGIA if they were "consistent with or superior to" the terms of the *pro forma* LGIP and *pro forma* LGIA.¹⁶ A transmission provider seeking a "consistent with or superior to" variation must demonstrate why its proposal is consistent

¹³ *Id.* at 3.

¹⁴ *Id.* at 1.

¹⁵ Order No. 845, 163 FERC ¶ 61,043 at P 43.

¹⁶ *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, 104 FERC ¶ 61,103, at P 26 (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).

with or superior to the *pro forma* LGIP and/or *pro forma* LGIA.¹⁷ The Commission also permitted transmission providers to justify a variation to the *pro forma* LGIA or LGIP based on regional reliability requirements and required transmission providers submitting such regional reliability variations to the Commission for approval to identify the proposed variations and explain why such variations are necessary.¹⁸ We will evaluate El Paso's proposed variations from the requirements of Order Nos. 845 and 845-A accordingly.

B. 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.¹⁹ 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.²⁰ 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."²¹

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;²² and (2) clarify that the option to build does not apply to stand alone network

¹⁷ See, e.g., *Nev. Power Co.*, 167 FERC ¶ 61,086, at P 3 (2019).

¹⁸ Order No. 2003, 104 FERC ¶ 61,103 at P 826; Order No. 2003-A, 106 FERC ¶ 61,220 at P 45.

¹⁹ Order No. 845, 163 FERC ¶ 61,043 at PP 85-87.

²⁰ Order No. 2003, 104 FERC ¶ 61,103 at P 353; *see also pro forma* LGIP § 5.1.3.

²¹ Order No. 845, 163 FERC ¶ 61,043 at P 85.

²² Order No. 845-A, 166 FERC ¶ 61,137 at P 68.

upgrades on affected systems.²³ 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.²⁴ 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.²⁵

1. El Paso's Compliance Filing

14. El Paso proposes 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.²⁶ El Paso proposes revisions to its *pro forma* LGIA amending articles 5.1, 5.1.3, and 5.1.4 to incorporate the *pro forma* LGIA revisions adopted by Order Nos. 845 and 845-A without modification.²⁷

15. With respect to subsection (12) of LGIA article 5.2 adopted by Order Nos. 845 and 845-A, El Paso proposes to replace the placeholder indicated in the Commission's *pro forma* language with a specification of a minimum amount of \$25,000 that it will collect from interconnection customers to recover expenses incurred to oversee the interconnection customer's option to build activities should the interconnection customer exercise the option to build.²⁸

²³ *Id.* P 61.

²⁴ *Id.* P 75.

²⁵ *Id.* P 33.

²⁶ El Paso, OATT, Attachment M Large Generator Interconnection Procedures and Agreement (0.9.0), Standard Large Generator Interconnection Procedures, § 1 (Definitions); El Paso, OATT, Attachment M Large Generator Interconnection Procedures and Agreement (0.9.0), app. 6 Standard Large Generator Interconnection Agreement, art. 1 (Definitions).

²⁷ El Paso, OATT, Attachment M Large Generator Interconnection Procedures and Agreement (0.9.0), app. 6 Standard Large Generator Interconnection Agreement, art. 5.1 (Options) and 5.1.3 (Option to Build).

²⁸ *Id.* at art. 5.2 (General Conditions Applicable to Option to Build).

2. Commission Determination

16. We find that El Paso's proposed revisions regarding the option to build partially comply with the requirements of Order Nos. 845 and 845-A because, apart from its proposed modification to article 5.2, El Paso adopts the Commission's *pro forma* LGIA and *pro forma* LGIP revisions without modification.

17. We find that El Paso fails to adequately explain how its proposed revision in article 5.2 of its *pro forma* LGIA to include a \$25,000 minimum amount for oversight costs related to the option to build is consistent with or superior to the requirements in the Commission's *pro forma* LGIA in Order Nos. 845 and 845-A. The Commission in Order No. 845-A revised article 5.2 of the *pro forma* LGIA to include a placeholder amount and stated, "We expect the transmission provider and interconnection customer to negotiate this amount and clearly state it in the LGIA."²⁹ Accordingly, we direct El Paso to file, within 60 days of the date of this order, a further compliance filing that adopts article 5.2 of the Commission's *pro forma* LGIA without modification (i.e., retains the placeholder to reflect the amount negotiated with each interconnection customer).

C. Dispute Resolution

18. 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.³⁰ 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.³¹

1. El Paso's Compliance Filing

19. El Paso proposes revisions to its LGIP that adopt the dispute resolution language required by Order Nos. 845 and 845-A without modification.³²

²⁹ Order No. 845-A, 166 FERC ¶ 61,137 at P 75.

³⁰ Order No. 845, 163 FERC ¶ 61,043 at P 133; *see also pro forma* LGIP § 13.5.5.

³¹ Order No. 845, 163 FERC ¶ 61,043 at P 139.

³² El Paso, OATT, Attachment M Large Generator Interconnection Procedures and

2. Commission Determination

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

D. Identification and Definition of Contingent Facilities

21. 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.³³ 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.³⁴ 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.³⁵ The Commission stated that this transparency will ensure that the method is applied on a non-discriminatory basis.³⁶ 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.³⁷

1. El Paso's Compliance Filing

22. El Paso proposes to adopt the Commission's *pro forma* LGIP definition of

Agreement (0.9.0), Standard Large Generator Interconnection Procedures, § 13.5.5 (Non-Binding Dispute Resolution Procedures).

³³ Order No. 845, 163 FERC ¶ 61,043 at P 218; *see also pro forma* LGIP § 1.

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

³⁵ *Id.*; *see also pro forma* LGIP § 3.8.

³⁶ Order No. 845, 163 FERC ¶ 61,043 at P 200.

³⁷ *Id.* P 199; *see also pro forma* LGIP § 3.8.

contingent facilities. El Paso also proposes revisions to add section 3.8 to its LGIP, which states that El Paso will identify contingent facilities by: (1) evaluating any planned network upgrades associated with higher-queued interconnection customers; (2) evaluating any planned interconnection facilities associated with higher-queued or equal-queued interconnection customers; (3) coordinating with affected systems to determine what contingent facilities have been identified through affected system studies; and/or (4) evaluating other planned transmission projects unrelated to any interconnection requests. El Paso further explains that any such planned upgrades, interconnection facilities, contingent facilities, or planned transmission projects 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, shall each be identified and listed in the system impact study.³⁸

23. El Paso states that it will provide the interconnection customer a written explanation as to why a facility was identified as a contingent facility and how it relates to the interconnection request under study. In addition, El Paso states that, at the request of the interconnection customer, El Paso shall provide the estimated network upgrade costs and estimated in-service completion time associated with each identified contingent facility, when this information is readily available, and not commercially sensitive.³⁹

2. Commission Determination

24. We find that the revised provisions that identify and describe El Paso's method for determining contingent facilities, as El Paso proposes in its LGIP, partially comply with the requirements of Order Nos. 845 and 845-A. We find that El Paso complies with the requirements of Order Nos. 845 and 845-A because El Paso has adopted the definition of contingent facilities without modification. Further, El Paso'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.

25. However, as specified in Order No. 845, transmission providers must include, in section 3.8 of their LGIPs, a method for determining contingent facilities.⁴⁰ 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

³⁸ Filing at 2-3; *see also* El Paso OATT, Attachment M (0.9.0), LGIP § 3.8 (Identification of Contingent Facilities).

³⁹ *Id.*

⁴⁰ Order No. 845, 163 FERC ¶ 61,043 at P 199.

request.⁴¹ 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.⁴² El Paso's proposed Tariff revisions lack the requisite transparency required by Order Nos. 845 and 845-A because the proposed Tariff revisions do not detail the specific technical screens or analyses and the specific thresholds or criteria that El Paso will use as part of its method to identify contingent facilities. Without this information, an interconnection customer will not understand how El Paso will evaluate potential contingent facilities to determine their relationship to an individual interconnection request.⁴³ Further, including provisions regarding specific thresholds or criteria in El Paso's LGIP will ensure El Paso's technical screens or analyses will be applied to interconnection requests on a consistent, not unduly discriminatory or preferential basis.

26. We therefore direct El Paso to describe in section 3.8 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 El Paso 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.⁴⁴ 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 facility⁴⁵ 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

⁴¹ *Id.* P 200.

⁴² *Id.*

⁴³ *See pro forma* LGIP § 3.8 ("The method shall be sufficiently transparent to determine why a specific Contingent Facility was identified.").

⁴⁴ Order No. 845, 163 FERC ¶ 61,043 at P 220.

⁴⁵ 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.

corresponding, specific triggering threshold or criterion to indicate how it will apply each screen or analysis.

27. Because El Paso 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 El Paso to submit a further compliance filing, within 60 days of the date of this order, which adds in section 3.8 of El Paso's LGIP: (1) the method El Paso 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.

E. Transparency Regarding Study Models and Assumptions

28. 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."⁴⁶ 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).⁴⁷

29. 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.⁴⁸ 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.⁴⁹ The Commission further clarified that the phrase

⁴⁶ Order No. 845, 163 FERC ¶ 61,043 at P 236.

⁴⁷ *Id.*; see also *pro forma* LGIP § 2.3.

⁴⁸ Order No. 845-A, 166 FERC ¶ 61,137 at P 84 (citing Order No. 845, 163 FERC ¶ 61,043 at P 241).

⁴⁹ *Id.* P 85 (citing 18 C.F.R. § 388.113(g)(5)(i) (2019)).

“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.⁵⁰

1. El Paso’s Compliance Filing

30. El Paso proposes revisions to its LGIP section 2.3 to incorporate the *pro forma* language adopted by Order Nos. 845 and 845-A without modification.⁵¹

2. Commission Determination

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

F. Definition of Generating Facility

32. 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.⁵²

⁵⁰ *Id.* P 88.

⁵¹ El Paso proposes to retain certain previously accepted language in section 2.3 of its LGIP stating that El Paso’s responsibility to maintain the required databases must be “consistent with Applicable Laws and Regulations and Applicable Reliability Standards.” El Paso, OATT, Attachment M Large Generator Interconnection Procedures and Agreement (0.9.0), Standard Large Generator Interconnection Procedures, § 2.3 (Base Case Data). The Commission previously accepted this language. *See El Paso Elec. Co.*, Docket No. ER10-2730-000, (Nov. 17, 2010) (delegated order).

⁵² Order No. 845, 163 FERC ¶ 61,043 at P 275 (additions italicized); *see also pro forma* LGIP § 1.

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.⁵³

1. El Paso's Compliance Filing

33. El Paso proposes revisions to section 1 of its LGIP and article 1 of its *pro forma* LGIA to incorporate the definition of "Generating Facility" adopted by Order Nos. 845 and 845-A without modification.⁵⁴

2. Commission Determination

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

G. Interconnection Study Deadlines

35. 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.⁵⁵ 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.⁵⁶ 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

⁵³ Order No. 845, 163 FERC ¶ 61,043 at P 275.

⁵⁴ El Paso, OATT, Attachment M Large Generator Interconnection Procedures and Agreement (0.9.0), Standard Large Generator Interconnection Procedures, § 1 (Definitions); El Paso, OATT, Attachment M Large Generator Interconnection Procedures and Agreement (0.9.0), app. 6 Standard Large Generator Interconnection Agreement, art. 1 (Definitions).

⁵⁵ Order No. 845, 163 FERC ¶ 61,043 at P 305; *see also pro forma* LGIP §§ 3.5.2, 3.5.3.

⁵⁶ Order No. 845, 163 FERC ¶ 61,043 at P 305; *see also pro forma* LGIP §§ 3.5.2, 3.5.3.

consecutive calendar quarters.⁵⁷ 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.⁵⁸ 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 2020.⁵⁹

1. El Paso's Compliance Filing

36. El Paso proposes revisions to its LGIP to add a new section 3.5.2 that incorporates the *pro forma* language of Order Nos. 845 and 845-A with some modifications that it asserts are consistent with or superior to those proposed in Order Nos. 845 and 845-A. First, El Paso proposes language in LGIP section 3.5.2 to clarify how the study completion timeline may apply to interconnection customers that are members of a queue cluster, explaining that the 90-day clock will begin after the cluster window closes or, where study agreements are not executed by all interconnection customers, after all customers in the cluster return their study agreements. Second, in section 3.5.2.2 of its proposed LGIP revisions, El Paso proposes to include the word “draft” in order to better reflect the existing Commission-approved Tariff obligations governing the presentation of a Facilities Study Report in draft form for the interconnection customer’s review and comment, before a final report is tendered.⁶⁰

37. Additionally, El Paso proposes to omit the feasibility study-related provisions in the Commission’s *pro forma* section 3.5.2.1 because its Attachment M to the Tariff does not contain feasibility study obligations. El Paso states that the Commission approved the elimination of feasibility study obligations relating to generator interconnections from El Paso’s Tariff in 2011.⁶¹ El Paso proposes Tariff revisions to LGIP section 3.5.2.1 with a system impact study completion deadline of 90 calendar days after El Paso receives all

⁵⁷ Order No. 845, 163 FERC ¶ 61,043 at P 305; *see also pro forma* LGIP § 3.5.4.

⁵⁸ Order No. 845, 163 FERC ¶ 61,043 at P 307.

⁵⁹ Order No. 845-A, 166 FERC ¶ 61,137 at P 107.

⁶⁰ Filing at 3-4; El Paso, OATT, Attachment M Large Generator Interconnection Procedures and Agreement (0.9.0), Standard Large Generator Interconnection Procedures § 3.5.2.2 (Interconnection Facilities Studies Processing Time).

⁶¹ Filing at 4 (citing *El Paso Electric Co.*, 137 FERC ¶ 61,101 (2011)).

interconnection customers' executed interconnection impact study agreements⁶² and to LGIP section 3.5.2.2 with a facilities study completion deadline of 90 calendar days after El Paso receives the interconnection customer's executed interconnection facilities agreement.⁶³

2. Commission Determination

38. We find that the revised provisions that address El Paso's study deadline statistics and informational reporting requirements, as proposed in El Paso's LGIP, comply with the requirements of Order Nos. 845 and 845-A because El Paso proposes to include *pro forma* LGIP sections 3.5.3 and 3.5.4 without modification, except for certain deviations and to replace the bracketed placeholders with timelines that align with the timelines reflected in its Tariff. We also find that El Paso's additional proposed revisions in section 3.5.2 relating to queue clusters, and the insertion of the word "draft" are consistent with or superior to the requirements in Order Nos. 845 and 845-A because they are consistent with existing provisions in El Paso's LGIP and therefore add clarity to El Paso's Tariff. We also find that because the Commission approved the elimination of feasibility study obligations from El Paso's Tariff in 2011,⁶⁴ El Paso's proposal to omit revisions related feasibility studies in section 3.5.2 is appropriate and consistent with or superior to the requirements of Order Nos. 845 and 845-A.

H. Requesting Interconnection Service below Generating Facility Capacity

39. 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,⁶⁵ recognizing the need for proper control technologies and flexibility for transmission

⁶² El Paso, OATT, Attachment M Large Generator Interconnection Procedures and Agreement (0.9.0), Standard Large Generator Interconnection Procedures, § 3.5.2.1 (Interconnection System Impact Studies Processing Time).

⁶³ *Id.* at § 3.5.2.2 (Interconnection Facilities Studies Processing Time).

⁶⁴ *See El Paso*, 137 FERC ¶ 61,101 at P 20.

⁶⁵ 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.

providers to propose penalties to ensure that the generating facility does not inject energy above the requested level of service.⁶⁶

40. 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.⁶⁷ 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.

41. 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.⁶⁸

42. 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

⁶⁶ 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.

⁶⁷ Order No. 845, 163 FERC ¶ 61,043 at PP 383-84.

⁶⁸ *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.*

prior to returning to the transmission provider an executed system impact study agreement or an executed facilities study agreement.⁶⁹

1. El Paso's Compliance Filing

43. El Paso proposes revisions to its LGIP that adopt the Commission's reforms to *pro forma* LGIP sections 3.1, 4.4.1, 4.4.2, 7.3, and 8.2 and Appendix 1 to incorporate the language set forth in Order Nos. 845 and 845-A without modification.⁷⁰ However, El Paso's proposed Tariff revisions do not fully incorporate the *pro forma* LGIP language adopted by Order No. 845.⁷¹ 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.⁷²

44. Additionally, El Paso proposes a variation to omit language relating to feasibility studies in section 6.3 of the Commission's *pro forma* LGIP, which El Paso's Tariff does not contain.⁷³ El Paso states that it does not propose to adopt section 6.3 of the Commission's *pro forma* LGIP because the Commission previously approved the

⁶⁹ *Id.* P 406; *see also pro forma* LGIP §§ 4.4.1, 4.4.2.

⁷⁰ El Paso, OATT, Attachment M Large Generator Interconnection Procedures and Agreement (0.9.0), Standard Large Generator Interconnection Procedures, §§ 3.1 (General), 7.3 (Scope of Interconnection System Impact Study), and 8.2 (Scope of Interconnection Facilities Study) and app. 1 (Interconnection Request for a Large Generating Facility).

⁷¹ *See* Order No. 845-A, 166 FERC ¶ 61,137 at P 117.

⁷² 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 El Paso'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.

⁷³ Filing at 4 (citing *El Paso*, 137 FERC ¶ 61,101).

elimination of feasibility study obligations relating to generator interconnections from El Paso's Tariff.⁷⁴

2. Commission Determination

45. We find that El Paso'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, with the only modification intended to maintain consistency with a prior Commission approved deviation from the Commission's *pro forma* LGIP. We find that, because the Commission previously approved the elimination of feasibility study obligations from El Paso's Tariff,⁷⁵ El Paso's proposal to omit the revisions related to feasibility studies in its compliance filing is appropriate and consistent with or superior to the requirements of Order Nos. 845 and 845-A.

46. However, as discussed above, El Paso's revisions to section 3.1 of its LGIP omit some of the *pro forma* LGIP language required by Order No. 845.⁷⁶ Accordingly, we direct El Paso 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.

I. Provisional Interconnection Service

47. In Order No. 845, the Commission required transmission providers to allow all interconnection customers to request provisional interconnection service.⁷⁷ 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.⁷⁸ To implement this service, the Commission

⁷⁴ *Id.*

⁷⁵ *See El Paso*, 137 FERC ¶ 61,101 at P 20.

⁷⁶ Order No. 845, 163 FERC ¶ 61,043 at PP 347, 367, and app. B.

⁷⁷ *Id.* P 438.

⁷⁸ *Id.* P 441.

revised the *pro forma* LGIP and *pro forma* LGIA to add a definition for “Provisional Interconnection Service”⁷⁹ and for a “Provisional Large Generator Interconnection Agreement.”⁸⁰

48. In addition, the Commission added *pro forma* LGIA article 5.9.2, which details the terms for provisional interconnection service.⁸¹ 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.⁸² The Commission stated that interconnection customers are responsible for the costs for performing these provisional interconnection studies.⁸³

1. El Paso’s Compliance Filing

49. El Paso proposes revisions to add the required definitions related to provisional interconnection service to its LGIP and *pro forma* LGIA without modification. El Paso also adds article 5.9.2 to its *pro forma* LGIA to implement the changes set forth in Order Nos. 845 and 845-A. El Paso proposes to fill in the bracketed section of article 5.9.2 by providing that it will study and update the maximum permissible output of the generating facility under provisional service “whenever changes experienced or projected to occur on the system warrant reevaluation of the maximum permissible output.”⁸⁴

⁷⁹ *Pro forma* LGIP § 1; *pro forma* LGIA art. 1.

⁸⁰ *Pro forma* LGIP § 1; *pro forma* LGIA art. 1. 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.

⁸¹ *Id.* P 438; *see also pro forma* LGIP § 5.9.2.

⁸² Order No. 845, 163 FERC ¶ 61,043 at P 448.

⁸³ *Id.*

⁸⁴ El Paso, OATT, Attachment M Large Generator Interconnection Procedures and Agreement (0.9.0), app. 6 Standard Large Generator Interconnection Agreement, art. 5.9.2 (Provisional Interconnection Service).

2. Commission Determination

50. We find that the revised provisions that establish provisional interconnection service, as proposed in El Paso's *pro forma* LGIA, partially comply with the requirements of Order Nos. 845 and 845-A. El Paso's proposed revisions comply with the Commission's required *pro forma* definition of provisional interconnection service because El Paso adopts the definition without modification.

51. However, we find that El Paso's proposed revisions to its *pro forma* LGIA article 5.9.2 do not comply with the requirements of Order Nos. 845 and 845-A. El Paso's proposed revisions stating that it will update provision interconnection studies "whenever changes experienced or projected to occur on the system warrant reevaluation of the maximum permissible output"⁸⁵ lack the requisite transparency and clarity required by Order Nos. 845 and 845-A by creating uncertainty regarding the frequency for updating provisional interconnection studies. Accordingly, we direct El Paso to file, within 60 days of the date of this order, a further compliance filing with revisions that clarify, in *pro forma* LGIA article 5.9.2, how El Paso will determine whether changes to the system warrant reevaluation.

J. Surplus Interconnection Service

52. 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.⁸⁶ Surplus interconnection service enables a new interconnection customer to utilize the unused portion of an existing interconnection customer's interconnection service within specific parameters.⁸⁷ 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.⁸⁸ That

⁸⁵ *Id.*

⁸⁶ Order No. 845, 163 FERC ¶ 61,043 at P 467; *see also pro forma* LGIP § 1; *pro forma* LGIA art. 1.

⁸⁷ Order No. 845, 163 FERC ¶ 61,043 at P 467; Order No. 845-A, 166 FERC ¶ 61,137 at P 119.

⁸⁸ Order No. 845, 163 FERC ¶ 61,043 at P 467; *see also pro forma* LGIP §§ 3.3, 3.3.1.

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.⁸⁹ 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.⁹⁰ 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.⁹¹ 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.⁹²

1. El Paso's Proposal

53. El Paso proposes revisions in sections 1, 3.3, 3.3.1, and 3.3.2 of its LGIP, and article 1 to its *pro forma* LGIA, to comply with the Commission's directives in Order Nos. 845 and 845-A.⁹³ El Paso's proposed revisions in section 3.3.1 relate to surplus interconnection service requests, and its proposed revisions in section 3.3.2 relate to the process for securing surplus interconnection service. El Paso adopts 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, except for a deviation to

⁸⁹ Order No. 845, 163 FERC ¶ 61,043 at P 483; *see also pro forma* LGIP § 3.3.

⁹⁰ Order No. 845, 163 FERC ¶ 61,043 at PP 455 and 467.

⁹¹ *Id.* P 481.

⁹² *Id.* P 499.

⁹³ El Paso, OATT, Attachment M Large Generator Interconnection Procedures and Agreement (0.9.0), Standard Large Generator Interconnection Procedures, §§ 1 (Definitions), 3.3 (Utilization of Surplus Interconnection Service), 3.3.1 (Surplus Interconnection Service Requests), and 3.3.2 (Process for Securing Surplus Interconnection Service); El Paso, OATT, Attachment M Large Generator Interconnection Procedures and Agreement (0.9.0), app. 6 Standard Large Generator Interconnection Agreement, art. 1 (Definitions).

cross reference the section for the newly created process for securing surplus interconnection service.

54. In section 3.3.2, El Paso's proposed revisions require the surplus interconnection service request to include the following information: (1) the amount of surplus interconnection service (in MW) proposed to be made available; (2) the start date and end date that the surplus interconnection service is to be made available; (3) whether the surplus interconnection service to be made available is Energy Resource Interconnection Service (ERIS) or Network Resource Interconnection Service (NRIS), but if the original interconnection customer's LGIA provides for ERIS, any surplus interconnection service must also be ERIS; (4) a one-line diagram illustrating how the generating facility that is to use the surplus interconnection service will connect to the original interconnection customer's interconnection facilities; (5) details on the generating facility that is to use the surplus interconnection service (i.e., type of resource, characteristics, modeling information); (6) the signature of the original interconnection customer if the original interconnection customer is not the entity submitting the surplus interconnection service request; and (7) any other relevant conditions of the original interconnection customer on its proposed utilization or transfer.⁹⁴

55. El Paso also proposes in section 3.3.2 that a surplus interconnection customer will need to execute an appropriate surplus interconnection service request, subject to technical studies, as necessary.⁹⁵ El Paso's proposed revisions explain that it may require new technical studies in circumstances in which the original system impact study(ies) are more than three years old or where new generation facilities have been added to El Paso's system since the original interconnection customer's large generating facility was studied. El Paso states that the interconnection customer must provide a study deposit of \$25,000, subject to true-up to reflect the actual cost of the studies necessary to evaluate the surplus interconnection service request. El Paso states that surplus interconnection service cannot be offered until all facilities required for the original interconnection customer's interconnection service (including all contingent facilities) are constructed and in service. El Paso's proposal states that surplus interconnection service cannot be offered if the original interconnection customer's generating facility is scheduled to retire and permanently cease commercial operation before the surplus interconnection service customer's generating facility begins commercial operation.

⁹⁴ El Paso, OATT, Attachment M Large Generator Interconnection Procedures and Agreement (0.9.0), Standard Large Generator Interconnection Procedures, § 3.3.2 (Process for Securing Surplus Interconnection Service).

⁹⁵ *Id.*

2. Commission Determination

56. We find that El Paso's proposed Tariff revisions regarding surplus interconnection service partially comply with the requirements of Order Nos. 845 and 845-A. El Paso adopts the *pro forma* definition of surplus interconnection service and *pro forma* provisions in LGIP section 3.3 without modification. El Paso's proposed Tariff revisions in section 3.3.1 also comply with the requirements of Order Nos. 845 and 845-A because the only modification to the Commission's *pro forma* language in section 3.3.1 is to cross-reference El Paso's newly proposed process for evaluating surplus interconnection service in section 3.3.2 of El Paso's LGIP.

57. We find, however, that El Paso's proposed process for evaluating surplus interconnection service in section 3.3.2 partially complies with the requirements of Order Nos. 845 and 845-A. As required by Order Nos. 845 and 845-A, El Paso'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. However, El Paso's proposed revisions do not explicitly state that surplus interconnection service requests will be processed outside the non-surplus interconnection queue, as required by Order No. 845.⁹⁶ Accordingly, we direct El Paso to file, within 60 days of the date of this order, a further compliance filing that revises section 3.3.2 of its LGIP to explicitly state that surplus interconnection service requests will be processed outside of the non-surplus interconnection queue.

K. Material Modifications and Incorporation of Advanced Technologies

58. 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,⁹⁷ 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,

⁹⁶ Order No. 845, 163 FERC ¶ 61,043 at PP 467 & 486-488.

⁹⁷ 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.

therefore, will not result in the loss of queue position.⁹⁸ 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.⁹⁹

59. 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.¹⁰⁰ 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.¹⁰¹

60. 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.¹⁰² 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.¹⁰³ 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.¹⁰⁴

⁹⁸ *Id.* P 518.

⁹⁹ *Id.*; *see also pro forma* LGIP § 4.4.6.

¹⁰⁰ Order No. 845, 163 FERC ¶ 61,043 at P 519.

¹⁰¹ *Id.*

¹⁰² *Id.*; Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

¹⁰³ Order No. 845, 163 FERC ¶ 61,043 at P 521.

¹⁰⁴ *Id.* P 521.

61. 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.¹⁰⁵ 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.¹⁰⁶ 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.

62. 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.¹⁰⁷

¹⁰⁵ *Id.* P 535.

¹⁰⁶ *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.*

¹⁰⁷ Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

1. El Paso's Compliance Filing

63. El Paso proposes revisions to section 1 of its LGIP to incorporate the following definition of permissible technological advancement:

Permissible Technological Advancement shall mean a modification to a specific technology type submitted in an Interconnection Customer's Interconnection Request that: (1) is not a Material Modification; (2) is not a change in generation technology or fuel type, but may include advancements to other technology such as, e.g., advancements to turbines, inverters, plant supervisory controls, or other technological advancements that may affect a generating facility's ability to produce ancillary services; (3) results in electrical performance that is equal to or better than the electrical performance expected prior to the technology change; (4) 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); (5) does not increase the Interconnection Customer's requested Interconnection Service and (6) does not cause any reliability concerns (i.e., materially impact the transmission system with regard to short circuit capability limits, steady-state thermal or voltage limits or dynamic system stability and response).[¹⁰⁸]

64. In addition, El Paso proposes revisions to section 4.4.2 of its LGIP that adopt the Commission's *pro forma* language without modification.¹⁰⁹

65. El Paso also proposes a technological change procedure in section 4.4.6 of its LGIP, which it states complies with the requirements of Order Nos. 845 and 845-A. El Paso's proposed technological change procedure requires the interconnection customer to submit "a detailed description of the proposed technology change, along with a detailed description of the interconnection customer's estimate of the impact of the

¹⁰⁸ El Paso, OATT, Attachment M Large Generator Interconnection Procedures and Agreement (0.9.0), Standard Large Generator Interconnection Procedures, § 1 (Definitions).

¹⁰⁹ El Paso, OATT, Attachment M Large Generator Interconnection Procedures and Agreement (0.9.0), Standard Large Generator Interconnection Procedures, § 4.4.2.

proposed technology change.”¹¹⁰ El Paso proposes that any such request cannot “result in an increase in the Interconnection Customer’s requested interconnection service or cause any reliability concerns, i.e., materially impact the transmission system with regard to short circuit capability limits, steady-state thermal and voltage limits, or dynamic system stability and response.”¹¹¹

66. El Paso’s proposed revisions require it to review the interconnection customer’s request to determine whether the technological change will trigger the LGIP’s material modification provisions. If studies are necessary, El Paso’s proposed revisions state that it will complete any such studies within 30 days of making the determination that the study was required. Additionally, El Paso’s proposed revisions state that if a study is necessary, El Paso will notify the interconnection customer to provide a \$25,000 deposit within five business days, with any difference between the study deposit and the actual cost of the study being either paid to the transmission provider or refunded to the interconnection customer. Where additional funds are needed to cover the cost of the study, El Paso proposes to require interconnection customers to forward such additional funds within three business days of El Paso’s request or El Paso can take such funds from the original interconnection request deposit, at El Paso’s discretion. El Paso’s proposed revisions also describe what a proposed technology change cannot include, as well as the kinds of technology changes that will not require a study.¹¹²

67. Additionally, even where a study would not otherwise be required, El Paso’s proposed revisions in section 4.4.6 of its LGIP permit it to evaluate whether a technology change would reduce the network upgrades previously identified in the interconnection process. The proposed revisions in section 4.4.6 also clarify that El Paso is not responsible for any reimbursements for network upgrades that are no longer necessary due to a technological change.

2. Commission Determination

68. We find that El Paso’s proposed LGIP revisions to incorporate a definition of a permissible technological advancement and technological change procedure partially comply with the requirements of Order Nos. 845 and 845-A. Specifically, we find that El Paso’s proposed definition of a permissible technological advancement meets the

¹¹⁰ El Paso, OATT, Attachment M Large Generator Interconnection Procedures and Agreement (0.9.0), Standard Large Generator Interconnection Procedures, § 4.4.6 (Technological Change Procedure).

¹¹¹ *Id.*

¹¹² *Id.*

Commission's requirement to provide a category of technological change that does not constitute a material modification.

69. With regard to the deadline for completion of any additional studies in response to 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.¹¹³ However, El Paso's proposed revisions to its LGIP section 4.4.6 provide that El Paso must perform and complete the study no later than 30 days after El Paso determines that additional studies are required, rather than 30 days after the interconnection customer submits the request. Accordingly, we direct El Paso 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 El Paso will determine whether or not a technological advancement is a material modification within 30 calendar days of receipt of the initial request.

70. Further, Order No. 845 required an interconnection customer to tender a deposit if the transmission provider determines that additional studies are needed 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.¹¹⁴ While Order No. 845 sets the default deposit amount at \$10,000, it allows the transmission provider to propose, with justification, a reasonable alternative amount. However, El Paso fails to provide any justification for why its proposed \$25,000 alternative deposit amount is appropriate. Accordingly, we direct El Paso to file, within 60 days of the date of this order, a further compliance filing that justifies why its proposed \$25,000 alternative deposit is an appropriate amount for the interconnection customer to tender if El Paso determines that additional studies are needed to evaluate whether a technological change is a material modification or in the alternative to set the deposit at the default \$10,000 amount.

71. Order No. 845 also requires that the technological change procedure explain how the transmission provider will evaluate the technological advancement request to determine whether it is a material modification.¹¹⁵ El Paso'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 El Paso to file, within 60 days of the date of this order, a further compliance filing revising its LGIP to provide

¹¹³ Order No. 845, 163 FERC ¶ 61,043 at P 535; Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

¹¹⁴ Order No. 845, 163 FERC ¶ 61, 043 at P 534.

¹¹⁵ *Id.* P 521.

a more detailed explanation of the studies that El Paso will conduct to determine whether the technological advancement request will result in a material modification.

72. Further, because El Paso's filing is silent on whether it will provide an explanation to the interconnection customer regarding why the technological advancement is a material modification, we reiterate that the transmission provider is required to do so if it cannot accommodate a proposed technological advancement without triggering the material modification provision of the *pro forma* LGIP.¹¹⁶

L. Other Issues Raised by El Paso

1. El Paso's Proposal

73. El Paso also proposes to insert a placeholder in the form Facilities Study Agreement in Attachment M for the interconnection customer to mark its election between NRIS and ERIS in the manner provided for in section 3.2 of its LGIP.¹¹⁷ El Paso states that the proposed revisions will increase clarity regarding the interconnection customer's election between NRIS and ERIS as required by section 3.2 of the LGIP. El Paso also states that the election will be helpful for any subsequent exercise by the original interconnection customer of its surplus interconnection service rights because El Paso's proposed Tariff revisions in section 3.3.2. specify that where the original interconnection customer has elected ERIS, and not NRIS, any surplus interconnection service that could be transferred by the original interconnection customer to another would have to be ERIS.¹¹⁸

74. We also note what appears to be ministerial errors in sections 3.3.1 and 3.5.2 of El Paso's LGIP. In section 3.3.1, the second sentence cross-references "section 3.32" when that the cross-reference should be to 3.3.2. Additionally, as mentioned previously, El Paso's Attachment M does not contain feasibility study obligations, and therefore, section 3.5.2 should not contain a reference to section 3.5.2.4. Instead, the reference to section 3.5.2.4 should be changed to section 3.5.2.3 to account for the removal of the feasibility study obligations section of the Commission's *pro forma* language.

¹¹⁶ *Id.* P 522.

¹¹⁷ Filing at 4; El Paso, OATT, Attachment M Large Generator Interconnection Procedures and Agreement (0.9.0), app. 3 (Interconnection Facilities Study Agreement).

¹¹⁸ Filing at 4; *see* El Paso, OATT, Attachment M Large Generator Interconnection Procedures and Agreement (0.9.0), Standard Large Generator Interconnection Procedures, § 3.3.2.A (Process for Securing Surplus Interconnection Service).

2. Commission Determination

75. We find that the El Paso's proposed revision in appendix 3 of its LGIP, the form Interconnection Facilities Study Agreement, is consistent with or superior to the requirements of Order Nos. 845 and 845-A because it will bring additional clarity to El Paso's LGIP.

76. Regarding the two ministerial errors, we direct El Paso to file, within 60 days of the date of this order, a further compliance filing that revises its LGIP to correct these typographical errors.

The Commission orders:

(A) El Paso'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) El Paso is hereby directed to submit a 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.