## 170 FERC ¶ 61,214 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;

Richard Glick and Bernard L. McNamee.

Western Interconnect LLC

Docket No. ER19-2165-001

#### ORDER ON COMPLIANCE

(Issued March 19, 2020)

1. On June 14, 2019, as amended on July 10, 2019, Western Interconnect LLC (Western Interconnect) submitted proposed revisions to its Open Access Transmission Tariff (Tariff) Attachment M 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 Western Interconnect's filing partially complies with the requirements of Order Nos. 845 and 845-A. Accordingly, we accept Western Interconnect's compliance filing, effective May 22, 2019 and direct Western Interconnect 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 enhance the interconnection process. The Commission stated that it expects that these

<sup>&</sup>lt;sup>1</sup> 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).

<sup>&</sup>lt;sup>2</sup> 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.

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.<sup>3</sup> 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<sup>4</sup> and stand alone network upgrades<sup>5</sup> only in instances when the transmission provider cannot meet the dates proposed by the interconnection customer;<sup>6</sup> and (2) required that transmission providers establish interconnection dispute resolution procedures that allow a disputing party unilaterally to seek non-binding dispute resolution.<sup>7</sup>

<sup>&</sup>lt;sup>3</sup> *Id.* P 2; Order No. 845-A, 166 FERC ¶ 61,137 at P 1.

<sup>&</sup>lt;sup>4</sup> 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).

<sup>&</sup>lt;sup>5</sup> 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.* 

<sup>&</sup>lt;sup>6</sup> Order No. 845, 163 FERC ¶ 61,043 at P 85.

<sup>&</sup>lt;sup>7</sup> *Id.* P 3.

- 4. Second, to promote more informed interconnection decisions, the Commission: (1) required transmission providers to outline and make public a method for determining contingent facilities; (2) required transmission providers to list the specific study processes and assumptions for forming the network models used for interconnection studies; (3) revised the definition of "Generating Facility" to explicitly include electric storage resources; and (4) established reporting requirements for aggregate interconnection study performance. 9
- 5. Third, the Commission adopted reforms to enhance the interconnection process by (1) allowing interconnection customers to request a level of interconnection service that is lower than their generating facility capacity; (2) requiring transmission providers to allow for provisional interconnection agreements that provide for limited operation of a generating facility prior to completion of the full interconnection process; (3) requiring transmission providers to create a process for interconnection customers to use surplus interconnection service <sup>10</sup> 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. <sup>11</sup>

## II. Western Interconnect's Compliance Filing

6. Western Interconnect proposes to incorporate the Commission's *pro forma* LGIP and *pro forma* LGIA reforms in Attachment M of its Tariff as required by Order Nos. 845 and 845-A. Thus, Western Interconnect adopts without modification the following *pro forma* LGIP and *pro forma* LGIA reforms: interconnection customer's option to build, dispute resolution, definition of contingent facilities, transparency regarding study

<sup>&</sup>lt;sup>8</sup> 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).

 $<sup>^{9}</sup>$  Order No. 845, 163 FERC  $\P$  61,043 at P 4.

<sup>&</sup>lt;sup>10</sup> 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.

<sup>&</sup>lt;sup>11</sup> *Id.* P 5.

models and assumptions, definition of a generating facility, requesting interconnection service below generating facility capacity, and provisional interconnection service.

- 7. Western Interconnect 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, Western Interconnect 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.<sup>12</sup>
- 8. Finally, Western Interconnect requests that the proposed Tariff revisions become effective on May 22, 2019.

# III. Notice and Responsive Pleadings

- 9. Notice of Western Interconnect's compliance filing was published in the *Federal Register*, 84 Fed. Reg. 29,192 (June 21. 2019), with interventions and protests due on or before July 5, 2019. None was filed.
- 10. On July 10, 2019, Western Interconnect filed an amendment to its compliance filing to provide additional clarification regarding its procedure for allowing surplus interconnection service. Notice of Western Interconnect's amendment was published in the *Federal Register*, 84 Fed. Reg. 33,931 (July 16. 2019), with interventions and protests due on or before July 31, 2019. None was filed.

#### IV. Discussion

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

# A. <u>Interconnection Customer's Option to Build</u>

12. In Order No. 845, the Commission revised articles 5.1, 5.1.3, and 5.1.4 of the *pro forma* LGIA to allow interconnection customers to unilaterally exercise the option to build for stand alone network upgrades and the transmission provider's interconnection facilities, regardless of whether the transmission provider can complete construction of

<sup>&</sup>lt;sup>12</sup> Western Interconnect June 14, 2019, Compliance Filing, Transmittal at 1 (Filing).

such facilities by the interconnection customer's proposed in-service date, initial synchronization date, or commercial operation date. 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. 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." 15

13. In Order No. 845-A, the Commission granted rehearing and clarification of certain aspects of the revised option to build. Specifically, the Commission revised the definition of stand alone network upgrade in the *pro forma* LGIP and *pro forma* LGIA to: (1) state that, when there is a disagreement, the transmission provider must provide the interconnection customer a written technical explanation outlining why the transmission provider does not consider a specific network upgrade to be a stand alone network upgrade; <sup>16</sup> and (2) clarify that the option to build does not apply to stand alone network upgrades on affected systems. <sup>17</sup> 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. <sup>18</sup> 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. <sup>19</sup>

<sup>&</sup>lt;sup>13</sup> Order No. 845, 163 FERC ¶ 61,043 at PP 85-87.

<sup>14</sup> Standardization of Generator Interconnection Agreements and Procedures, Order No. 2003, 104 FERC ¶ 61,103, at P 353 (2003), order on reh'g, Order No. 2003-A, 106 FERC ¶ 61,220, order on reh'g, Order No. 2003-B, 109 FERC ¶ 61,287 (2004), order on reh'g, Order No. 2003-C, 111 FERC ¶ 61,401 (2005), aff'd sub nom. Nat'l Ass'n of Regulatory Util. Comm'rs v. FERC, 475 F.3d 1277 (D.C. Cir. 2007); see also pro forma LGIP § 5.1.3.

<sup>&</sup>lt;sup>15</sup> Order No. 845, 163 FERC ¶ 61,043 at P 85.

<sup>&</sup>lt;sup>16</sup> Order No. 845-A, 166 FERC ¶ 61,137 at P 68.

<sup>&</sup>lt;sup>17</sup> *Id.* P 61.

<sup>&</sup>lt;sup>18</sup> *Id.* P 75.

<sup>&</sup>lt;sup>19</sup> *Id.* P 33.

## 1. Western Interconnect's Compliance Filing

14. Western Interconnect proposes revisions to its *pro forma* LGIA amending articles 5.1, 5.1.3, and 5.2(12) to incorporate the *pro forma* LGIA revisions adopted by Order Nos. 845 and 845-A without modification.<sup>20</sup> Additionally, Western Interconnect proposes revisions to its *pro forma* LGIP revising section 1, Definitions, to incorporate the *pro forma* LGIP revisions adopted by Order Nos. 845 and 845-A without modification.<sup>21</sup>

## 2. Commission Determination

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

## **B.** Dispute Resolution

16. In Order No. 845, the Commission revised the *pro forma* LGIP by adding new section 13.5.5, which establishes generator interconnection dispute resolution procedures that allow a disputing party to unilaterally seek non-binding dispute resolution.<sup>22</sup> 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.<sup>23</sup>

<sup>&</sup>lt;sup>20</sup> Filing at 1.

<sup>&</sup>lt;sup>21</sup> Order No. 845-A, 166 FERC ¶ 61,137 at P 68.

<sup>&</sup>lt;sup>22</sup> Order No. 845, 163 FERC ¶ 61,043 at P 133; see also pro forma LGIP § 13.5.5.

<sup>&</sup>lt;sup>23</sup> Order No. 845, 163 FERC ¶ 61,043 at P 139.

## 1. Western Interconnect's Compliance Filing

17. Western Interconnect proposes revisions to its LGIP that adopt the language required by Order Nos. 845 and 845-A without modification.<sup>24</sup>

## 2. <u>Commission Determination</u>

18. We find that Western Interconnect's proposed LGIP revisions regarding dispute resolution comply with the requirements of Order Nos. 845 and 845-A because Western Interconnect adopts the Commission's *pro forma* revisions without modification. However, we note that there are two typographical errors in Western Interconnect's proposed LGIP section 13.5.5: (1) the word "past" is written as "part," and (2) the word "and" is written as "an," in the fourth and sixth sentences of the section, respectively. Therefore, we direct Western Interconnect to submit a further compliance filing within 120 days of the date of this order to remedy these typographical errors.

## C. <u>Identification and Definition of Contingent Facilities</u>

19. 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. 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. 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. The Commission stated that this transparency will ensure that the method

<sup>&</sup>lt;sup>24</sup> Western Interconnect, OATT, att. M (LGIP), § 13.5.5 Non-Binding Dispute Resolution Procedures.

 $<sup>^{25}</sup>$  Order No. 845, 163 FERC  $\P$  61,043 at P 218; see also pro forma LGIP  $\S$  1 (Definitions).

<sup>&</sup>lt;sup>26</sup> Order No. 845, 163 FERC ¶ 61,043 at P 199.

<sup>&</sup>lt;sup>27</sup> Id.; see also pro forma LGIP § 3.8.

is applied on a non-discriminatory basis.<sup>28</sup> 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.<sup>29</sup>

## 1. Western Interconnect's Compliance Filing

- 20. Western Interconnect states that it proposes to adopt the Commission's *pro forma* LGIP definition of contingent facilities without modification. However, Western Interconnect proposes to use the word "or" instead of "and" in its definition of contingent facilities so that it refers to interconnection facilities and network upgrades that may be "delayed *and* not built," instead of "delayed *or* not built."
- 21. Western Interconnect also proposes a new LGIP section 3.8 to identify contingent facilities in the system impact study by reviewing and accounting for: (1) planned network upgrades associated with interconnection customers with higher queue priority and/or (2) coordination with applicable Affected System parties to determine what contingent facilities have been identified through Affected System Studies, and/or (3) other planned transmission projects unrelated to any Interconnection Requests. Western Interconnect will include the contingent facilities information in the interconnection customer's LGIA. In addition, Western Interconnect will 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.

# 2. <u>Commission Determination</u>

- 22. We find that Western Interconnect's proposed definition of contingent facilities deviates from the requirements of Order Nos. 845 and 845-A, because Western Interconnect has changed the word "or" to "and" in its definition of contingent facilities so that it incorrectly reads "delayed *and* not built", as discussed above. Therefore, we direct Western Interconnect to file, within 120 days of the date of this order, a compliance filing to remedy this deviation.
- 23. We also find that the revised provisions that identify and describe Western Interconnect's method for determining contingent facilities, as Western Interconnect proposes in its LGIP, partially comply with the requirements of Order Nos. 845 and

<sup>&</sup>lt;sup>28</sup> Order No. 845, 163 FERC ¶ 61,043 at P 200.

<sup>&</sup>lt;sup>29</sup> Id. P 199; see also pro forma LGIP § 3.8.

- 845-A. Western Interconnect'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.
- 24. However, as specified in Order No. 845, transmission providers must include, in section 3.8 of their LGIPs, a method for determining contingent facilities.<sup>30</sup> 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.<sup>31</sup> 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.<sup>32</sup> Western Interconnect'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 Western Interconnect will use as part of its method to identify contingent facilities. Without this information, an interconnection customer will not understand how Western Interconnect will evaluate potential contingent facilities to determine their relationship to an individual interconnection request.<sup>33</sup> Further, including provisions regarding specific thresholds or criteria in Western Interconnect's LGIP will ensure Western Interconnect's technical screens or analyses will be applied to interconnection requests on a consistent, not unduly discriminatory or preferential basis.
- 25. We therefore direct Western Interconnect to describe in section 3.8 of its LGIP the specific technical screens and/or analyses that it will employ to determine which facilities are contingent facilities. Further, we also direct Western Interconnect 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.<sup>34</sup> 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

<sup>&</sup>lt;sup>30</sup> Order No. 845, 163 FERC ¶ 61,043 at P 199.

<sup>&</sup>lt;sup>31</sup> *Id.* P 200.

<sup>&</sup>lt;sup>32</sup> *Id*.

<sup>&</sup>lt;sup>33</sup> See pro forma LGIP § 3.8 ("The method shall be sufficiently transparent to determine why a specific Contingent Facility was identified.").

<sup>&</sup>lt;sup>34</sup> Order No. 845, 163 FERC ¶ 61,043 at P 220.

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 facility<sup>35</sup> 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.

26. Because Western Interconnect 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 Western Interconnect to submit a further compliance filing, within 120 days of the date of this order, which adds in section 3.8 of Western Interconnect's LGIP (1) the method Western Interconnect will use to determine contingent facilities, including technical screens or analyses it proposes to use to identify these facilities, and (2) the specific thresholds or criteria it will use in its technical screens or analysis to achieve the level of transparency required by Order No. 845, as discussed above.

#### D. Transparency Regarding Study Models and Assumptions

27. 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). 37

<sup>&</sup>lt;sup>35</sup> 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.

<sup>&</sup>lt;sup>36</sup> Order No. 845, 163 FERC ¶ 61,043 at P 236.

<sup>&</sup>lt;sup>37</sup> *Id.*; see also pro forma LGIP § 2.3.

28. 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. 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. 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. 40

## 1. Western Interconnect's Compliance Filing

29. Western Interconnect proposes revisions to its LGIP to add a new section 2.3 that incorporates the language adopted by Order Nos. 845 and 845-A without modification.<sup>41</sup>

## 2. Commission Determination

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

## **E.** Definition of Generating Facility

31. 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

 $<sup>^{38}</sup>$  Order No. 845-A, 166 FERC ¶ 61,137 at P 84 (citing Order No. 845, 163 FERC ¶ 61,043 at P 241).

<sup>&</sup>lt;sup>39</sup> *Id.* P 85 (citing 18 C.F.R. § 388.113(g)(5)(i) (2019)).

<sup>&</sup>lt;sup>40</sup> *Id.* P 88.

<sup>&</sup>lt;sup>41</sup> Western Interconnect Tariff, att. M, § 2.3.

electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities. 42

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.<sup>43</sup>

## 1. Western Interconnect's Compliance Filing

32. Western Interconnect proposes revisions to section 1 of its LGIP and its *pro forma* LGIA to incorporate the Commission's revised definition of "Generating Facility" as required by Orders No. 845 and 845-A without modification.<sup>44</sup>

## 2. <u>Commission Determination</u>

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

#### F. Interconnection Study Deadlines

34. 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.<sup>45</sup> 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.<sup>46</sup> The Commission also revised the *pro forma* LGIP to add section 3.5.4 to require transmission providers to file

<sup>&</sup>lt;sup>42</sup> Order No. 845, 163 FERC ¶ 61,043 at P 275 (additions italicized); see also pro forma LGIP § 1(Definitions).

<sup>&</sup>lt;sup>43</sup> Order No. 845, 163 FERC ¶ 61,043 at P 275.

<sup>&</sup>lt;sup>44</sup> Western Interconnect Tariff, att. M, § 1.

 $<sup>^{45}</sup>$  Order No. 845, 163 FERC  $\P$  61,043 at P 305; see also pro forma LGIP §§ 3.5.2, 3.5.3.

 $<sup>^{46}</sup>$  Order No. 845, 163 FERC  $\P$  61,043 at P 305; see also pro forma LGIP §§ 3.5.2, 3.5.3.

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. <sup>47</sup> 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. <sup>48</sup> 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. <sup>49</sup>

## 1. Western Interconnect's Compliance Filing

35. Western Interconnect proposes revisions to its LGIP to add new sections 3.5.2, 3.5.3, and 3.5.4 that incorporates the *pro forma* language of Order Nos. 845 and 845-A without modification. Additionally, Western Interconnect proposes to replace the bracketed language (1) in LGIP section 3.5.2.1 with a feasibility study completion deadline of forty-five days after Western Interconnect receives the executed study agreement, (2)in LGIP section 3.5.2.2 with a system impact study completion deadline of 90 days after Western Interconnect receives the executed study agreement, and (3) in LGIP section 3.5.2.3 with a facilities study completion deadline of 90 days with no more than +/- 10 percent cost estimate after Western Interconnect receives the executed interconnection facilities study agreement.

# 2. <u>Commission Determination</u>

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

 $<sup>^{47}</sup>$  Order No. 845, 163 FERC  $\P$  61,043 at P 305; see also pro forma LGIP  $\S$  3.5.4.

<sup>&</sup>lt;sup>48</sup> Order No. 845, 163 FERC ¶ 61,043 at P 307.

<sup>&</sup>lt;sup>49</sup> Order No. 845-A, 166 FERC ¶ 61,137 at P 107.

<sup>&</sup>lt;sup>50</sup> Western Interconnect Tariff, att. M, § 3.5.2, 3.5.3, and 3.5.4.

# G. Requesting Interconnection Service below Generating Facility Capacity

- 37. 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, <sup>51</sup> 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. <sup>52</sup>
- 38. 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.<sup>53</sup> 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.
- 39. The Commission required, in *pro forma* LGIP revised sections 6.3, 7.3, and 8.2, that the feasibility, system impact, and facilities studies be performed at the level of interconnection service that the interconnection customer requests, unless the transmission provider is otherwise required to study the full generating facility capacity due to safety and reliability concerns. The Commission stated that, if the transmission provider determines that additional network upgrades are necessary based on these studies, it must specify which additional network upgrade costs are based on which studies and provide a detailed explanation of why the additional network upgrades are necessary.<sup>54</sup>

<sup>&</sup>lt;sup>51</sup> 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).

 $<sup>^{52}</sup>$  Order No. 845, 163 FERC  $\P$  61,043 at P 367; see also pro forma LGIP §§ 3.1, 6.3, 7.3, 8.2, pro forma LGIP app. 1.

<sup>&</sup>lt;sup>53</sup> Order No. 845, 163 FERC ¶ 61,043 at PP 383-84.

<sup>&</sup>lt;sup>54</sup> *Id.* P 384. The Commission clarified that, if the transmission provider determines, based on good utility practice and related engineering considerations and

40. 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.<sup>55</sup>

## 1. Western Interconnect's Compliance Filing

41. Western Interconnect proposes revisions to its LGIP that adopt the Commission's reforms to *pro forma* LGIP sections 6.3, 7.3, and 8.2; Appendix 1; and sections 4.4.1 and 4.4.2 to incorporate the language set forth in Order Nos. 845 and 845-A without modification. However, Western Interconnect's proposed Tariff revisions do not fully incorporate the *pro forma* LGIP section 3.1 language adopted by Order No. 845. Order No. 845 adopted the following language as the second sentence of the final paragraph in *pro forma* LGIP section 3.1:

These requests for Interconnection Service shall be studied at the level of Interconnection Service requested for purposes of Interconnection Facilities, Network Upgrades, *and associated costs*, but may be subject to other studies at the full Generating Facility Capacity to ensure safety and reliability of the system, with the study costs borne by the Interconnection Customer.<sup>58</sup>

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.* 

<sup>&</sup>lt;sup>55</sup> *Id.* P 406; see also pro forma LGIP §§ 4.4.1, 4.4.2.

<sup>&</sup>lt;sup>56</sup> Western Interconnect Tariff, att. M, § 6.3, 7.3, 8.2, App. 1.

<sup>&</sup>lt;sup>57</sup> See Order No. 845-A, 166 FERC ¶ 61,137 at P 117.

 $<sup>^{58}</sup>$  Order No. 845, 163 FERC ¶ 61,043 at P 347; *see also id.* P 367. The italics indicate language adopted by Order No. 845 that Western Interconnect's Tariff revisions failed to include. We recognize, however, that the *pro forma* LGIP that was available on the Commission's website failed to include that language.

#### 2. Commission Determination

42. We find that Western Interconnect's proposed LGIP revisions that allow an interconnection customer to request interconnection service below its full generating facility capacity partially comply with the requirements of Order Nos. 845 and 845-A. Specifically, Western Interconnect adopts most of the Commission's *pro forma* LGIP language without modification. However, as discussed above, Western Interconnect's revisions to section 3.1 of its LGIP omit some of the *pro forma* LGIP language required by Order No. 845. Accordingly, we direct Western Interconnect to file, within 120 days of the date of this order, a further compliance filing that incorporates the *pro forma* revisions to section 3.1 of its LGIP, as required by Order No. 845.

## H. <u>Provisional Interconnection Service</u>

43. In Order No. 845, the Commission required transmission providers to allow all interconnection customers to request provisional interconnection service. 60 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. 61 To implement this service, the Commission revised the *pro forma* LGIP and *pro forma* LGIA to add a definition for "Provisional Interconnection Service" and for a "Provisional Large Generator Interconnection Agreement." 63

<sup>&</sup>lt;sup>59</sup> Order No. 845, 163 FERC ¶ 61,043 at PP 347, 367, and app. B.

<sup>&</sup>lt;sup>60</sup> *Id.* P 438.

<sup>&</sup>lt;sup>61</sup> *Id.* P 441.

<sup>&</sup>lt;sup>62</sup> Pro forma LGIP § 1 (Definitions); pro forma LGIA art. 1 (Definitions).

<sup>&</sup>lt;sup>63</sup> *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.

44. In addition, the Commission added *pro forma* LGIA article 5.9.2, which details the terms for provisional interconnection service.<sup>64</sup> 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.<sup>65</sup> The Commission stated that interconnection customers are responsible for the costs for performing these provisional interconnection studies.<sup>66</sup>

# 1. Western Interconnect's Compliance Filing

45. Western Interconnect proposes revisions to add the required definitions related to provisional interconnection service to its LGIP and *pro forma* LGIA, without modification. Western Interconnect also proposes to add article 5.9.2 to its *pro forma* LGIA to implement the changes set forth in Order Nos. 845 and 845-A. Western Interconnect proposes that the maximum permissible output shall be studied and updated on a frequency determined by transmission provider and at the interconnection customer's expense.

## 2. Commission Determination

46. We find that the revised provisions that establish provisional interconnection service, as proposed in Western Interconnect's *pro forma* LGIA, partially comply with the requirements of Order Nos. 845 and 845-A. Western Interconnect proposes to incorporate into its LGIP and *pro forma* LGIA the required definitions without modification, and incorporate most of article 5.9.2 of the Commission's *pro forma* LGIA. However, we note that in its LGIA article 5.9.2, Western Interconnect deleted the words "currently" and "Interconnection" in the following sentences (with missing words in italics):

Where available studies indicate that such, Interconnection Facilities, Network Upgrades, Distribution Upgrades, and/or System Protection Facilities that are required for the interconnection of a new, modified and/or expanded Generating Facility are not *currently* in place, Transmission Provider will perform a study, at Interconnection Customer's

 $<sup>^{64}</sup>$  Order No. 845, 163 FERC  $\P$  61,043 at P 438; see also pro forma LGIP  $\S$  5.9.2.

<sup>&</sup>lt;sup>65</sup> Order No. 845, 163 FERC ¶ 61,043 at P 448.

<sup>66</sup> Id.

expense, to confirm the facilities that are required for Provisional Interconnection Service.

and

Interconnection Customer assumes all risk and liabilities with respect to changes between the Provisional Large Generator *Interconnection* Agreement and the Large Generator *Interconnection* Agreement, including changes in output limits and Interconnection Facilities, Network Upgrades, Distribution Upgrades, and/or System Protection Facilities cost responsibilities.

47. In addition, Western Interconnect failed to insert language for the bracketed placeholder in the *pro forma* article 5.9.2 providing the frequency with which it will study and update the maximum permissible output of the generating facility under provisional service. We find that Western Interconnect has failed to comply with the requirements of Order Nos. 845 and 845-A with regard to these aspects of LGIA article 5.9.2. Accordingly, we direct Western Interconnect to file, within 120 days of the date of this order, a further compliance filing to correct the deleted words described above and to fill in the bracketed placeholder to state the frequency with which it will study and update the maximum permissible output of the generating facility under provisional service.

## I. Surplus Interconnection Service

48. 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.<sup>67</sup> Surplus interconnection service enables a new interconnection customer to utilize the unused portion of an existing interconnection customer's interconnection service within specific parameters.<sup>68</sup> 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

 $<sup>^{67}</sup>$  Order No. 845, 163 FERC  $\P$  61,043 at P 467; see also pro forma LGIP  $\S$  1; pro forma LGIA art. 1 (Definitions).

 $<sup>^{68}</sup>$  Order No. 845, 163 FERC ¶ 61,043 at P 467; Order No. 845-A, 166 FERC ¶ 61,137 at P 119.

process outside of the interconnection queue for surplus interconnection service. <sup>69</sup> 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. 70 The transmission provider must perform reactive power, short circuit/fault duty, and stability analyses studies as well as steady-state (thermal/voltage) analyses as necessary to ensure evaluation of all required reliability conditions to provide surplus interconnection service and ensure the reliable use of surplus interconnection service.<sup>71</sup> 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.<sup>72</sup> 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.<sup>73</sup>

## 1. Western Interconnect's Proposal

- 49. Western Interconnect proposes revisions to add sections 1, 3.3 and 3.3.1 to its LGIP, and article 1 to its *pro forma* LGIA, to comply with the Commission's directives in Order Nos. 845 and 845-A. Western Interconnect proposes to adopt the Commission's *pro forma* LGIP and *pro forma* LGIA revisions for surplus interconnection service as required by Order Nos. 845 and 845-A without modification.
- 50. Western Interconnect also proposes a process under which requests for surplus interconnection service will be processed. Proposed LGIP section 3.3.1 states that all notifications and requests for surplus interconnection service shall be posted on the Western Interconnect's OASIS and processed outside the interconnection queue. The interconnection customer will tender a study deposit of \$10,000 and execute a system impact study agreement. Western Interconnect will perform a system impact study

 $<sup>^{69}</sup>$  Order No. 845, 163 FERC  $\P$  61,043 at P 467; see also pro forma LGIP §§ 3.3, 3.3.1.

<sup>&</sup>lt;sup>70</sup> Order No. 845, 163 FERC ¶ 61,043 at P 483; see also pro forma LGIP § 3.3.

<sup>&</sup>lt;sup>71</sup> Order No. 845, 163 FERC ¶ 61,043 at PP 455 and 467.

<sup>&</sup>lt;sup>72</sup> *Id.* P 481.

<sup>&</sup>lt;sup>73</sup> *Id.* P 499.

consisting of reactive power, short circuit/fault duty, and stability analyses, and any additional studies deemed necessary to evaluate the interconnection request, such as steady-state (thermal/voltage) analyses. If Western Interconnect determines through the system impact study that additional interconnection facilities or network upgrades would be necessary, the request for surplus interconnection service will be denied. Western Interconnect states that it will use reasonable efforts to complete the system impact study for surplus interconnection service requests within 90 days of receipt of the executed study agreement, study deposit, and requisite technical data.

51. Western Interconnect proposes in its LGIP section 3.3.3 a process for providing a surplus interconnection service agreement. Within thirty days of delivering the system impact study to the interconnection customer, Western Interconnect will provide a draft surplus interconnection service agreement to the interconnection customer to be executed within thirty days. Western Interconnect will file all executed surplus interconnection service agreements with the Commission within 10 business days after receipt of the executed agreement. Within 10 business days following the receipt of a request to file an unexecuted agreement, Western Interconnect will file the unexecuted surplus interconnection service agreement with the Commission, together with an explanation of any matters as to which the interconnection customer and Western Interconnect disagree and support for the costs that Western Interconnect proposes to charge to the interconnection customer under the surplus interconnection service agreement.

## 2. <u>Commission Determination</u>

52. We find that Western Interconnect's proposed Tariff revisions regarding surplus interconnection service comply with the requirements of Order Nos. 845 and 845-A because Western Interconnect adopts the *pro forma* definition of surplus interconnection service and *pro forma* provisions in LGIP sections 3.3 and 3.3.1 without modification. We also find that Western Interconnect's proposed process for evaluating surplus interconnection service complies with the requirements of Order Nos. 845 and 845-A. The process provides that Western Interconnect will evaluate surplus interconnection service requests outside of its non-surplus interconnection queue. Additionally, as required by Order Nos. 845 and 845-A, Western Interconnect'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.

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

53. 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,<sup>74</sup> 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.<sup>75</sup> In addition, the Commission modified section 4.4.6 of the *pro forma* LGIP to require transmission providers to insert a technological change procedure that includes the requisite information and process that the transmission provider will follow to assess whether an interconnection customer's proposed technological advancement is a material modification.<sup>76</sup>

- 54. 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. 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. 78
- 55. The Commission also required that the technological change procedure specify the conditions under which a study will or will not be necessary to determine whether a proposed technological advancement is a material modification. The Commission explained that the technological change procedure must also state that, if a study is necessary to evaluate whether a particular technological advancement is a material modification, the transmission provider shall clearly indicate to the interconnection

<sup>&</sup>lt;sup>74</sup> 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.

<sup>&</sup>lt;sup>75</sup> *Id.* P 518.

 $<sup>^{76}</sup>$  Id.; see also pro forma LGIP § 4.4.6.

<sup>&</sup>lt;sup>77</sup> Order No. 845, 163 FERC ¶ 61,043 at P 519.

<sup>&</sup>lt;sup>78</sup> *Id*.

<sup>&</sup>lt;sup>79</sup> *Id*.: Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

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.<sup>80</sup> 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.<sup>81</sup>

- 56. Further, the Commission required that the technological change procedure outline a time frame of no more than thirty days after the interconnection customer submits a formal technological advancement request for the transmission provider to perform and complete any necessary additional studies.<sup>82</sup> The Commission also found that, if the transmission provider determines that additional studies are needed to evaluate whether a technological advancement is a material modification, the interconnection customer must tender a deposit, and the transmission provider must specify the amount of the deposit in the transmission provider's technological change procedure.<sup>83</sup> 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.
- 57. 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

<sup>&</sup>lt;sup>80</sup> Order No. 845, 163 FERC ¶ 61,043 at P 521.

<sup>81</sup> Id. P 521

<sup>82</sup> *Id.* P 535.

<sup>&</sup>lt;sup>83</sup> *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.* 

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.<sup>84</sup>

## 1. Western Interconnect's Compliance Filing

58. Western Interconnect proposes revisions to section 1 of its LGIP to incorporate the following definition of permissible technological advancement:

Permissible Technological Advancement shall mean modification to turbines, inverters, plant supervisory controls or other technological advancements that do not have a material impact on the cost or timing of any Interconnection Request with a later queue priority date. A Permissible Technological Advancement results in electrical performance that is equal to or better that [sic] the electric performance expected prior to the technology change and does not cause any reliability concerns or degrade the electrical characteristics of the generating equipment (e.g., the ratings, impedances, efficiencies, capabilities, and performance of the equipment under steady-state and dynamic conditions), and does not include changes in generation technology or fuel type.

- 59. Western Interconnect also proposes revisions to section 4.4.2 of its LGIP that adopt the Commission's *pro forma* language without modification.
- 60. Western Interconnect proposes a technological change procedure in its LGIP section 4.4.6. Under the proposal, an interconnection customer may submit "a written request to the transmission provider to make modifications to the Large Generating Facility's technology" at any point prior to the return of the interconnection facilities study agreement. Western Interconnect will review the interconnection customer's request and determine whether additional study is needed. If the proposed technological advancement does not change the technical specifications for the large generating facility, the modifications shall be deemed a permissible technological advancement and no further action shall be required. If additional study is needed, Western Interconnect will collect a \$10,000 study deposit and use reasonable efforts to update studies within thirty days to determine whether the request constitutes a material modification. If further study indicates that previously identified interconnection facilities and network upgrades

<sup>&</sup>lt;sup>84</sup> Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

are inadequate, the request will be deemed a material modification; otherwise, the request will be deemed a permissible technological advancement.

#### 2. Commission Determination

- 61. We find that Western Interconnect'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 Western Interconnect'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.
- 62. Western Interconnect's technological change procedure states that an interconnection customer may submit "a written request to the transmission provider to make modifications to the Large Generating Facility's technology." However, Order No. 845 required the technological change procedure to state that the interconnection customer should submit a "technological advancement request" if it seeks to incorporate technological advancements into its proposed generating facility. Requiring the interconnection customer to submit a technological change request provides clarity with regard to whether the transmission provider is evaluating the request under the new technological change procedure, or the existing material modification assessment procedures. Therefore, we direct Western Interconnect to submit a further compliance filing, within 120 days of the date of this order, that revises its technological change procedure to state that an interconnection customer should submit a "technological advancement request" if it seeks to incorporate the technological advancements into its proposed generating facility.
- 63. We also find that the use of the undefined term "technical specifications" in Western Interconnect's proposed technological change procedure makes it unclear how Western Interconnect will determine whether a proposed technological change is a permissible technological advancement. Accordingly, we direct Western Interconnect's to submit a further compliance filing, within 120 days of the date of this order, that revises section 4.4.6 of its LGIP to clarify how it will assess changes to a generating facility's technical specifications.
- 64. Order No. 845 also requires that the technological change procedure explain how the transmission provider will evaluate the technological advancement request to determine whether it is a material modification. Western Interconnect's proposed LGIP revisions propose to "update studies" to determine whether the request constitutes a

<sup>&</sup>lt;sup>85</sup> Order No. 845-A, 166 FERC ¶ 61,137 at P 519.

<sup>86</sup> Id. P 521.

material modification, but Western Interconnect does not explain which "studies" it will update in its evaluation. Accordingly, we direct Western Interconnect to file, within 120 days of the date of this order, a further compliance filing revising its technological change procedure to provide a detailed explanation of the studies that Western Interconnect will conduct to determine whether the technological advancement request will result in a material modification.

- 65. 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 thirty days of the initial request. Thowever, Western Interconnect's proposed revisions to LGIP section 4.4.6 provide that Western Interconnect will use "reasonable efforts" to update studies within thirty days after the receipt of the deposit, rather than the receipt of the original request. Order No. 845 establishes a thirty day requirement to determine whether the proposed technological change is a material modification and does not allow for the use of "reasonable efforts" to achieve this timeline. Accordingly, we direct Western Interconnect to file, within 120 days of the date of this order, a further compliance filing that revises its proposed technological change procedure to: (1) remove the "reasonable efforts" language; and (2) provide that Western Interconnect will determine whether or not a technological advancement is a material modification within thirty calendar days of receipt of the initial request.
- 66. Further, because Western Interconnect's filing is silent on whether it will provide an explanation to the interconnection customer regarding why the technological advancement is a material modification, we reiterate that the transmission provider is required to do so if it cannot accommodate a proposed technological advancement without triggering the material modification provision of the *pro forma* LGIP.<sup>89</sup>

#### K. Other Issues

67. Western Interconnect proposes various modifications to the Commission's adopted language in its Tariff that appear to be non-material insertions, deletions, and typographical errors. These errors are found in LGIP sections 2.3, 3.5.2.1, 3.5.2.3, 3.5.3, and 3.5.4, and LGIA articles 5.1.4 and 5.9.2. We direct Western Interconnect to submit

 $<sup>^{87}</sup>$  Order No. 845, 163 FERC  $\P$  61,043 at P 535; Order No. 845-A, 166 FERC  $\P$  61,137 at P 155.

<sup>&</sup>lt;sup>88</sup> Order No. 845, 163 FERC ¶ 61,043 at P 535.

<sup>89</sup> Id. P 522.

a further compliance filing within 120 days of the date of this order to remedy these non-substantive modifications and errors.

#### The Commission orders:

- (A) Western Interconnect'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) Western Interconnect 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.

(SEAL)

Nathaniel J. Davis, Sr., Deputy Secretary.