

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

Nevada Power Company

Docket No. ER19-1904-000

ORDER ON COMPLIANCE

(Issued March 19, 2020)

1. On May 20, 2019, Nevada Power Company (Nevada Power) and Sierra Pacific Power Company (Sierra Pacific) (together, NV Energy) submitted proposed revisions to their joint Open Access Transmission Tariff (Tariff)¹ in compliance with the requirements of Order Nos. 845 and 845-A,² which amended the Commission's *pro forma* Large Generator Interconnection Agreement (LGIA) and *pro forma* Large Generator Interconnection Procedures (LGIP).³ As discussed below, we find that NV Energy's filing partially complies with the requirements of Order Nos. 845 and 845-A. Accordingly, we accept NV Energy's compliance filing, effective May 22, 2019, and direct NV Energy to submit a further compliance filing within 120 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

¹ NV Energy explains that the joint Tariff is located in the Commission's eTariff database under Nevada Power Company. NV Energy May 20, 2019 Compliance Filing at 1 n.4 (Filing).

² *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).

³ 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.

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, transmission providers will be able to focus resources on those interconnection requests most likely to reach commercial operation.⁴ 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 facilities⁵ and stand alone network upgrades⁶ only in instances when the transmission provider cannot meet the dates proposed by the interconnection customer;⁷ and (2) required that transmission providers establish interconnection dispute resolution procedures that allow a disputing party unilaterally to seek non-binding dispute resolution.⁸

⁴ *Id.* P 2; Order No. 845-A, 166 FERC ¶ 61,137 at P 1.

⁵ 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 app. A to the Standard Large Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Transmission Provider's Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades." *Pro forma* LGIA art. 1 (Definitions).

⁶ 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 app. A to the Standard Large Generator Interconnection Agreement." *Id.*

⁷ Order No. 845, 163 FERC ¶ 61,043 at P 85.

⁸ *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;⁹ (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.¹⁰

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 service¹¹ 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.¹²

II. NV Energy’s Compliance Filing

6. NV Energy states that it has revised Attachment N of its Tariff to include the *pro forma* LGIP and *pro forma* LGIA reforms as required by Order Nos. 845 and 845-A. NV Energy states that it adopts without modification the following *pro forma* LGIP and *pro forma* LGIA reforms: interconnection customer’s option to build, definition of contingent facilities, definition of a generating facility, definition of stand alone network

⁹ Contingent facilities are “those unbuilt Interconnection Facilities and Network Upgrades upon which the Interconnection Request’s costs, timing, and study findings are dependent, and if delayed or not built, could cause a need for Re-Studies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing.” *Pro forma* LGIP § 1 (Definitions).

¹⁰ Order No. 845, 163 FERC ¶ 61,043 at P 4.

¹¹ 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.

¹² *Id.* P 5.

upgrade, definition of surplus interconnection service, and requesting interconnection service below generating facility capacity.¹³

7. NV Energy 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, NV Energy proposes Tariff revisions for the following reforms: identification of contingent facilities, interconnection study deadlines, surplus interconnection service, and material modifications and incorporation of advanced technologies. NV Energy also proposes certain other modifications that it asserts are consistent with or superior to the changes adopted in Order Nos. 845 and 845-A, and should be permitted.¹⁴

8. NV Energy requests that the proposed Tariff revisions become effective on May 22, 2019.¹⁵

III. Notice and Responsive Pleadings

9. Notice of NV Energy's compliance filing was published in the *Federal Register*, 84 Fed. Reg. 24,501 (May 28, 2019), with interventions and protests due on or before June 10, 2019. Avangrid Renewables, LLC filed a timely motion to intervene.

IV. Discussion

A. Procedural Matters

10. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2019), the timely, unopposed motion to intervene serves to make Avangrid Renewables, LLC a party to this proceeding.

B. Substantive Matters

11. As discussed below, we find that NV Energy's filing partially complies with the requirements of Order Nos. 845 and 845-A. Accordingly, we accept NV Energy's compliance filing, effective May 22, 2019, and direct NV Energy to submit a further compliance filing within 120 days of the date of this order.

¹³ Filing at 2, 4, 9-10, 12.

¹⁴ *Id.* at 6-10.

¹⁵ *Id.* at 14.

1. Proposed Variations

12. As discussed further below, NV Energy 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. 2003.¹⁶ 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.¹⁷ A transmission provider seeking a "consistent with or superior to" variation must demonstrate why its proposal is consistent with or superior to the *pro forma* LGIP and/or *pro forma* LGIA.¹⁸ 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.¹⁹ We will evaluate NV Energy's proposed variations from the requirements of Order Nos. 845 and 845-A accordingly.

2. Interconnection Customer's Option to Build

13. In Order No. 845, the Commission revised articles 5.1, 5.1.3, and 5.1.4 of the *pro forma* LGIA to allow interconnection customers to unilaterally exercise the option to build for stand alone network upgrades and the transmission provider's interconnection facilities, regardless of whether the transmission provider can complete construction of such facilities by the interconnection customer's proposed in-service date, initial synchronization date, or commercial operation date.²⁰ Prior to Order No. 845, this option to build was available to an interconnection customer only if the transmission provider

¹⁶ Order No. 845, 163 FERC ¶ 61,043 at P 43.

¹⁷ *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).

¹⁸ *See, e.g., Nev. Power Co.*, 167 FERC ¶ 61,086, at P 3 (2019).

¹⁹ Order No. 2003, 104 FERC ¶ 61,103 at P 826; Order No. 2003-A, 106 FERC ¶ 61,220 at P 45.

²⁰ Order No. 845, 163 FERC ¶ 61,043 at PP 85-87.

did not agree to the interconnection customer's preferred construction timeline.²¹ 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."²²

14. In Order No. 845-A, the Commission granted rehearing and clarification of certain aspects of the revised option to build. Specifically, the Commission revised the definition of stand alone network upgrade in the *pro forma* LGIP and *pro forma* LGIA to: (1) state that, when there is a disagreement, the transmission provider must provide the interconnection customer a written technical explanation outlining why the transmission provider does not consider a specific network upgrade to be a stand alone network upgrade;²³ and (2) clarify that the option to build does not apply to stand alone network upgrades on affected systems.²⁴ 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.²⁵ 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.²⁶

a. NV Energy's Compliance Filing

15. NV Energy 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.²⁷ NV Energy also proposes revisions to its

²¹ Order No. 2003, 104 FERC ¶ 61,103 at P 353; *see also pro forma* LGIP § 5.1.3.

²² Order No. 845, 163 FERC ¶ 61,043 at P 85.

²³ Order No. 845-A, 166 FERC ¶ 61,137 at P 68.

²⁴ *Id.* P 61.

²⁵ *Id.* P 75.

²⁶ *Id.* P 33.

²⁷ Nevada Power Company, Open Access Transmission Tariff, attach. N, Standard Large Generator Interconnection Procedures (0.9.0), § 1 (Definitions); *id.*, app. 6, art. 1 (Definitions).

pro forma LGIA to amend articles 5.1, 5.1.3, 5.1.4, and 5.2 to incorporate the *pro forma* LGIA revisions adopted by Order Nos. 845 and 845-A without modification.²⁸

b. Commission Determination

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

3. Dispute Resolution

17. In Order No. 845, the Commission revised the *pro forma* LGIP by adding new section 13.5.5, which establishes generator interconnection dispute resolution procedures that allow a disputing party to unilaterally seek non-binding dispute resolution.²⁹ 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.³⁰

a. NV Energy’s Compliance Filing

18. NV Energy proposes to adopt the non-binding dispute resolution language the Commission included in *pro forma* LGIP section 13.5.5 but to reformat that language into the following separate subsections: 13.5.5 (Non-binding Dispute Resolution Procedures), 13.5.7 (Decision), and 13.5.8 (Costs). NV Energy states that it is proposing to make these changes to coincide with the formatting of the existing arbitration procedures in NV Energy’s LGIP sections 13.5.2 through 13.5.4.³¹ In addition, NV Energy proposes to revise certain internal references to cite to these new subsections. NV Energy also proposes to add two sentences, one in LGIP section 13.5.2 (External Arbitration Procedures) and one in LGIP section 13.5.5 (Non-binding Dispute Resolution Procedures), stating that the arbitration procedures and the non-binding dispute resolution procedures are “applicable to the transmission operator and the interconnection customer

²⁸ *Id.*, app. 6, art. 5.1, 5.1.3, 5.1.4, and 5.2.

²⁹ Order No. 845, 163 FERC ¶ 61,043 at P 133; *see also pro forma* LGIP § 13.5.5.

³⁰ Order No. 845, 163 FERC ¶ 61,043 at P 139.

³¹ Filing at 11.

or the interconnection applicant only.” NV Energy also proposes to add a new sentence in LGIP section 13.5.7 (Decision) specifying that “[i]f the Parties chose to accept the results of the non-binding dispute process, the Parties may implement the resolutions identified in the record of decision.”

19. NV Energy also proposes a new section 13.5.6 (Non-binding Dispute Resolution Implementation Procedures) providing additional details regarding its proposed non-binding dispute resolution process. These additional procedures include a requirement for the parties to submit a list of issues, an obligation of the decision-maker to execute a non-disclosure agreement in some cases, the parties’ need to cooperate in good faith in voluntary and informal exchange of information, and meeting requirements. In support of these additional revisions, NV Energy states that Order No. 845 requires each transmission provider to develop and establish a just and reasonable process that allows disputing parties to unilaterally seek non-binding dispute resolution.³²

20. NV Energy also proposes to revise its *pro forma* LGIA to delete in its entirety all of the existing language in LGIA article 27 (Disputes), 27.1 (Submission), 27.2 (External Arbitration Procedures), 27.3 (Arbitration Decisions), and 27.4 (Costs) and replace it with a sentence stating, “Disputes will be handled in accordance with the procedures specified in Section 13.5 of the LGIP.”³³ NV Energy acknowledges that the Commission did not specify in Order No. 845 that LGIA section 27 should be modified. It asserts, however, that stating parties’ obligations and rights once avoids any concerns for disputes as to language or meanings when comparing the two dispute resolution procedures. NV Energy maintains that this proposed language is equal or superior to the existing language.

b. Commission Determination

21. We find that NV Energy’s proposed LGIP revisions regarding dispute resolution partially comply with the requirements of Order Nos. 845 and 845-A because NV Energy largely adopts the language the Commission includes in *pro forma* LGIP section 13.5.5 with modifications only to reformat the language into different subsections and to make revisions to internal references. In addition, we find that the variation NV Energy proposed to include a new section 13.5.6 is consistent with or superior to Order Nos. 845 and 845-A because the new subsection provides additional specificity and detail regarding NV Energy’s non-binding dispute resolution procedures. We also find that NV Energy’s proposal to include an additional sentence in section 13.5.7 specifying that

³² *Id.* (citing Order No. 845, 163 FERC ¶ 61,043 at P 135).

³³ *Id.* at 11-12; Nevada Power Company, Open Access Transmission Tariff, attach. N, Standard Large Generator Interconnection Procedures (0.9.0), app. 6, art. 27.2-27.4.

the parties may implement the resolutions identified in the record of decision if they choose to accept the results of non-binding dispute resolution is consistent with or superior to Order Nos. 845 and 845-A because it provides additional clarity regarding the parties' options following completion of the non-binding dispute resolution process. We also find that NV Energy's proposed revisions to article 27 of its *pro forma* LGIA are consistent with or superior to Order Nos. 845 and 845-A because they provide clarity by ensuring consistency between the dispute procedures in its LGIA and section 13.5 of NV Energy's LGIP.

22. However, NV Energy proposes to add two sentences that are not in the *pro forma* LGIP, one in LGIP section 13.5.2 (External Arbitration Procedures) and one in LGIP section 13.5.5 (Non-binding Dispute Resolution Procedures), stating that the arbitration procedures and the non-binding dispute resolution procedures are "applicable to the transmission operator and the interconnection customer or the interconnection applicant only." We find that NV Energy has not demonstrated that the addition of these two sentences is consistent with or superior to the *pro forma* LGIP. Further, NV Energy has not defined "transmission operator" in its Tariff. The *pro forma* LGIP refers to "Parties" in section 13.5. Accordingly, we direct NV Energy to file, within 120 days of the date of this order, a further compliance filing either removing these provisions or explaining how they are consistent with or superior to what is required by Order Nos. 845 and 845-A.

4. Identification and Definition of Contingent Facilities

23. 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.³⁴ 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.³⁵ 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.³⁶ The Commission stated that this transparency will ensure that the method is

³⁴ Order No. 845, 163 FERC ¶ 61,043 at P 218; *see also pro forma* LGIP § 1 (Definitions).

³⁵ Order No. 845, 163 FERC ¶ 61,043 at P 199.

³⁶ *Id.*; *see also pro forma* LGIP § 3.8.

applied on a non-discriminatory basis.³⁷ 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.³⁸

a. NV Energy's Compliance Filing

24. NV Energy proposes to revise section 1 of its LGIP to add the Commission's *pro forma* LGIP definition of contingent facilities.³⁹ NV Energy also proposes revisions to its LGIP to add new section 4.8⁴⁰ to explain the current method NV Energy uses for identifying contingent facilities, and to implement the requirements that the Commission prescribed with respect to *pro forma* LGIP section 3.8.⁴¹ Specifically, NV Energy's proposed LGIP section 4.8 states that prior to the issuance of the interconnection system impact study report and the interconnection facilities study report, NV Energy shall use reasonable efforts to review, identify and include in study reports as contingent facilities: (1) any facilities that were modeled within the base case of the study report that are not currently constructed and are necessary for the interconnection customer's generating facility to be operating; and (2) any higher-queued interconnection requests and LGIAs that are driving any distribution upgrades or network upgrades of which the facilities must be in place for the interconnection of the new generating facility. NV Energy's proposed LGIP section 4.8 states that the facilities identified in NV Energy's evaluation shall be identified, to the best of NV Energy's ability, in all study reports. NV Energy's proposed LGIP section 4.8 also states that the study reports shall include the estimated timing of in-service completion and associated costs with the identified facilities to the extent that such information is readily available and not commercially sensitive. To the extent that such information is not readily available, NV Energy's proposed LGIP

³⁷ Order No. 845, 163 FERC ¶ 61,043 at P 200.

³⁸ *Id.* P 199; *see also pro forma* LGIP § 3.8.

³⁹ Nevada Power Company, Open Access Transmission Tariff, attach. N, Standard Large Generator Interconnection Procedures (0.9.0), § 1 (Definitions).

⁴⁰ As a result of previous approved revisions to sections 3 and 4 of NV Energy's LGIP, the provisions of sections 3.2 through 3.8 of the *pro forma* LGIP are instead implemented in sections 4.2 through 4.8 of NV Energy's LGIP, and the numbering of sections 4 through 6 of NV Energy's LGIP is generally one higher than in the *pro forma* LGIP. Accordingly, the requirements of new section 3.8 of the Commission's *pro forma* LGIP are included in a new section 4.8 of NV Energy's LGIP.

⁴¹ Filing at 9.

section 4.8 states that NV Energy shall not be excluded from identifying or including contingent facilities at any time.

b. Commission Determination

25. We find that the revised provisions that identify and describe NV Energy's method for determining contingent facilities, as NV Energy proposes in its LGIP, partially comply with the requirements of Order Nos. 845 and 845-A. We find that NV Energy complies with the requirements of Order Nos. 845 and 845-A because NV Energy has adopted the definition of contingent facilities without modification and has proposed in section 4.8 a method for identification of contingent facilities. Further, NV Energy'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.

26. However, as specified in Order No. 845, transmission providers must include, in section 3.8 of their LGIPs, which would be section 4.8 for NV Energy, a method for determining contingent facilities.⁴² The Commission required that this method provide sufficient transparency to determine why a specific contingent facility was identified and how it relates to the interconnection request.⁴³ 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.⁴⁴ NV Energy'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 NV Energy will use as part of its method to identify contingent facilities. Without this information, an interconnection customer may not understand how NV Energy will evaluate potential contingent facilities to determine their relationship to an individual interconnection request.⁴⁵ Further, including provisions regarding specific thresholds or criteria in NV Energy's LGIP will ensure NV Energy's technical screens or analyses will be applied to interconnection requests on a consistent, not unduly discriminatory or preferential basis.

27. We therefore direct NV Energy to describe in section 4.8 of its LGIP the specific technical screens and/or analyses that it will employ to determine which facilities are

⁴² Order No. 845, 163 FERC ¶ 61,043 at P 199.

⁴³ *Id.* P 200.

⁴⁴ *Id.*

⁴⁵ *See pro forma* LGIP § 3.8 ("The method shall be sufficiently transparent to determine why a specific Contingent Facility was identified.").

contingent facilities. Further, we also direct NV Energy 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.⁴⁶ 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 facility⁴⁷ such that the transmission provider would conclude that the facility is contingent for the new generating facility. A transmission provider may use multiple screens or analyses as part of its method, but it must include a corresponding, specific triggering threshold or criterion to indicate how it will apply each screen or analysis.

28. Because NV Energy 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 NV Energy to submit a further compliance filing, within 120 days of the date of this order, which includes in section 4.8 of NV Energy's LGIP: (1) the method NV Energy 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.

5. Transparency Regarding Study Models and Assumptions

29. 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

⁴⁶ Order No. 845, 163 FERC ¶ 61,043 at P 220.

⁴⁷ 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.

and be representative of current system conditions.”⁴⁸ 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).⁴⁹

30. 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.⁵⁰ 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.⁵¹ 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.⁵²

a. NV Energy’s Compliance Filing

31. NV Energy proposes revisions to section 2.3 of its LGIP to incorporate the language adopted by Order Nos. 845 and 845-A with a variation.⁵³ Specifically, NV Energy proposes a variation to the *pro forma* language in section 2.3 to state that the network model and underlying assumptions it maintains should be representative of “system conditions at the requested in-service date(s) of the project(s) being studied,” rather than the *pro forma* LGIP section 2.3 language that states that network models and underlying assumptions should be representative of “current system conditions.” NV Energy asserts that current system conditions do not properly represent the transmission system at the requested in-service date. NV Energy contends that its

⁴⁸ Order No. 845, 163 FERC ¶ 61,043 at P 236.

⁴⁹ *Id.*; see also *pro forma* LGIP § 2.3.

⁵⁰ Order No. 845-A, 166 FERC ¶ 61,137 at P 84 (citing Order No. 845, 163 FERC ¶ 61,043 at P 241).

⁵¹ *Id.* P 85 (citing 18 C.F.R. § 388.113(g)(5)(i) (2019)).

⁵² *Id.* P 88.

⁵³ Nevada Power Company, Open Access Transmission Tariff, attach. N, Standard Large Generator Interconnection Procedures (0.9.0), § 2.3.

proposal will provide the customer with a more accurate study model and represent future system conditions at the time of in-service.⁵⁴

b. Commission Determination

32. We find that NV Energy’s proposed LGIP revisions regarding study models and assumptions comply with the requirements of Order Nos. 845 and 845-A because NV Energy adopts the *pro forma* LGIP provisions with one variation with respect to the conditions modeled. We find that the variation proposed by NV Energy is consistent with or superior to Order Nos. 845 and 845-A because it will provide transmission customers with more accurate study model information representing future system conditions at the time of a project’s requested in-service date.

6. Definition of Generating Facility

33. 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.⁵⁵

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.⁵⁶

⁵⁴ Filing at 5.

⁵⁵ Order No. 845, 163 FERC ¶ 61,043 at P 275 (additions italicized); *see also pro forma* LGIP § 1 (Definitions).

⁵⁶ Order No. 845, 163 FERC ¶ 61,043 at P 275.

a. **NV Energy's Compliance Filing**

34. NV Energy proposes revisions to section 1 of its LGIP and its *pro forma* LGIA to incorporate the revised definition of a “Generating Facility” adopted by Orders No. 845 and 845-A without modification.⁵⁷

b. **Commission Determination**

35. We find that NV Energy's revisions regarding the definition of a “Generating Facility” comply with the requirements of Order Nos. 845 and 845-A because NV Energy adopts the Commission's *pro forma* LGIP and *pro forma* LGIA provisions without modification.

7. **Interconnection Study Deadlines**

36. 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.⁵⁸ 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.⁵⁹ The Commission also revised the *pro forma* LGIP to add section 3.5.4 to require transmission providers to file informational reports with the Commission if a transmission provider exceeds its interconnection study deadlines for more than 25 percent of any study type for two consecutive calendar quarters.⁶⁰ 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.⁶¹ In Order No. 845-A, the Commission revised

⁵⁷ Nevada Power Company, Open Access Transmission Tariff, attach. N, Standard Large Generator Interconnection Procedures (0.9.0), § 1 (Definitions); *id.*, app. 6, art. 1 (Definitions).

⁵⁸ Order No. 845, 163 FERC ¶ 61,043 at P 305; *see also pro forma* LGIP §§ 3.5.2, 3.5.3.

⁵⁹ *Id.*

⁶⁰ Order No. 845, 163 FERC ¶ 61,043 at P 305; *see also pro forma* LGIP § 3.5.4.

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

pro forma LGIP section 3.5.3 to clarify that the data reporting and retention requirements begin in the first calendar quarter of 2020.⁶²

a. NV Energy's Compliance Filing

37. NV Energy proposes revisions to its LGIP to add new LGIP sections 4.5.3 and 4.5.4 that incorporate the language in *pro forma* LGIP sections 3.5.3 and 3.5.4 without modification.⁶³ NV Energy also proposes revisions to its LGIP to add new section 4.5.2 to incorporate the language in *pro forma* LGIP section 3.5.2 with one variation. Specifically, NV Energy proposes to omit the *pro forma* LGIP language in subsection 3.5.2.1 addressing feasibility study metrics because NV Energy does not perform feasibility studies, and it proposes to adjust the overall subsection numbering accordingly.⁶⁴ In addition, NV Energy proposes to replace the bracketed placeholders in LGIP sections 4.5.2.1 and 4.5.2.2 with timelines that align with the 120 day deadlines already in its Tariff to complete the system impact and facilities study..⁶⁵

b. Commission Determination

38. We find that the revised provisions that address NV Energy's study deadline statistics and informational reporting requirements, as proposed in NV Energy's LGIP, comply with the requirements of Order Nos. 845 and 845-A because NV Energy proposes to include *pro forma* LGIP sections 3.5.3, and 3.5.4 without modification. Additionally, NV Energy proposes Tariff revisions to replace the bracketed placeholders with timelines that align with the timelines already in its Tariff. We also find that with exception of the *pro forma* language proposed in LGIP subsection 3.5.2.1, NV Energy has fully incorporated *pro forma* section 3.5.2 into its LGIP. We find NV Energy's proposal to omit revisions related to feasibility studies in section 3.5.2.1 of the *pro forma*

⁶² Order No. 845-A, 166 FERC ¶ 61,137 at P 107.

⁶³ Nevada Power Company, Open Access Transmission Tariff, attach. N, Standard Large Generator Interconnection Procedures (0.9.0), §§ 4.5.3, 4.5.4. As noted in footnote 40, above, NV Energy's LGIP includes additional application procedures in section 3 that increase the numbering of subsequent LGIP sections 4 through 6 by one from the *pro forma*.

⁶⁴ Filing at 8 & n.20 (citing *NV Energy, Inc.*, 142 FERC ¶ 61,165 at P 21).

⁶⁵ Nevada Power Company, Open Access Transmission Tariff, attach. N, Standard Large Generator Interconnection Procedures (0.9.0), § 4.5.2.3.

LGIP is consistent with or superior to the requirements of Order Nos. 845 and 845-A because NV Energy does not perform feasibility studies under its Tariff.⁶⁶

8. Requesting Interconnection Service below Generating Facility Capacity

39. In Order No. 845, the Commission modified sections 3.1, 4.4.1, 4.4.2, 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,⁶⁷ 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.⁶⁸

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.⁶⁹ 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

⁶⁶ See *NV Energy, Inc.*, 142 FERC ¶ 61,165 at P 21.

⁶⁷ The term generating facility capacity is defined as “the net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple energy production devices.” *Pro forma* LGIA art. 1 (Definitions).

⁶⁸ 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.

⁶⁹ Order No. 845, 163 FERC ¶ 61,043 at PP 383-84.

studies and provide a detailed explanation of why the additional network upgrades are necessary.⁷⁰

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 prior to returning to the transmission provider an executed system impact study agreement or an executed facilities study agreement.⁷¹

a. NV Energy's Compliance Filing

43. NV Energy proposes revisions to sections 3.1, 5.4.1, 5.4.2,⁷² 7.3, and 8.2 and Appendix 1 to its LGIP that adopt the Commission's proposed 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.⁷³ NV Energy explains that the Commission's revision to *pro forma* LGIP section 6.3 (Interconnection Feasibility Study Procedures) is not applicable to NV Energy because, as discussed above, the Commission has already approved NV Energy's elimination of the feasibility study.⁷⁴

b. Commission Determination

44. We find that NV Energy's proposed LGIP revisions that allow an interconnection customer to request interconnection service below its full generating facility capacity comply with the requirements of Order Nos. 845 and 845-A because they incorporate the

⁷⁰ *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.*

⁷¹ *Id.* P 406; *see also pro forma* LGIP §§ 4.4.1, 4.4.2.

⁷²As a result of previous approved revisions to sections 3 and 4 of NV Energy's LGIP, the numbering of sections 4 through 6 of NV Energy's LGIP is generally one higher than in the *pro forma* LGIP. *Supra note* 40.

⁷³ Nevada Power Company, Open Access Transmission Tariff, attach. N, Standard Large Generator Interconnection Procedures (0.9.0), §§ 3.1, 5.4.1, 5.4.2, 7.3, 8.2, and app. 1.

⁷⁴ Filing at 11 (citing *NV Energy, Inc.*, 142 FERC ¶ 61,165 at P 21).

pro forma LGIP language with one variation. We find that the variation proposed by NV Energy to exclude *pro forma* LGIP section 6.3 language regarding feasibility studies is consistent with or superior to Order Nos. 845 and 845-A because it reflects the Commission's prior approval of NV Energy's elimination of the feasibility study stage of the interconnection study process.

9. Provisional Interconnection Service

45. In Order No. 845, the Commission required transmission providers to allow all interconnection customers to request provisional interconnection service.⁷⁵ 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.⁷⁶ To implement this service, the Commission revised the *pro forma* LGIP and *pro forma* LGIA to add a definition for "Provisional Interconnection Service"⁷⁷ and for a "Provisional Large Generator Interconnection Agreement."⁷⁸

46. In addition, the Commission added *pro forma* LGIA article 5.9.2, which details the terms for provisional interconnection service.⁷⁹ 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.⁸⁰ The

⁷⁵ Order No. 845, 163 FERC ¶ 61,043 at P 438.

⁷⁶ *Id.* P 441.

⁷⁷ *Pro forma* LGIP § 1 (Definitions); *pro forma* LGIA art. 1 (Definitions).

⁷⁸ *Pro forma* LGIP § 1 (Definitions); *pro forma* LGIA art. 1 (Definitions). The Commission declined, however, to adopt a separate *pro forma* provisional large generator interconnection agreement. Order No. 845, 163 FERC ¶ 61,043 at P 444.

⁷⁹ *Id.* P 438; *see also pro forma* LGIP § 5.9.2.

⁸⁰ Order No. 845, 163 FERC ¶ 61,043 at P 448.

Commission stated that interconnection customers are responsible for the costs for performing these provisional interconnection studies.⁸¹

a. NV Energy's Compliance Filing

47. NV Energy explains that it has offered interim interconnection service since 2015,⁸² and that its interim interconnection service is offered on the same basis as provisional interconnection service in that both are for less than the full requested level of interconnection service and neither is available on a permanent basis. NV Energy contends that its interim interconnection service, revised as described below, “is equal, or superior to,” the provisional interconnection service that the Commission established in Order No. 845 and the Commission’s *pro forma* language in LGIA section 5.9.⁸³ NV Energy proposes revisions to its Tariff to: (1) combine the Commission’s definition of “Provisional Interconnection Service” with its current Commission-approved definition for “Interim Interconnection Service”;⁸⁴ (2) change the name of “Interim Interconnection Service” to “Provisional Interconnection Service” throughout the Tariff; (3) change the name of the “Interim Interconnection Service Study Agreement” in Appendix 4A to its LGIP to “Provisional Interconnection Service Study Agreement”;⁸⁵ and (4) revise the Interim Interconnection Service to include the Commission’s Provisional Interconnection Service provisions that are not currently in NV Energy’s Interim Interconnection Service.⁸⁶

48. NV Energy states that it did not include the Commission’s *pro forma* provisional interconnection service language for LGIA article 5.9 in its entirety, but rather included parts of it in LGIA article 4.1.3. Specifically, NV Energy revised its *pro forma* LGIA article 4.1.3 to add the construction of distribution upgrades to the provisional interconnection service under the LGIA, require the interconnection customer to remain

⁸¹ *Id.*

⁸² Filing at 12 (citing *Nevada Power Co.*, 151 FERC ¶ 61,249 (2015) (accepting revisions to NV Energy’s Tariff to provide for interim interconnection service)).

⁸³ *Id.* at 12-13.

⁸⁴ Nevada Power Company, Open Access Transmission Tariff, attach. N, Standard Large Generator Interconnection Procedures (0.9.0), § 1 (Definitions); *id.*, app. 6, art. 1 (Definitions)

⁸⁵ *Id.*, app. 4A.

⁸⁶ Filing at 13; Nevada Power Company, Open Access Transmission Tariff, attach. N, Standard Large Generator Interconnection Procedures (0.9.0), app. 6, art. 4.1.3.

in good standing of its milestones of its existing interconnection agreement in order to be eligible for provisional interconnection service, and make provisional interconnection service available any time after an LGIA is executed until such time as all of the required interconnection facilities, distribution upgrades, and/or network upgrades are placed in-service. In addition, NV Energy proposes to revise LGIA article 4.1.3 to provide that it will study the maximum permissible output of the generating facility during the term in which the interconnection customer is requesting provisional interconnection service, and to reflect the interconnection customer's assumption of risk and liabilities with respect to changes between the provisional interconnection service and the interconnection service should the output of the generating facilities exceed the contractual or operational limitations.⁸⁷ NV Energy also proposes to revise LGIA article 4.1.3.3 to specify that it shall study the maximum permissible output of the generating facility in the Provisional Large Generator Interconnection Agreement, and that this shall be studied and updated on an as needed basis, but not more frequently than quarterly and at the interconnection customer's expense.⁸⁸

49. In addition, NV Energy explains that it has not included the Commission's definition of "Provisional Large Generator Interconnection Agreement" in its LGIP or *pro forma* LGIA because the new provisional interconnection service is incorporated into article 4.1.3 and a new Appendix A-1 to its *pro forma* LGIA, which establishes provisional interconnection service specifications. For this reason, NV Energy explains that it is not proposing to include a separate provisional large generator interconnection agreement.

b. Commission Determination

50. We find that NV Energy's proposed LGIP and *pro forma* LGIA revisions regarding provisional interconnection service partially comply with the requirements of Order Nos. 845 and 845-A. Specifically, we find that the procedures addressing study practices and implementation details that NV Energy has converted from interim interconnection service to provisional interconnection service are compliant with Order No. 845, except as discussed below.

51. NV Energy's proposed definition of provisional interconnection service in section 1 of its LGIP and article 1 of its *pro forma* LGIA provides that provisional interconnection service is available only to interconnection customers "with an executed

⁸⁷ Nevada Power Company, Open Access Transmission Tariff, attach. N, Standard Large Generator Interconnection Procedures (0.9.0), app. 6, art. 4.1.3.

⁸⁸ *Id.*, app. 6, art. 4.1.3.3.

[LGIA].”⁸⁹ This is inconsistent with Order No. 845 because it would allow an interconnection customer to receive provisional interconnection service only after having gone through most of the interconnection process. Order No. 845 provides that provisional interconnection service is available to interconnection customers at all stages of the process, whether awaiting the final results of the interconnection studies, the execution of an LGIA, or the construction of any additional interconnection facilities and/or network upgrades that may result from the full interconnection process.⁹⁰ Accordingly, we direct NV Energy to file, within 120 days of the date of this order, a further compliance filing that revises its Tariff to provide that all interconnection customers may request provisional interconnection service, to remove the requirement that an interconnection customer have an executed LGIA in order to be eligible for provisional interconnection service, and to remove references throughout LGIP section 11.5 and *pro forma* LGIA article 4.1.3 to an executed LGIA.

52. In addition, we find that NV Energy’s proposed revisions to its *pro forma* LGIA article 4.1.3.3 do not comply with the requirements of Order Nos. 845 and 845-A because NV Energy’s proposed language stating that NV Energy will update provisional interconnection studies “on an as needed basis, but not more frequently than quarterly”⁹¹ would create too much discretion for NV Energy regarding the frequency for updating provisional interconnection studies. Accordingly, we direct NV Energy to file, within 120 days of the date of this order, a further compliance filing to remove the language in NV Energy’s *pro forma* LGIA article 4.1.3.3 that gives NV Energy discretion to decide whether it will update provisional interconnection service studies less often than on a quarterly basis, or to demonstrate that this language in *pro forma* LGIA article 4.1.3.3 is consistent with or superior to the requirements of Order Nos. 845 and 845-A.

53. We also find that NV Energy does not provide sufficient specificity regarding the scope of studies to be conducted for provisional interconnection service. Section 11.5.2.5 of NV Energy’s LGIP and article 4.1.3.3(i) of NV Energy’s *pro forma* LGIA provide that the Provisional Interconnection System Impact Study conducted by NV Energy has the same scope as the current LGIP System Impact Study. The Commission’s *pro forma* language does not limit the scope of studies to the current system impact study, but rather provides that the transmission provider “shall determine, through available studies or additional studies as necessary, whether stability, short circuit, thermal, and/or voltage

⁸⁹ This requirement is also reflected in sections 11.5.1, 11.5.2.1, 11.5.4, 11.5.6, and 11.5.7 of NV Energy’s LGIP and in articles 4.1.3.1, 4.1.3.2, and 4.1.3.5 of its *pro forma* LGIA.

⁹⁰ Order No. 845, 163 FERC ¶ 61,043 at PP 424, 438, 439, and 442.

⁹¹ Nevada Power Company, Open Access Transmission Tariff, attach. N, Standard Large Generator Interconnection Procedures (0.9.0), app. 6, art. 4.1.3.3.

issues would arise if Interconnection Customer interconnects without modifications to the Generating Facility or Transmission System.”⁹² We direct NV Energy to modify section 11.5.2.5 of its LGIP and article 4.1.3.3(i) of its *pro forma* LGIA to be consistent with the Commission’s *pro forma* language.

54. Moreover, NV Energy does not propose to include a definition of “Provisional Large Generator Interconnection Agreement” in its LGIP and *pro forma* LGIA because, under its proposal, a provisional interconnection service customer must have an executed LGIA. Specifically, instead of using a Provisional Large Generator Interconnection Agreement to memorialize the terms of provisional interconnection service, NV Energy proposes to add the terms of provisional interconnection service to the executed LGIA of the provisional customer as Appendix A-1. In light of our finding above that NV Energy’s requirement that a provisional interconnection customer have an executed LGIA is inconsistent with Order No. 845, we direct NV Energy to file, within 120 days of the date of this order, a further compliance filing that revises its Tariff to include the definition of Provisional Large Generator Interconnection Agreement in its LGIP and *pro forma* LGIA as required by Order No. 845, and to revise as necessary the requirements for provisional interconnection service in proposed article 4.1.3 of NV Energy’s *pro forma* LGIA to reflect the existence of a separate Provisional Large Generator Interconnection Agreement. We also direct NV Energy to revise its Tariff to provide that an interconnection customer may request the filing of an unexecuted Provisional Large Generator Interconnection Agreement, consistent with the requirements of Order No. 845.⁹³

55. Further, three additional proposals NV Energy made that describe its provisional interconnection service contain variations from the requirements of Order No. 845 without explanation. First, NV Energy proposes to include the following statement in article 4.1.3.2 in its *pro forma* LGIA: “Provisional Interconnection Service is an interim product that will only continue to be offered under this LGIA if the Interconnection Customer continues to be in good standing of its milestones with the progression of construction for the required Interconnection Facilities.”⁹⁴ Second, NV Energy’s proposal provides that it may terminate provisional interconnection service at any point if there is a change to the NV Energy transmission system as the result of a generating facility with an LGIA going into commercial operation or a transmission customer taking

⁹² *Pro forma* LGIA, § 5.9.2.

⁹³ *See id.* (providing that “Transmission Provider may execute a Provisional Large Generator Interconnection Agreement or Interconnection Customer may request the filing of an unexecuted Provisional Large Generator Interconnection Agreement”).

⁹⁴ Nevada Power Company, Open Access Transmission Tariff, attach. N, Standard Large Generator Interconnection Procedures (0.9.0), app. 6, art. 4.1.3.2.

service.⁹⁵ Third, section 11.5.3 of NV Energy's LGIP provides that NV Energy may require an interconnection customer to "install equipment or protective devices that would disconnect the Generating Facility in the event the output of the Generating Facility exceeds the operational limit described in the Provisional Generation Interconnection Agreement."⁹⁶ We find that NV Energy has not demonstrated that these provisions are consistent with or superior to the *pro forma* LGIA. Accordingly, we direct NV Energy to file, within 120 days of the date of this order, a further compliance filing either removing these provisions or explaining how they are consistent with or superior to what is required by Order Nos. 845 and 845-A.

10. Surplus Interconnection Service

56. 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.⁹⁷ Surplus interconnection service enables a new interconnection customer to utilize the unused portion of an existing interconnection customer's interconnection service within specific parameters.⁹⁸ 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.⁹⁹ 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.¹⁰⁰ The transmission provider must perform reactive power, short circuit/fault duty, and stability analyses studies as well as

⁹⁵ *Id.* § 11.5.1.

⁹⁶ *Id.* § 11.5.3.

⁹⁷ Order No. 845, 163 FERC ¶ 61,043 at P 467; *see also pro forma* LGIP § 1; *pro forma* LGIA art. 1 (Definitions).

⁹⁸ Order No. 845, 163 FERC ¶ 61,043 at P 467; Order No. 845-A, 166 FERC ¶ 61,137 at P 119.

⁹⁹ Order No. 845, 163 FERC ¶ 61,043 at P 467; *see also pro forma* LGIP §§ 3.3, 3.3.1.

¹⁰⁰ Order No. 845, 163 FERC ¶ 61,043 at P 483; *see also pro forma* LGIP § 3.3.

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.¹⁰¹ 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.¹⁰² 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.¹⁰³

a. NV Energy's Proposal

57. NV Energy proposes revisions to section 1 and proposes new sections 3.4, 3.4.1, 3.4.2, 3.4.3, 3.4.4, and 3.4.5 to its LGIP, and revisions to article 1 to its *pro forma* LGIA, to comply with the Commission's directives in Order Nos. 845 and 845-A.¹⁰⁴ NV Energy 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. In addition to this *pro forma* language, NV Energy provides additional detail regarding the process to request surplus interconnection service, the studies that will be conducted, and the process for executing a surplus interconnection service large generator interconnection agreement.. NV Energy proposes new Appendices 2A and 3A to its LGIP providing a *pro forma* surplus interconnection system impact study agreement and surplus interconnection service facilities study agreement, respectively.¹⁰⁵

58. Specifically, section 3.4.2.1 of NV Energy's LGIP requires the interconnection customer to submit in writing to NV Energy a request for surplus interconnection service. Section 3.4.3.1 of NV Energy's LGIP provides that after a valid request for surplus interconnection service has been received and the modeling data has been approved, NV Energy will deem the request complete. NV Energy proposes that it will then

¹⁰¹ Order No. 845, 163 FERC ¶ 61,043 at PP 455 and 467.

¹⁰² *Id.* P 481.

¹⁰³ *Id.* P 499.

¹⁰⁴ Filing at 6-7; Nevada Power Company, Open Access Transmission Tariff, attach. N, Standard Large Generator Interconnection Procedures (0.9.0), §§ 1, 3.4, 3.4.1, 3.4.2, 3.4.3, 3.4.4, and 3.4.5; *id.*, app. 6, art. 1 (Definitions).

¹⁰⁵ *Id.*, app. 2A, 3A.

determine if the original system impact study is sufficient to evaluate the request for surplus interconnection service. If the original system impact study is not sufficient, NV Energy will within five business days provide the interconnection customer a surplus interconnection service system impact study agreement obligating the interconnection customer to pay the actual costs of the study.

59. Section 3.4.3.2 of NV Energy's LGIP provides that within 30 calendar days of receipt of the surplus interconnection service system impact study agreement (in the form of Appendix 2A of the LGIP), the interconnection customer will execute the surplus interconnection service system impact study agreement and shall provide a deposit in the amount of \$10,000 to NV Energy or the request shall be deemed withdrawn. NV Energy LGIP section 3.4.3.3 provides that the surplus interconnection service system impact study shall consist of reactive power, short circuit/fault duty, stability analyses, and any other appropriate studies. The reactive power, short circuit/fault duty, stability, and steady-state analyses for surplus interconnection service will identify any additional interconnection facilities and/or network upgrades necessary.

60. Section 3.4.3.4 of the LGIP requires that within 10 business days of providing a surplus interconnection service system impact study report to the interconnection customer, NV Energy and the interconnection customer(s) shall meet to discuss the results of the surplus interconnection service system impact study. Further, section 3.4.4.2 of the LGIP requires that, if any new interconnection facilities are identified in the surplus interconnection service system impact study for the utilization of surplus interconnection service, the interconnection customer must execute the surplus interconnection service facilities study agreement and deliver it to NV Energy within 30 calendar days after its receipt, together with an additional \$10,000 deposit to be used in preparation of the surplus interconnection service facilities study agreement.

61. Section 3.4.5.1 of the LGIP requires NV Energy, within 30 calendar days of being tendered the surplus interconnection service facilities study report, to tender a draft Amended and Restated LGIA, together with draft appendices completed to the extent practicable to the existing interconnection customer and the interconnection customer that will be utilizing the surplus interconnection service.

62. Finally, section 3.4.5.3 of the LGIP provides that, within 10 business days after execution of the Amended and Restated LGIA or the request to file an unexecuted Amended and Restated LGIA, NV Energy shall file the Amended and Restated LGIA with the Commission, together with its explanation of any matters as to which the interconnection customer and NV Energy disagree and support for the costs that NV Energy proposes to charge to the interconnection customer under the Amended and Restated LGIA.

b. Commission Determination

63. We find that NV Energy's proposed Tariff revisions regarding surplus interconnection service partially comply with the requirements of Order Nos. 845 and 845-A. NV Energy adopts the *pro forma* definition of surplus interconnection service and the language of the Commission's *pro forma* surplus interconnection service provisions in LGIP sections 3.4, and 3.4.1, and 3.4.3 of its LGIP without modification. NV Energy also proposes a procedure for evaluating surplus interconnection service requests. As required by Order Nos. 845 and 845-A, NV Energy'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, NV Energy does not explicitly state in its proposed Tariff revisions that surplus interconnection service requests will be processed outside the non-surplus interconnection queue, as required by Order No. 845.¹⁰⁶ Accordingly, we direct NV Energy to file, within 120 days of the date of this order, a further compliance filing to revise its LGIP to explicitly state that surplus interconnection requests will be processed outside of the non-surplus interconnection queue.

11. Material Modifications and Incorporation of Advanced Technologies

64. 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,¹⁰⁷ 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.¹⁰⁸ 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

¹⁰⁶ Order No. 845, 163 FERC ¶ 61,043 at P 467.

¹⁰⁷ 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. *Id.* P 536.

¹⁰⁸ *Id.* P 518.

the transmission provider will follow to assess whether an interconnection customer's proposed technological advancement is a material modification.¹⁰⁹

65. 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.¹¹⁰ 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.¹¹¹

66. 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.¹¹² 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.¹¹³ 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.¹¹⁴

67. 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.¹¹⁵ The Commission also found that, if the transmission

¹⁰⁹ *Id.*; see also *pro forma* LGIP § 4.4.6.

¹¹⁰ Order No. 845, 163 FERC ¶ 61,043 at P 519.

¹¹¹ *Id.*

¹¹² *Id.*; Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

¹¹³ Order No. 845, 163 FERC ¶ 61,043 at P 521.

¹¹⁴ *Id.* P 521.

¹¹⁵ *Id.* P 535.

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.¹¹⁶ 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.

68. 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.¹¹⁷

a. NV Energy's Compliance Filing

69. NV Energy proposes revisions to section 1 of its LGIP to incorporate the following definition of permissible technological advancement:

Permissible Technological Advancement shall mean a new, upgraded, updated or modified technology that may be utilized in the design, construction or operation of generation or transmission facilities that would not change the electrical characteristics of an interconnection request and would not

¹¹⁶ *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.*

¹¹⁷ Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

trigger a material modification, as defined in the *pro forma* LGIP, to the Interconnection Customer's interconnection request. Permissible Technology changes may include the Interconnection Customer requesting to update a type of turbine, inverter, plant supervisory controls, or other advancements that do not include a change in the generation technology or fuel type. All Permissible Technological Advances must demonstrate that the proposed incorporation of the technological advancement would result in electrical performance that is equal to or better than the technology that was previously submitted with the Interconnection Customer's Interconnection Request.¹¹⁸

70. NV Energy also proposes revisions to section 5.4.2 of its LGIP that adopt the Commission's *pro forma* language without modification.¹¹⁹

71. In addition, NV Energy proposes its technological change procedure in section 5.4.6 of its LGIP.¹²⁰ Specifically, section 5.4.6.1 provides that, prior to the return of the executed interconnection system impact study agreement to NV Energy, the interconnection customer may submit a request to NV Energy to evaluate a change to technology of the generating facility to determine if the change is a permissible technological advancement. In order to have a completed request for a technological change request, the interconnection customer will complete and provide a revised Appendix 1 of the LGIP with the revised generator data for the change of technology. NV Energy will require that the interconnection customer provide updated modeling data. LGIP section 5.4.6.1 further provides that "Since the request for a technological change has been made prior to any study work commencing, NV Energy will allow the permissible technological advancement and will utilize the new data provided by the interconnection customer for the interconnection system impact study." The provision states that, at this phase, these modifications do not impact lower-queued customers and do not trigger restudies since the study has not commenced.

¹¹⁸ Nevada Power Company, Open Access Transmission Tariff, attach. N, Standard Large Generator Interconnection Procedures (0.9.0), § 1 (Definitions).

¹¹⁹ *Id.* § 5.4.2. As described in note 40, *supra*, as a result of previous approved revisions to sections 3 and 4 of NV Energy's LGIP, the numbering of sections 4 through 6 of NV Energy's LGIP is generally one higher than in the *pro forma* LGIP.

¹²⁰ Nevada Power Company, Open Access Transmission Tariff, attach. N, Standard Large Generator Interconnection Procedures (0.9.0), § 5.4.6.

72. Section 5.4.6.2 of NV Energy's LGIP provides that, prior to the return of the executed interconnection facility study agreement to NV Energy, the interconnection customer may submit a request to NV Energy to evaluate a change to technology of the generating facility to determine if the change is a permissible technological advancement. Once the technological change request has been received, NV Energy will evaluate remaining system impact study funds received from the interconnection customer. If NV Energy has over \$10,000 remaining in study funds, a deposit will not be required. NV Energy will complete an assessment that shall consist of reactive power, short circuit/fault duty, stability analyses, and any other appropriate studies to determine if the technological change results in electrical performance that is equal to or better than an interconnection request's previously projected electrical performance and not cause any reliability concerns. LGIP section 5.4.6.2 also provides that NV Energy shall use reasonable efforts to complete the assessment within 30 calendar days and, if the assessment deems the technological advancement permissible, NV Energy shall notify the interconnection customer. LGIP section 5.4.6.2 states that, if, during the assessment, the technological change is not deemed to be permissible and is deemed a material modification, NV Energy shall tender a report with the results of the applicable studies that were completed followed with an explanation of how and why the technological change is deemed a material modification. If the interconnection customer still elects to proceed with the technological advancement after it has been deemed a material modification, the interconnection customer shall submit a new application for interconnection.

b. Commission Determination

73. We find that NV Energy'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 NV Energy's proposed definition of a permissible technological advancement meets the Commission's requirement to provide a category of technological change that does not constitute a material modification.

74. With regard to the deadline for completion of a technological advancement request, Order No. 845 provides that the determination of whether a change is a material modification must be made within 30 days of the initial request.¹²¹ However, NV Energy's proposed revisions to section 5.4.6.2 of its LGIP provide that NV Energy shall use "reasonable efforts" to complete the assessment within 30 calendar days. Order No. 845 establishes a 30-day requirement to determine whether the proposed technological change is a material modification and does not allow for the use of

¹²¹ Order No. 845, 163 FERC ¶ 61,043 at P 535; Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

“reasonable efforts” to achieve this timeline.¹²² Accordingly, we direct NV Energy to file, within 120 days of the date of this order, a further compliance filing that removes the “reasonable efforts” language.

75. Further, our review finds NV Energy’s proposed process reflected in LGIP section 5.4.6.1 for a request submitted prior to the return of the executed system impact study agreement is missing several of the requirements established in Order Nos. 845 and 845-A.¹²³ Specifically, NV Energy’s proposed process fails to: (1) specify a deposit amount;¹²⁴ (2) explain how the transmission provider will evaluate the technological advancement request to determine whether it is a material modification;¹²⁵ and (3) establish a timeframe for determining whether the request will result in a material modification.¹²⁶ Accordingly, we direct NV Energy to file, within 120 days of the date of this order, a further compliance filing that cures these deficiencies or explains why these requirements are not necessary for the situation described in LGIP section 5.4.6.1 of NV Energy’s proposed process.¹²⁷ Finally, because NV Energy’s proposed process for a request submitted prior to the return of the executed system impact study agreement 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.¹²⁸

¹²² Order No. 845, 163 FERC ¶ 61,043 at P 535.

¹²³ Nevada Power Company, Open Access Transmission Tariff, attach. N, Standard Large Generator Interconnection Procedures (0.9.0), § 5.4.6.1.

¹²⁴ Order No. 845, 163 FERC ¶ 61,043 at P 534.

¹²⁵ *Id.* P 521.

¹²⁶ *Id.* P 535.

¹²⁷ For example, NV Energy could explain that it is not requiring a deposit in LGIP section 4.4.6.1 because it will not need to conduct any studies to determine whether a request submitted prior to the return of the executed system impact study agreement is a permissible technological advancement.

¹²⁸ *Id.* P 522.

12. Other Issues**a. LGIP Table of Contents**

76. NV Energy proposes revisions to its LGIP Table of Contents that reflect, in part, the Tariff changes it has proposed to comply with Order Nos. 845 and 845-A. However, not all of NV Energy's proposed Tariff revisions are incorporated into the revised Table of Contents. Specifically, NV Energy has not revised its Table of Contents to reflect the addition of LGIP sections 3.4 and 4.8 or subsections 13.5.5 through 13.5.8. In addition, NV Energy's proposed revision to the title of section 11.5 erroneously includes the word "Provisional" twice.

b. Commission Determination

77. We find that NV Energy's revised LGIP Table of Contents does not accurately reflect the revisions proposed by NV Energy throughout its LGIP. We direct NV Energy to file, within 120 days of the date of this order, a further compliance filing modifying its LGIP Table of Contents to accurately reflect the contents of its LGIP, as revised.

The Commission orders:

(A) NV Energy'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) NV Energy is hereby directed to submit a compliance filing within 120 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.