170 FERC ¶ 61,042
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

Southwest Power Pool, Inc. Docket No. ER19-1954-000

ORDER ON COMPLIANCE FILING
(issued January 23, 2020)

1. On May 22, 2019, Southwest Power Pool, Inc. (SPP) submitted proposed revisions to its Open Access Transmission Tariff (Tariff) in compliance with the requirements of Order Nos. 845 and 845-A, which amended the Commission’s pro forma Large Generator Interconnection Agreement (LGIA) and pro forma Large Generator Interconnection Procedures (LGIP). As discussed below, we find that SPP’s filing partially complies with the requirements of Order Nos. 845 and 845-A. Accordingly, we accept SPP’s compliance filing in part, effective as of the date of this order, and direct SPP to submit a further compliance filing within sixty (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, 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. In Order No. 845-A, the Commission generally upheld the reforms it required in Order No. 845, but granted certain requests for rehearing and clarification.

3. In Order No. 845, the Commission adopted 10 different reforms in three categories to improve the interconnection process. First, in order to improve certainty for interconnection customers, the Commission: (1) removed the limitation that interconnection customers may exercise the option to build the transmission provider’s interconnection facilities and stand alone network upgrades only in instances when the transmission provider cannot meet the dates proposed by the interconnection customer; and (2) required that transmission providers establish interconnection dispute resolution procedures that allow a disputing party unilaterally to seek non-binding dispute resolution.  

4. Second, to promote more informed interconnection decisions, the Commission: (1) required transmission providers to outline and make public a method for determining contingent facilities; (2) required transmission providers to list the specific study

3 Order No. 845, 163 FERC ¶ 61,043 at P 2; Order No. 845-A, 166 FERC ¶ 61,137 at P 1.

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

5 Stand alone network upgrades are “Network Upgrades that an Interconnection Customer may construct without affecting day-to-day operations of the Transmission System during their construction. Both the Transmission Provider and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Standard Large Generator Interconnection Agreement.” Id.

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

7 Id. P 3.

8 Contingent facilities are “those unbuilt Interconnection Facilities and Network Upgrades upon which the Interconnection Request’s costs, timing, and study findings are
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.  

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 service 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.  

II. SPP’s Compliance Filing  

6. SPP proposes revisions to the Generator Interconnection Procedures (GIP) contained in Attachment V of its Tariff, as well as revisions to its pro forma Generator Interconnection Agreement (GIA) and pro forma interim GIA, to comply with the dependent, and if delayed or not built, could cause a need for Re-Studies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing.” Pro Forma LGIP § 1 (Definitions).  

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

10 Order No. 845 added a definition for “Surplus Interconnection Service” to section 1 of the pro forma LGIP and article 1 of the pro forma LGIA, defining the term as “any unused portion of Interconnection Service established in a Large Generator Interconnection Agreement, such that if Surplus Interconnection Service is utilized the Interconnection Service limit at the Point of Interconnection would remain the same.” Id. P 459.  

11 Id. P 5.  

12 SPP’s GIP contains procedures for the interconnection of both large and small generating facilities, rather than establishing separate procedures for small generating facilities. See Transmittal at 3; SPP Tariff, attach. V.  

13 SPP proposes revisions to its standard pro forma GIA and interim pro forma GIA, contained in Appendices 6 and 8 of Attachment V, respectively, as well as the pro forma GIA and pro forma interim GIA applicable when the Western Area Power
Commission’s directives in Order Nos. 845 and 845-A. SPP requests independent entity variations regarding the directives in Order No. 845 related to provisional interconnection service and surplus interconnection service and proposes additional variations regarding the directives in Order No. 845 related to the option to build, interconnection study deadlines, and requesting interconnection service below generating facility capacity.\textsuperscript{14} SPP requests that its proposed Tariff revisions become effective on the date established in the Commission’s order accepting the compliance filing.

III. \textbf{Notice and Responsive Pleadings}

7. Notice of SPP’s compliance filing was published in the \textit{Federal Register}, 84 Fed. Reg. 25,251 (2019), with interventions and protests due on or before June 12, 2019. On May 31, 2019, the American Wind Energy Association (AWEA) filed a motion to extend the comment period to July 3, 2019.\textsuperscript{15} On June 7, 2019, the Commission extended the comment period until, and including, June 26, 2019.\textsuperscript{16}


\textsuperscript{14} Transmittal at 12 and 18.

\textsuperscript{15} AWEA Motion for Extension of Time, Docket No. ER19-1949-000, et al., at 1 (filed May 31, 2019).

\textsuperscript{16} Notice Granting Extension of Time, Docket No. ER19-1949-000, et al. (June 7, 2019).
10. On July 5, 2019, Xcel Energy Services Inc. filed a motion to intervene out of time.

IV. Discussion

A. Procedural Matters

11. Pursuant to Rule 214 of the Commission’s Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2019), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

12. Pursuant to Rule 214(d) of the Commission’s Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2019), we grant Xcel Energy Services Inc.’s late-filed motion to intervene given its interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.

B. Substantive Matters

13. As discussed below, we find that SPP’s filing partially complies with the requirements of Order Nos. 845 and 845-A. Accordingly, we accept SPP’s compliance filing, effective as of the date of this order, and direct SPP to submit a further compliance filing within sixty (60) days of the date of this order.

1. Proposed Variations

14. As discussed further below, SPP has requested 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. In Order No. 2003, the Commission permitted Regional Transmission Organizations/Independent System Operators (RTOs/ISOs) to seek “independent entity variations” for pricing and non-pricing provisions, and that RTOs/ISOs “shall have greater flexibility to customize [their] interconnection procedures and agreement to fit regional needs.” The Commission stated that this approach recognizes that an RTO/ISO is less likely to act in an unduly discriminatory manner than a transmission provider that is a market participant. The Commission has granted independent entity variations from rulemakings where the RTO/ISO demonstrates that

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18 Order No. 2003, 104 FERC ¶ 61,103 at P 827.
the proposed variation: (1) is just and reasonable, and not unduly discriminatory or preferential; and (2) accomplishes the purposes of the order. It is not a sufficient justification to state that a variation conforms to current RTO/ISO practices or to the RTO’s/ISO’s tariff definitions and terminology. Even if the transmission provider is an RTO/ISO, it must still justify its variations in light of the Commission’s pro forma LGIP and/or pro forma LGIA.20 We will evaluate SPP’s proposed variations from the requirements of Order Nos. 845 and 845-A accordingly.

2. Interconnection Customer’s Option to Build

15. 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.21 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.22 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.”23

16. 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.
upgrade;\textsuperscript{24} and (2) clarify that the option to build does not apply to stand alone network upgrades on affected systems.\textsuperscript{25} The Commission also made revisions to article 5.2 of the \textit{pro forma} LGIA to allow transmission providers to recover oversight costs related to the interconnection customer’s option to build.\textsuperscript{26} 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.\textsuperscript{27}

### a. SPP’s Compliance Filing

17. SPP proposes revisions to articles 5.1, 5.1.2, and 5.1.3 in its \textit{pro forma} GIA and \textit{pro forma} interim GIA to remove language that limited the interconnection customer’s ability to elect the option to build to instances where the interconnection customer and transmission owner could not reach agreement regarding the completion of transmission owner’s interconnection facilities and stand alone network upgrades.\textsuperscript{28} SPP also proposes revisions to articles 5.1, 5.1.2, and 5.1.3 in its \textit{pro forma} GIA and \textit{pro forma} interim GIA that, it states, implement additional revisions that the Commission made to articles 5.1, 5.1.3, and 5.1.4 in the Commission’s \textit{pro forma} LGIA.

18. SPP proposes revisions to the definition of “Stand Alone Network Upgrade” in its GIP, \textit{pro forma} GIA, and \textit{pro forma} interim GIA that, it states, implement the revisions to this definition required by Order Nos. 845 and 845-A. Specifically, SPP proposes revising the definition of “Stand Alone Network Upgrade” to clarify that the option to build does not apply to stand alone network upgrades on affected systems and that the transmission owner must provide a written technical explanation to the interconnection customer when the interconnection customer disagrees about whether the upgrade is a stand alone network upgrade.\textsuperscript{29}

\begin{itemize}
\item \textsuperscript{24} Order No. 845-A, 166 FERC ¶ 61,137 at P 68.
\item \textsuperscript{25} \textit{Id.} P 61.
\item \textsuperscript{26} \textit{Id.} P 75.
\item \textsuperscript{27} \textit{Id.} P 33.
\item \textsuperscript{28} Proposed SPP Tariff, attach. V, apps. 6, 8, 13, and 14 (proposing revisions to articles 5.1, 5.1.2, and 5.1.3). Articles 5.1.2 and 5.1.3 in SPP’s \textit{pro forma} GIA and \textit{pro forma} interim GIA are equivalent to articles 5.1.3 and 5.1.4 in the Commission’s \textit{pro forma} LGIA, respectively.
\item \textsuperscript{29} Transmittal at 7; Proposed SPP Tariff, attach. V, § 1; apps. 6, 8, 13, and 14
\end{itemize}
19. Additionally, SPP proposes revisions to article 5.2(12) in its *pro forma* GIA and *pro forma* interim GIA to comply with the directive in Order No. 845-A to allow a transmission owner to recover costs for overseeing an interconnection customer’s construction of transmission owner’s interconnection facilities and stand alone network upgrades, when the interconnection customer elects the option to build.30

20. SPP seeks various modifications to the option to build provisions in Order No. 845 to account for the three-party nature of its GIP, *pro forma* GIA, and *pro forma* interim GIA, in which the transmission provider is a separate entity from the transmission owner. For instance, SPP states that, in its proposed revisions to the definition for stand alone network upgrade, the transmission owner, rather than the transmission provider, is responsible for providing technical information to the interconnection customer regarding the classification of a network upgrade as stand alone. SPP asserts that these modifications are consistent with the three-party nature of its GIP, *pro forma* GIA, and *pro forma* interim GIA and correctly assign responsibilities among the transmission provider, the interconnection customer, and the transmission owner.31

b. Protest

21. Clean Energy Entities request that the Commission require SPP to amend article 5.1 of SPP’s *pro forma* GIA and *pro forma* interim GIA to ensure that interconnection customers understand the expectations under this provision. Clean Energy Entities note that proposed article 5.1 provides that the interconnection customer shall select either the option to build or the negotiated option. Clean Energy Entities explain that this section goes on to state, “At the same time, Interconnection Customer shall indicate whether it elects to exercise the Option to Build.” While Clean Energy Entities acknowledge that the quoted sentence implements language adopted in Order No. 845, Clean Energy Entities emphasize that the Commission’s *pro forma* introductory language in article 5.1 discusses the interconnection customer choosing either the standard option or the alternate option. In contrast, Clean Energy Entities note, SPP’s pre-existing introductory language in article 5.1 has the interconnection customer choosing between the option to build and the negotiated option, which Clean Energy Entities contend means that the interconnection customer would have already indicated its choice.32 Clean Energy Entities request that the Commission require SPP to remove

(proposing revisions to article 1).

30 Transmittal at 7-8; Proposed SPP Tariff, attach. V, apps. 6, 8, 13, and 14 (proposing revisions to article 5.2(12)).

31 Transmittal at 7.

32 SPP’s *pro forma* GIA and *pro forma* interim GIA do not contain the alternate
the quoted sentence in article 5.1 of SPP’s *pro forma* GIA and *pro forma* interim GIA, for the sake of clarity.\(^{33}\)

22. Clean Energy Entities also request that the Commission require SPP to indicate which required network upgrades are stand alone network upgrades in the facilities study results. Without this information, Clean Energy Entities contend that the interconnection customer cannot make a decision on whether to exercise the option to build stand alone network upgrades, as the option to build provisions apply only to stand alone network upgrades determined in the facilities study. Clean Energy Entities also request that the Commission clarify that it expects interconnection customers will be notified, in the facilities study results, which required network upgrades are stand alone network upgrades. Clean Energy Entities further request that the costs of stand alone network upgrades be specifically delineated from those of other network upgrades in the facilities study results.\(^{34}\)

c. Commission Determination

23. We find that SPP’s proposed revisions to its GIP, *pro forma* GIA, and *pro forma* interim GIA comply with the requirements of Order Nos. 845 and 845-A. Specifically, we find that SPP’s revisions comply with the requirements to allow interconnection customers to unilaterally exercise the option to build stand alone network upgrades and transmission provider’s interconnection facilities, to revise the definition of “Stand Alone Network Upgrade,” and to provide for the recovery of oversight costs assumed by the transmission owner when the interconnection customer elects the option to build.

24. We also grant SPP an independent entity variation to the option to build provisions. We find that SPP’s revisions to the *pro forma* option to build provisions are just and reasonable because they appropriately account for the three-party nature of SPP’s GIP, *pro forma* GIA, and *pro forma* interim GIA. The revisions also accomplish the purposes of Order No. 845 by appropriately assigning responsibilities to the interconnection customer, transmission owner, and transmission provider in order to allow interconnection customers to unilaterally exercise the option to build.

25. While we agree with Clean Energy Entities that the proposed sentence in article 5.1.2 in SPP’s *pro forma* GIA and *pro forma* interim GIA quoted by Clean Energy Entities may be repetitive, we find that this sentence is consistent with the requirements of Order No. 845 and does not inhibit the ability of interconnection customers to exercise option contained in article 5.1.2 of the Commission’s *pro forma* LGIA.

\(^{33}\) Clean Energy Entities Protest at 5.

\(^{34}\) *Id.* at 5-6.
the unilateral option to build. Accordingly, we deny Clean Energy Entities’ request to require SPP to remove the quoted sentence. In addition, we deny Clean Energy Entities’ request to require SPP to identify which required network upgrades are stand alone network upgrades in the facilities study results. We find that this request is outside the scope of this compliance proceeding.

3. Dispute Resolution

26. 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. 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.

a. SPP’s Compliance Filing

27. SPP explains that its existing GIP does not contain the dispute resolution language contained in the Commission’s pro forma LGIP and that, instead, its GIP references the dispute resolution procedures contained in Part 1, section 12 of the SPP Tariff. SPP proposes to add a new section 13.5.2 to its GIP in order to incorporate the dispute resolution language required by Order No. 845. SPP also proposes revisions to the definition of “Dispute Resolution” contained in the GIP, the pro forma GIA, and the pro forma interim GIA to reference the dispute resolution procedures in proposed section 13.5.2 of its GIP. Further, SPP proposes clarifying revisions within its GIP,

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

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

37 Transmittal at 8; see also SPP Tariff, attach. V, § 1.

38 Transmittal at 8; proposed SPP Tariff, attach. V, § 1; proposed SPP Tariff, attach. V, apps. 6, 8, 13, and 14 (proposing revisions to article 1).
pro forma GIA, and pro forma interim GIA to ensure internal consistency in section numbering and references.39

b. Commission Determination

28. We find that SPP’s proposed GIP revisions regarding dispute resolution comply with the requirements of Order Nos. 845 and 845-A. Further, we accept the proposed revisions to the definition of “Dispute Resolution” in SPP’s GIP, pro forma GIA, and pro forma interim GIA, as well as other ministerial revisions, as these changes are consistent with Order Nos. 845 and 845-A and appropriately direct parties to the dispute resolution procedures in section 13.5.2 of the GIP (rather than section 12 of the Tariff), and ensure internal consistency within the Tariff.

4. Identification and Definition of Contingent Facilities

29. 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.40 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.41 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.42 The Commission stated that this transparency will ensure that the method is applied on a non-discriminatory basis.43 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

39 Transmittal at 8.

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

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

42 Id.; see also pro forma LGIP § 3.8.

43 Order No. 845, 163 FERC ¶ 61,043 at P 200.
commercially sensitive.\textsuperscript{44}

a. \textbf{SPP’s Compliance Filing}

30. SPP proposes to revise section 1 in its GIP to and \textit{pro forma} interim GIA to adopt the Commission’s \textit{pro forma} LGIP and \textit{pro forma} LGIA definition of “Contingent Facilities,” as required by Order No. 845. SPP proposes to expand the definition to provide that “Contingent Facilities are identified in Appendix A of the Generator Interconnection Agreement or Interim Generator Interconnection Agreement, as applicable.”\textsuperscript{45} SPP also proposes revisions to its GIP to add a new section 3.8 to outline its method for identifying contingent facilities.\textsuperscript{46} SPP proposes to identify contingent facilities at the conclusion of the Definitive Interconnection System Impact Study (DISIS) and again at the conclusion of the interconnection facilities study, and to include any identified contingent facilities in Appendix A of the interconnection customer’s GIA or interim GIA. SPP states that it will also provide, upon request of the interconnection customer, the estimated interconnection facility and/or network upgrade costs and estimated in-service completion time of each identified contingent facility when this information is readily available and not commercially sensitive.\textsuperscript{47}

31. As part of its method for identifying contingent facilities, SPP explains that it will first mitigate constraints found in the study process with network upgrades in the current SPP transmission expansion plan, as well as with network upgrades assigned to active prior-queued interconnection requests.\textsuperscript{48} Next, SPP proposes to determine the average incremental power flow impact of each interconnection request in a cluster study for each network upgrade identified. SPP then proposes to assign dependence on a network upgrade to each interconnection request that demonstrates a positive incremental impact on such network upgrade. SPP proposes to ignore incremental flows that result in a negative impact (i.e., counter flow) on a network upgrade.

32. Additionally, SPP proposes to replace the definition of “Previous Network Upgrade” with the definition of “Contingent Facilities” in its GIP, \textit{pro forma} GIA, and

\textsuperscript{44} \textit{Id.} P 199; \textit{see also} \textit{pro forma} LGIP § 3.8.

\textsuperscript{45} Transmittal at 9; proposed SPP Tariff, attach. V, apps. 6, 8, 13, and 14 (section 1).

\textsuperscript{46} Transmittal at 9.

\textsuperscript{47} \textit{Id.}; proposed SPP Tariff, attach. V, § 3.8.

\textsuperscript{48} Transmittal at 10.
pro forma interim GIA;\textsuperscript{49} SPP also proposes this replacement of terms in Appendix A of its pro forma GIA.\textsuperscript{50}

b. Commission Determination

33. We find that the revised provisions that identify and describe SPP’s method for determining contingent facilities, as SPP proposes in its GIP, partially comply with the requirements of Order Nos. 845 and 845-A. We find that SPP complies with the requirements of Order Nos. 845 and 845-A because SPP has adopted the definition of contingent facilities. We also accept SPP’s proposed revisions to its pro forma GIA and pro forma interim GIA to replace the term “Previous Network Upgrade” with the term “Contingent Facilities,” per the terminology adopted in Order No. 845. Further, SPP’s proposed section 3.8 of the GIP 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.

34. However, as specified in Order No. 845, transmission providers must include, in section 3.8 of their LGIPs, a method for determining contingent facilities.\textsuperscript{51} The Commission required that this method must provide sufficient transparency to determine why a specific contingent facility was identified and how it relates to the interconnection request.\textsuperscript{52} 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.\textsuperscript{53} SPP’s proposed Tariff provisions lack the requisite transparency required by Orders No. 845 and 845-A because the proposed Tariff provisions do not detail the specific thresholds or criteria that SPP will use as part of its method to identify contingent facilities.\textsuperscript{54} Without this information, an interconnection customer will not understand how SPP will evaluate potential contingent facilities to

\textsuperscript{49} Id. at 9; proposed SPP Tariff, attach. V, § 1; proposed SPP Tariff, attach. V, apps. 6, 8, 13, and 14 (proposing revisions to article 1).

\textsuperscript{50} Transmittal at 9; proposed SPP Tariff, attach. V, apps. 6 and 13.

\textsuperscript{51} Order No. 845, 163 FERC ¶ 61,043 at P 199.

\textsuperscript{52} Id. P 200.

\textsuperscript{53} Id.

\textsuperscript{54} The Commission declined to implement a standard threshold or criteria, such as a specific distribution factor threshold, because different thresholds may be more appropriate for different queue types and geographical footprints. Id. P 220.
determine their relationship to an individual interconnection request.\textsuperscript{55} We find that the term “positive incremental impact” does not have enough specificity to ensure that SPP’s technical screens or analyses will be applied to interconnection requests on a consistent, not unduly discriminatory or preferential basis. Accordingly, we direct SPP to file, within sixty (60) days of the date of this order, a further compliance filing that includes, within section 3.8 of the GIP, the specific thresholds or criteria that SPP will use in its technical screens or analysis to achieve the level of transparency required by Order No. 845.

5. **Transparency Regarding Study Models and Assumptions**

35. 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.” 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).\textsuperscript{56}

36. 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.\textsuperscript{57} 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.\textsuperscript{58} 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

\textsuperscript{55} See pro forma LGIP § 3.8 (“The method shall be sufficiently transparent to determine why a specific Contingent Facility was identified”).

\textsuperscript{56} Order No. 845, 163 FERC ¶ 61,043 at P 236, see also pro forma LGIP § 2.3.

\textsuperscript{57} Order No. 845-A, 166 FERC ¶ 61,137 at P 84 (citing Order No. 845, 163 FERC ¶ 61,043 at P 241).

\textsuperscript{58} Id. P 85 (citing 18 C.F.R. § 388.113(g)(5)(i)).
provider’s system. Instead, the network model information should reflect the system conditions currently used in interconnection studies.\(^{59}\)

### a. SPP’s Compliance Filing

37. SPP proposes revisions to section 2.4 in its GIP to adopt, without modification, the revised language in section 2.3 of the Commission’s *pro forma* LGIP, as required by Order Nos. 845 and 845-A.\(^ {60}\)

### b. Commission Determination

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

### 6. Definition of Generating Facility

39. In Order No. 845, the Commission revised the definition of “Generating Facility” to include electric storage resources and to allow electric storage resources to interconnect pursuant to the Commission-jurisdictional large generator interconnection processes. Specifically, the Commission revised the definition of “Generating Facility” in the *pro forma* LGIP and *pro forma* LGIA as:

> Generating Facility shall mean Interconnection Customer’s device for the production *and/or storage for later injection* of electricity identified in the Interconnection Request, but shall not include the interconnection customer’s Interconnection Facilities.\(^ {61}\)

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.\(^ {62}\)

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\(^{59}\) *Id.* P 88.

\(^{60}\) Transmittal at 10; proposed SPP Tariff, attach. V, § 2.4.

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

\(^{62}\) Order No. 845, 163 FERC ¶ 61,043 at P 275.
a. **SPP’s Compliance Filing**

40. SPP proposes revisions to section 1 in its GIP and article 1 in its *pro forma* GIA and *pro forma* interim GIA to adopt, without modification, the Commission’s *pro forma* LGIP and *pro forma* LGIA definition of “Generating Facility,” as required by Order Nos. 845 and 845-A.\(^{63}\)

b. **Commission Determination**

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

7. **Interconnection Study Deadlines**

42. 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.\(^{64}\) 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.\(^{65}\) 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.\(^{66}\) 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.\(^{67}\)

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\(^{63}\) Transmittal at 10-11; proposed SPP Tariff, attach. V, § 1 and apps. 6, 8, 13, and 14 (proposing revisions to article 1).

\(^{64}\) Order No. 845, 163 FERC ¶ 61,043 at P 305; *see also* *pro forma* LGIP §§ 3.5.2 and 3.5.3.

\(^{65}\) Order No. 845, 163 FERC ¶ 61,043 at P 305; *see also* *pro forma* LGIP § 3.5.4.

\(^{66}\) Order No. 845, 163 FERC ¶ 61,043 at P 307.

\(^{67}\) Order No. 845-A, 166 FERC ¶ 61,137 at P 107.
a. **SPP’s Compliance Filing**

43. SPP proposes to add new sections 3.5.2, 3.5.3, and 3.5.4 to its GIP to adopt, with minimal modification, the changes to the Commission’s *pro forma* LGIP set forth in Order Nos. 845 and 845-A. Additionally, SPP proposes revisions that replace the bracketed placeholders in *pro forma* LGIP sections 3.5.2, 3.5.3, and 3.5.4 with timelines that align with the timelines for the various interconnection studies that SPP performs in its three-stage generator interconnection study process, as described in sections 4 and 8.5 of its GIP. Specifically, SPP proposes that the start dates for its reporting metrics for DISIS Phase One, DISIS Phase Two, and the interconnection facilities study be the close of the DISIS queue cluster window, the end of Decision Point One, and the end of Decision Point Two, respectively.

b. **Commission Determination**

44. We find that SPP’s proposed revisions to its GIP regarding interconnection study deadlines comply with the requirements of Order Nos. 845 and 845-A. SPP’s proposed revisions adopt the Commission’s revised *pro forma* LGIP language with only minor edits. We find that SPP’s minor edits are appropriate because they replace the feasibility, system impact, and facilities study terms in the study deadline reporting sections of the *pro forma* LGIP with existing terms in SPP’s Tariff. In addition, we accept SPP’s proposal to replace the bracketed placeholders in *pro forma* LGIP sections 3.5.2, 3.5.3, and 3.5.4 with timelines that align with timelines already in its Tariff. In accepting SPP’s current three-stage generator interconnection study process, the Commission granted SPP an independent entity variation to use a single interconnection study agreement and update the agreement as the interconnection customer progresses through the interconnection study process, rather than using separate study agreements as described

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68 Under SPP’s three-stage generator interconnection study process, the interconnection customer executes and delivers a generator interconnection study agreement to SPP prior to the close of the DISIS queue cluster window, which is followed by a month-long review period. Each stage of the process is followed by a Decision Point, a period of fifteen (15) business days during which the interconnection customer may review the study results from the previous phase and opt to withdraw its request or proceed to the next phase. Decision Point One follows DISIS Phase One, and Decision Point Two follows DISIS Phase Two. SPP’s GIP provides that SPP shall use reasonable efforts to complete DISIS Phase One no later than ninety (90) calendar days after the close of the DISIS review period, DISIS Phase Two no later than one-hundred twenty (120) calendar days after the end of Decision Point One, and the interconnection facilities study phase no later than one-hundred thirty-five (135) calendar days after the end of Decision Point Two. SPP Tariff, attach. V, §§ 4.2.1 and 8.
in the Commission’s *pro forma* LGIP.\(^{69}\) We find that SPP’s proposal to use the close of
the DISIS queue cluster window, the end of Decision Point One, and the end of Decision
Point Two as the start dates for its reporting metrics, rather than using the execution dates
of individual study agreements, as directed in Order No. 845, is just and reasonable and
accomplishes the purposes of Order No. 845 because it ensures consistency in the
analysis of interconnection requests.

8. **Requesting Interconnection Service below Generating Facility Capacity**

45. 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,\(^{70}\)
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.\(^{71}\)

46. 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.\(^{72}\) 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.

47. 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


\(^{70}\) 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.

\(^{71}\) Order No. 845, 163 FERC ¶ 61,043 at P 367; *see also* *pro forma* LGIP §§ 3.1,
6.3, 7.3, and 8.2, and *pro forma* LGIP app. 1.

\(^{72}\) Order No. 845, 163 FERC ¶ 61,043 at PP 383-384.
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.\textsuperscript{73}

48. Finally, the Commission revised sections 4.4.1 and 4.4.2 of the \textit{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.\textsuperscript{74}

\textbf{a. \textit{SPP’s Compliance Filing}}

49. SPP proposes revisions to section 3.1 in its GIP to allow an interconnection customer to request a level of interconnection service below generating facility capacity. SPP states that the proposed revisions include minor modifications to apply the requirements of Order No. 845 to both SPP’s \textit{pro forma} GIA and \textit{pro forma} interim GIA.\textsuperscript{75}

50. With respect to the revised language that requires the feasibility, system impact, and facilities studies be performed at the level of interconnection service that the interconnection customer requests, SPP proposes to not incorporate within the GIP the revisions to section 6.3 in the Commission’s \textit{pro forma} LGIP applicable to the feasibility study. As to provisions applicable to the system impact study, SPP proposes revisions to section 8.4.2 in its GIP to implement the language required by Order No. 845.\textsuperscript{76} As to

\textsuperscript{73} \textit{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. \textit{Id.}

\textsuperscript{74} Order No. 845, 163 FERC ¶ 61,043 at P 406; \textit{see also} \textit{pro forma} LGIP §§ 4.4.1 and 4.4.2.

\textsuperscript{75} Transmittal at 11; proposed SPP Tariff, attach. V, § 3.1.

\textsuperscript{76} Transmittal at 11; proposed SPP Tariff, attach. V, § 8.4.2. Section 8.4.2 in SPP’s GIP is equivalent to section 7.3 in the Commission’s \textit{pro forma} LGIP.
provisions applicable to the facilities study, SPP proposes revisions to section 8.10 in its GIP to implement the language required by Order No. 845. SPP states that it also proposes revisions to sections 8.2(b) and 8.2(f) in its GIP to clarify that the requested capacity of an interconnection request is used to determine the applicable study deposit amounts and the first financial security payment. SPP states that it also proposes revisions to section 8.2(d) of its GIP to require the maximum generator output capability, rather than the definitive plant size, to clarify that a request for information in the generator interconnection study agreement is different than the requested capacity for the interconnection request.

Additionally, SPP proposes revisions to section 4.4.1 in its GIP to adopt the *pro forma* language required by Order No. 845. SPP states, however, that the section numbering in the GIP is different in some instances.

b. **Commission Determination**

We find that SPP’s proposed revisions to its GIP comply with the requirements of Order Nos. 845 and 845-A. Specifically, we find that SPP’s proposed revisions to sections 3.1, 4.4.1, 8.2, and 8.10 of its GIP accomplish the purposes of Order Nos. 845 and 845-A because they appropriately incorporate the requirements of Order No. 845 into SPP’s current three-stage generator interconnection study process, which SPP established pursuant to an independent entity variation granted by the Commission.

With respect to SPP not incorporating, within its GIP, the revisions to section 6.3 of the Commission’s *pro forma* LGIP, we find that this omission is appropriate because SPP’s existing interconnection study process does not include a feasibility study.

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77 Transmittal at 11; proposed SPP Tariff, attach. V, § 8.10. Section 8.10 in SPP’s GIP is equivalent to section 8.2 in the Commission’s *pro forma* LGIP.

78 Transmittal at 11-12; proposed SPP Tariff, attach. V, §§ 8.2(b) and 8.2(f). SPP’s three-stage interconnection study process requires the posting of financial security to enter each stage of the process, with financial security deposits tied to the cost of network upgrades required to accommodate the interconnection of a generating facility.

79 Transmittal at 12; proposed SPP Tariff, attach. V, § 8.2(d).

80 Transmittal at 11; proposed SPP Tariff, attach. V, § 4.4.1.

81 See 2019 Queue Reform Order, 167 FERC ¶ 61,275 at P 39.

82 See id. PP 12, 39.
9. **Provisional Interconnection Service**

54. In Order No. 845, the Commission required transmission providers to allow all interconnection customers to request provisional interconnection service.\(^{83}\) 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.\(^{84}\) To implement this service, the Commission revised the *pro forma* LGIP and *pro forma* LGIA to add a definition for “Provisional Interconnection Service”\(^{85}\) and for a “Provisional Large Generator Interconnection Agreement.”\(^{86}\)

55. In addition, the Commission added *pro forma* LGIA article 5.9.2, which details the terms for provisional interconnection service.\(^{87}\) 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.\(^{88}\) The Commission stated that interconnection customers are responsible for the costs for performing these provisional interconnection studies.\(^{89}\)

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\(^{83}\) Order No. 845, 163 FERC ¶ 61,043 at P 438.

\(^{84}\) Id. P 441.

\(^{85}\) *Pro forma* LGIP § 1 (Definitions); *pro forma* LGIA art. 1 (Definitions).

\(^{86}\) Id. 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.

\(^{87}\) Order No. 845, 163 FERC ¶ 61,043 at P 438; *see also* *pro forma* LGIP § 5.9.2.

\(^{88}\) Order No. 845, 163 FERC ¶ 61,043 at P 448.

\(^{89}\) Id.
a. **SPP’s Compliance Filing**

56. SPP requests an independent entity variation from the Order No. 845 requirements related to provisional interconnection service. SPP states that it already has a Commission-accepted, *pro forma* interim GIA that allows generating facilities projected to be in service prior to the completion of applicable interconnection studies to interconnect to the transmission system on a limited basis, prior to the completion of the study process. SPP asserts that this process is analogous to provisional interconnection service because SPP’s interim interconnection service allows a generating facility to interconnect to the transmission system prior to the completion of the interconnection study process. SPP concludes that its existing interim interconnection service provisions satisfy the provisional interconnection service requirements of Order Nos. 845 and 845-A and, therefore, revisions to its GIP are not necessary.

b. **Protest**

57. Clean Energy Entities assert that SPP’s proposal to use its existing interim interconnection service provisions is insufficient to meet the Order No. 845 requirements for provisional interconnection service. Clean Energy Entities state that Order No. 845 provides that “any interconnection customer, regardless of queue position, may request provisional interconnection service.” However, Clean Energy Entities note that section 11A.1 of SPP’s current GIP provides that an interconnection customer may only request interim interconnection service if its requested in-service date precedes the projected completion of its interconnection facilities study. Clean Energy Entities argue that Order No. 845 contains no such qualifier. Clean Energy Entities assert that the interconnection customer should have the unilateral right to manage its risk by requesting interim interconnection service, particularly because SPP is regularly delayed in meeting its Tariff-defined schedules.

58. Clean Energy Entities contend that if an interconnection customer’s projected facilities study completion date is shortly before the requested in-service date, the

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90 Provisions governing SPP’s existing *pro forma* interim GIA are contained in attach. V, § 11A.1 to the SPP Tariff.

91 Transmittal at 12-13.

92 Clean Energy Entities Protest at 7 (citing Order No. 845, 163 FERC ¶ 61,043 at P 442).

93 *Id.*

94 *Id.* at 8.
interconnection customer would not be allowed to request interim interconnection service. Clean Energy Entities argue that in this instance, there would be little time available to negotiate and execute a standard GIA, and the transmission owners in SPP could not reasonably be expected to complete any required interconnection facilities and network upgrades prior to the requested in-service date.\(^\text{95}\) Clean Energy Entities therefore request that the Commission direct SPP to remove the limitation on requesting interim interconnection service from section 11A.1 of the GIP and any other locations in the Tariff with similar provisions. Clean Energy Entities state that this will ensure that interim interconnection service, which SPP intends to serve as provisional interconnection service, is not unreasonably withheld.\(^\text{96}\)

c. **Commission Determination**

59. We find that SPP has not supported its proposed independent entity variation request to find that its existing interim interconnection service provisions under section 11A.1 of its GIP accomplish the purposes of Order No. 845 with respect to provisional interconnection service. We agree with SPP that its interim interconnection service provisions allow interconnection customers to 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. However, we find that section 11A.1 of SPP’s GIP only partially complies with the requirements of Order No. 845. Specifically, section 11A.1 provides that an interconnection customer may request provisional interconnection service only if its requested in-service date precedes the projected completion of its interconnection facilities study. We find that this restriction on the availability of provisional interconnection service does not accomplish the Commission’s purpose in Order No. 845 that provisional interconnection service be available to all customers regardless of queue position. In Order No. 845, the only condition on the availability of provisional interconnection service is that it may only be requested prior to the completion of requisite interconnection facilities, network upgrades, distribution upgrades, or system protection facilities.\(^\text{97}\) The Commission in Order No. 845 did not limit the availability of provisional interconnection service to only when the interconnection studies will be completed after the requested in-service date. Accordingly, we direct SPP to file, within sixty (60) days of the date of this order, a further compliance filing that modifies section 11A.1 of its GIP, and any other applicable Tariff provisions, as necessary, to remove the current limitation on the availability of provisional interconnection service.

\(^{95}\) *Id.*

\(^{96}\) *Id.*

\(^{97}\) Order No. 845, 163 FERC ¶ 61,043 at P 449.
and ensure that provisional interconnection service will be available to all interconnection customers regardless of queue position.

60. We also find that SPP’s interim interconnection service provisions, which SPP proposes to meet the provisional interconnection service requirements of Order No. 845, do not fully comply because the provisions do not specify the frequency at which SPP will study and update the maximum permissible output of a generating facility subject to an interim GIA. 98 Accordingly, we direct SPP to file, within sixty (60 days) of the date of this order, a further compliance filing that proposes revisions to the Tariff that specify the frequency at which SPP will study and update the maximum permissible output of a generating facility subject to an interim GIA.

10. Surplus Interconnection Service

61. 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. 99 Surplus interconnection service enables a new interconnection customer to utilize the unused portion of an existing interconnection customer’s interconnection service within specific parameters. 100 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. 101 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. 102 The transmission provider must perform reactive power, short circuit/fault duty, and stability analyses studies as well as

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98 Id. P 448.
99 Id. P 467; see also pro forma LGIP § (Definitions); pro forma LGIP art. 1 (Definitions).
100 Order No. 845, 163 FERC ¶ 61,043 at P 467; Order No. 845-A, 166 FERC ¶ 61,137 at P 119.
101 Order No. 845, 163 FERC ¶ 61,043 at P 467, see also pro forma LGIP §§ 3.3 and 3.3.1.
102 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. 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. 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.

a. **SPP’s Compliance Filing**

62. SPP proposes to revise its GIP and pro forma GIA to adopt Order No. 845’s definition of "Surplus Interconnection Service." SPP also proposes to create a process, described in proposed section 3.3 of its GIP, whereby an interconnection customer with an effective GIA may make surplus interconnection service available at an existing point of interconnection. SPP notes that the level of surplus interconnection service cannot exceed the total interconnection service already provided by the interconnection customer’s GIA and can only be available up to the amount that can be accommodated without requiring additional network upgrades.

63. SPP proposes the addition of section 3.3.1 to its GIP to describe the process for initiating a request for surplus interconnection service, as well as the addition of section 3.3.2 to its GIP to describe the process for tendering a study agreement. Proposed section 3.3.1 specifies the information necessary to initiate a request for surplus interconnection service, which may be submitted either by the interconnection customer with an effective GIA or by the entity that wants to use the surplus interconnection service. After initiating a request, proposed section 3.3.2 provides that the surplus interconnection service customer shall deliver an executed surplus interconnection

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103 Order No. 845, 163 FERC ¶ 61,043 at PP 455 and 467.
104 Id. P 481.
105 Id. P 499.
106 Proposed SPP Tariff, attach. V, § 1 and apps. 6 and 13.
107 Transmittal at 13; see also proposed pro forma LGIP § 3.3.
108 Proposed SPP Tariff, attach. V, § 3.3.1.
service impact study agreement\textsuperscript{109} to SPP together with the required technical data and a $15,000 study deposit. If the surplus interconnection service customer’s share of the surplus interconnection service impact study costs exceeds $15,000, proposed section 3.3.2 provides that the original interconnection customer will be responsible for the difference.\textsuperscript{110}

64. SPP proposes the addition of section 3.3.3 to its GIP to provide that it will process requests for surplus interconnection service in a surplus interconnection service queue. SPP proposes assigning a queue position based upon the date and time of receipt of a surplus interconnection service request, and to use this position to determine the order for performing the surplus interconnection service impact study. Proposed section 3.3.3 also clarifies how SPP will distinguish between higher-queued and lower-queued surplus interconnection service requests.\textsuperscript{111}

65. SPP proposes the addition of section 3.3.4 to its GIP to describe the scope of studies in its surplus interconnection service study process. Proposed section 3.3.4.1 details the parameters of the surplus interconnection service impact study, a sixty (60) day study that SPP states it will use to assess whether a request for surplus interconnection service will maintain the reliable operation of the SPP system. SPP proposes an independent entity variation from the requirement in Order No. 845 to identify any additional necessary interconnection facilities and network upgrades in surplus interconnection service study results.\textsuperscript{112} Instead, SPP proposes, in section 3.3.4.1, to only identify additional necessary interconnection facilities in surplus interconnection service study results. SPP further proposes to waive any or all of the additional studies if it determines that there is no reasonable expectation that the request for surplus interconnection service will negatively impact the reliability of the transmission system or that no additional interconnection facilities will be necessary.

66. SPP proposes the addition of section 3.3.4.2 to its GIP to describe the scope of the surplus interconnection service facilities study, which SPP proposes requiring if the surplus interconnection service impact study identifies additional interconnection facilities as necessary to support the requested surplus interconnection service. SPP proposes requiring an additional $15,000 study deposit, with study costs exceeding this

\textsuperscript{109} SPP refers to its proposed surplus interconnection service system impact study as a Surplus Interconnection Service Impact Study. Proposed SPP Tariff, attach. V, § 1.

\textsuperscript{110} Transmittal at 14; proposed SPP Tariff, attach. V, § 3.3.2.

\textsuperscript{111} Transmittal at 14; proposed SPP Tariff, attach. V, § 3.3.3.

\textsuperscript{112} Order No. 845, 163 FERC ¶ 61,043 at P 467; see also pro forma LGIP § 3.3.1.
amount being borne by the surplus interconnection customer.\textsuperscript{113} Proposed section 3.3.4.2 provides that if SPP determines that no additional studies are required, determines that no additional interconnection facilities are required, or posts a final surplus interconnection service facilities study report, SPP will tender a draft agreement for surplus interconnection service, pursuant to proposed section 3.3.5 of the GIP.\textsuperscript{114}

67. SPP also requests an independent entity variation from the restriction in Order Nos. 845 and 845-A that limits surplus interconnection service to the portion of interconnection service established in a LGIA. SPP explains that a large number of generators were interconnected to the SPP transmission system prior to when the transmission facilities where the generator is connected were part of SPP’s system and do not have GIAs for interconnection service under SPP’s Tariff. To address this, SPP proposes language to specify that, for the limited purpose of making available or requesting surplus interconnection service, references to the current interconnection customer or a currently effective GIA shall also include any generator that interconnected to the SPP transmission system prior to when the transmission facilities where the generator is connected were part of SPP’s system.\textsuperscript{115}

b. \textbf{Protest}

68. Clean Energy Entities request that the Commission require SPP to distinguish between system protection facilities and other required network upgrades. Clean Energy Entities state that, although system protection facilities is a defined term in SPP’s GIP and GIA, SPP does not distinguish between system protection facilities and other network upgrades when it completes an interconnection study. Clean Energy Entities contend that this distinction is critical because surplus interconnection service is only allowed when no network upgrades are required to provide service. Clean Energy Entities state that modifications to, or additions of, system protection facilities are appropriate in the case of adding surplus interconnection service to ensure that the transmission system is properly identifying faults on the modified configuration of interconnection facilities and generation facilities. Clean Energy Entities further contend that system protection facilities should not be considered network upgrades. Therefore, Clean Energy Entities request that the Commission clarify that SPP must distinguish

\textsuperscript{113} Transmittal at 15-16; Proposed SPP Tariff, attach. V, § 3.3.4.2.

\textsuperscript{114} Transmittal at 17; Proposed SPP Tariff, attach. V, § 3.3.5.

\textsuperscript{115} Transmittal at 18; Proposed SPP Tariff, attach. V, § 3.3.
between system protection facilities and other network upgrades when evaluating what may be needed to provide surplus interconnection service.¹¹⁶

c. **Commission Determination**

69. We find that SPP’s proposed revisions to its GIP and pro forma GIA partially comply with the requirements of Order Nos. 845 and 845-A. SPP’s proposed GIP revisions adopt the Commission’s pro forma definition of “Surplus Interconnection Service,” provide for an expedited surplus interconnection service study process outside of the normal interconnection queue, allow the original interconnection customer to stipulate the amount of surplus interconnection service that is available, and propose a process for evaluating and transferring surplus interconnection service.

70. We also find that SPP’s proposed independent entity variation to allow existing generators that are interconnected with the SPP transmission system but that pre-date the establishment of the SPP’s pro forma GIA to offer surplus interconnection service is just and reasonable. Specifically, the requested independent entity variation accomplishes the purposes of Order Nos. 845 and 845-A because it allows a generator that interconnected to the SPP transmission system, prior to when the transmission facilities to which the generator is connected were part of SPP’s system, to obtain surplus interconnection service and encourages more efficient use of the transmission system.

71. Additionally, we find that the definition of “System Protection Facilities” contained in SPP’s pro forma GIA, which incorporates the Commission’s existing pro forma LGIA definition with minimal modification, is sufficiently broad to include both interconnection facilities and network upgrades, as certain system protection facilities located on the transmission system may be appropriately classified as network upgrades due to their location.¹¹⁷ Accordingly, we decline Clean Energy Entities’ request to prohibit the characterization of system protection facilities as network upgrades because some of these facilities may be appropriately classified as network upgrades. We also decline Clean Energy Entities’ request to distinguish system protection facilities from network upgrades in the results of the facilities study because SPP’s proposal ensures that SPP will provide the surplus interconnection customer with a list of required

¹¹⁶ Clean Energy Entities Protest 6-7.

¹¹⁷ “System Protection Facilities shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) the Transmission System from faults or other electrical disturbances occurring at the Generating Facility and (2) the Generating Facility from faults or other electrical system disturbances occurring on the Transmission System . . . .” SPP Tariff, attach. V, app. 6, art. 1.
network upgrades, including any identified system protection facilities that also qualify as network upgrades.

72. However, we find that SPP failed to support its proposed independent entity variation to identify only necessary interconnection facilities, and not network upgrades, in the results of the surplus interconnection service impact study. Accordingly, we direct SPP to file, within sixty (60) days of the date of this order, a further compliance filing that either justifies its proposed variation or proposes new Tariff language to require the identification of network upgrades in the results of the surplus interconnection service impact study, as required by Order No. 845.118

73. SPP proposes to hold the original interconnection customer, rather than the surplus interconnection service customer, responsible for any surplus interconnection service impact study costs in excess of the study deposit provided to SPP. We find this proposal is not just and reasonable because the original interconnection customer does not take surplus interconnection service or cause SPP to potentially incur excess surplus interconnection service impact study costs. Accordingly, we direct SPP to file, within sixty (60) days of the date of this order, a further compliance filing that revises proposed section 3.3.2 of its GIP to provide that the surplus interconnection service customer will be responsible for any excess surplus interconnection service impact study costs.

11. **Material Modifications and Incorporation of Advanced Technologies**

74. 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, without risking the loss of its queue position. The Commission required transmission providers to develop and include in their LGIPs a definition of permissible technological advancements that will create a category of technological changes that, by definition, do not constitute a material modification and, therefore, will not result in the loss of queue position. In addition, the Commission modified section 4.4.6 of the pro forma LGIP to require transmission providers to insert a

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

119 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.
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.\textsuperscript{120}

75. 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.\textsuperscript{121} 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.\textsuperscript{122}

76. 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.\textsuperscript{123} 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.\textsuperscript{124} 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.\textsuperscript{125}

77. 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

\begin{flushright}
\textsuperscript{120} Id. P 518; see also pro forma LGIP § 4.4.6.
\textsuperscript{121} Order No. 845, 163 FERC ¶ 61,043 at P 519.
\textsuperscript{122} Id.
\textsuperscript{123} Id.; Order No. 845-A, 166 FERC ¶ 61,137 at P 155.
\textsuperscript{124} Order No. 845, 163 FERC ¶ 61,043 at P 521.
\textsuperscript{125} Id.
\end{flushright}
any necessary additional studies. The Commission also found that, if the transmission provider determines that additional studies are necessary to evaluate whether a technological advancement is a material modification, the interconnection customer must tender a deposit, and the transmission provider must specify the amount of the deposit in the transmission provider’s technological change procedure. In addition, the 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.

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 to 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.

a. **SPP’s Compliance Filing**

SPP proposes to define a permissible technological advancement as an advancement to turbines, inverters, plant supervisory controls, or other technological advancements that do not increase the interconnection customer’s requested

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126 *Id.* P 535.

127 *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 a justification supporting this alternative amount. *Id.*

128 *Id.* P 522.

129 *Order No. 845-A, 166 FERC ¶ 61,137 at P 155.*
interconnection service or cause any reliability concerns.\textsuperscript{130} SPP also proposes that a permissible technological advancement will not degrade the electrical characteristics of the generating equipment or include changes in generation technology type or fuel type.

80. SPP notes that Order No. 845 revised section 4.4.2 in the Commission’s \textit{pro forma} LGIP. SPP states that it made the applicable revisions to section 4.4.1 of its GIP because the section numbering in SPP’s GIP differs from the \textit{pro forma} LGIP.\textsuperscript{131}

81. Further, SPP proposes to establish a technological change procedure in new section 4.4.5 of its GIP. The proposed technological change procedure provides that an interconnection customer seeking to incorporate a technological advancement into its generating facility should submit a request to SPP in writing prior to the end of Decision Point Two.\textsuperscript{132} The request must include a description of the proposed technological advancement and provide details necessary to evaluate whether the proposed technological advancement is material, including, but not limited to, providing the specific parameters in Attachments A and B of SPP’s generator interconnection study agreement\textsuperscript{133} that would change as a result of the proposed advancement.\textsuperscript{134}

82. The proposed technological change procedure also provides that if the proposed technological advancement is a permissible technological advancement or would not change the request’s submitted parameters, no study will be necessary and the proposed technological advancement will not be considered a material modification. SPP proposes to notify the interconnection customer if a study is necessary to determine whether the change is considered a material modification and will conduct the evaluation pursuant to the material modification provisions in its GIP.\textsuperscript{135} The proposed technological change procedure specifies that the interconnection customer will provide a study deposit of $10,000 within five business days after notification that additional studies are required. SPP proposes that studies conducted under section 4.4.5 of the GIP will be completed in thirty (30) calendar days after the interconnection customer submits a formal

\begin{itemize}
\item \textsuperscript{130} Proposed SPP Tariff, attach. V, § 1.
\item \textsuperscript{131} Proposed SPP Tariff, attach. V, §§ 1 and 4.4.1.
\item \textsuperscript{132} Decision Point Two begins the next business day after the end of Phase 2 and lasts for fifteen (15) business days.
\item \textsuperscript{133} SPP’s generator interconnection study agreement is contained in Appendix 3 of Attachment V.
\item \textsuperscript{134} Proposed SPP Tariff, attach. V, §§ 1 and 4.4.5.
\item \textsuperscript{135} \textit{See} Proposed SPP Tariff, attach. V, §§ 4.42 and 4.4.3.
\end{itemize}
technological advancement request to SPP, provided that the interconnection customer has provided the required information and study deposit.\textsuperscript{136}

83. Additionally, SPP proposes to add language to section 4.4.3 of its GIP to specify that SPP will describe for the interconnection customer any costs incurred to conduct any necessary additional studies, provide the costs to the interconnection customers, and either refund any overage or charge for any shortages for costs that exceed the deposit amount.\textsuperscript{137}

b. Protest

84. Clean Energy Entities contend that SPP’s proposal — that any proposed technological change request that is a permissible technological advancement or that would not change any of the request’s technical parameters will not be considered a material modification — renders SPP’s proposed technological change procedure meaningless, as there is no need to study a proposed change that does not affect the interconnection request’s submitted parameters.\textsuperscript{138} Clean Energy Entities further assert that some technological changes may affect the technical parameters of an interconnection request yet do not require a dedicated study.\textsuperscript{139} Clean Energy Entities request that the Commission direct SPP to expand its definition and/or associated language regarding permissible technological advancements to clarify that the set of changes that do not require a material modification study may include more substantial changes to a generating facility and/or interconnection facilities.\textsuperscript{140}

85. Clean Energy Entities also contest SPP’s proposal to allow the interconnection customer to present a technological change request up to the end of Phase 2. Clean Energy Entities argue that there is no reason why an interconnection customer should not

\textsuperscript{136} Proposed SPP Tariff, attach. V, §§ 1 and 4.4.5.

\textsuperscript{137} Proposed SPP Tariff, attach. V, §§ 1 and 4.4.3.

\textsuperscript{138} Clean Energy Entities Protest at 9.

\textsuperscript{139} Id. Clean Energy Entities also note that Order No. 845 requires that the technological change procedure must “specify the conditions under which a study will or will not be necessary to determine whether a proposed technological advancement is a material modification.” Id. (citing Order No. 845, 163 FERC ¶ 61,043 at P 519).

\textsuperscript{140} Id.
have the option to propose a technological change up until the GIA is signed (and even afterward).\footnote{Id. at 10.}

86. Finally, Clean Energy Entities state that SPP’s proposed revisions do not include a deadline by which SPP will respond to a permissible technological advancement request. Clean Energy Entities request that the Commission direct SPP to revise its Tariff to specifically require SPP to respond to a technological advancement request within fifteen (15) calendar days.\footnote{Id.}

c. Commission Determination

87. We find that SPP’s proposed revisions to its GIP to incorporate a “Permissible Technological Advancement” definition and a technological change procedure partially comply with the requirements of Order Nos. 845 and 845-A. Specifically, we find that SPP’s proposed “Permissible Technological Advancement” definition meets the Commission’s requirement to provide a category of technological changes that do not constitute a material modification. We also find that the proposed Tariff revisions comply with the requirements to specify what technological advancements can be incorporated at various stages of the interconnection process, to specify the conditions under which a study may be necessary to determine whether a proposed technological advancement is a material modification, and to require the transmission provider to perform and complete any necessary additional studies within thirty (30) days after the interconnection customer submits a formal technological advancement request.

88. Further, because SPP’s proposal is silent on whether SPP will provide an explanation to the interconnection customer regarding why a proposed technological advancement is a material modification, we reiterate that SPP is required to provide this explanation if it cannot accommodate a proposed technological advancement without triggering the material modification provisions in section 4.4.5 of SPP’s GIP.\footnote{Order No. 845, 163 FERC ¶ 61,043 at P 522.}

89. Order No. 845 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. However, SPP’s proposed GIP revisions do not explain how it will evaluate the technological advancement request to determine whether it is a material modification. Accordingly, we direct SPP to file, within sixty (60) days of the date of this order, a further compliance filing revising its GIP to provide a more detailed explanation of the additional studies that SPP will conduct to determine whether
the technological advancement request will result in a material modification.

90. We deny Clean Energy Entities’ request to direct SPP to respond to a technological change request within fifteen (15) days of receiving the technological change request. Order No. 845 gives the transmission provider up to thirty (30) days upon receipt of a technological advancement request to complete its determination.

91. We deny Clean Energy Entities’ request to require SPP to modify its technological change procedure to expand the subset of changes for which no additional studies will be required. We find that SPP has complied with the requirement of Order No. 845 to specify the conditions under which additional studies will and will not be necessary.\textsuperscript{144} In addition, we find that SPP’s proposal does not provide that any and all changes to an interconnection request’s submitted parameters will necessarily require additional study, as Clean Energy Entities suggest.

92. We deny Clean Energy Entities’ request for the Commission to require SPP to permit technological advancements until the execution of a GIA or after. As the Commission found in Order No. 845, the interconnection facilities study is a reasonable cut-off point for allowing technological advancements that will not be considered material modifications, given that changes requested during the facilities study could delay the transmission provider’s ability to tender an interconnection service agreement and, consequently, delay other projects.\textsuperscript{145} We find that SPP’s proposal to permit technological advancements until the end of Decision Point Two of its GIP complies with Order No. 845.

\textbf{12. Additional Compliance Requirements}

93. We note that section 5.1.3 of SPP’s GIP contains a ministerial error. The section currently references a non-existent section 4.2.3 of the GIP. We direct SPP to revise section 5.1.3 of its GIP to read, “The DISIS Queue Cluster Window that is open at that time and each subsequent DISIS Queue Cluster Window shall have the duration specified in Section 4.2.1 of the GIP.”

\textsuperscript{144} Id. P 519.

\textsuperscript{145} Id. P 536.
The Commission orders:

(A) SPP’s compliance filing is hereby accepted, effective as of the date of this order, subject to a further compliance filing, as discussed in the body of this order.

(B) SPP is hereby directed to submit a further compliance filing within sixty (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.