

170 FERC ¶ 61,213  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

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

Smoky Mountain Transmission LLC

Docket Nos. ER19-2233-000  
ER19-2233-001

ORDER ON COMPLIANCE

(Issued March 19, 2020)

1. On June 21, 2019, as amended on July 12, 2019, Smoky Mountain Transmission LLC (Smoky Mountain) submitted proposed revisions to its Open Access Transmission Tariff (Tariff) to comply with the requirements of Order Nos. 845 and 845-A,<sup>1</sup> which amended the Commission's *pro forma* Large Generator Interconnection Agreement (LGIA) and *pro forma* Large Generator Interconnection Procedures (LGIP).<sup>2</sup> As discussed below, we find that Smoky Mountain's compliance filing partially complies with the requirements of Order Nos. 845 and 845-A. Accordingly, we accept Smoky Mountain's compliance filing, effective May 22, 2019, and direct Smoky Mountain 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 reforms will provide interconnection customers better information and more options for obtaining interconnection service, and as a result, there will be fewer overall

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<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>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.

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 ten different reforms in three categories to improve the interconnection process. First, in order to improve certainty for interconnection customers, the Commission: (1) removed the limitation that interconnection customers may exercise the option to build the transmission provider's interconnection 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>

4. Second, to promote more informed interconnection decisions, the Commission: (1) required transmission providers to outline and make public a method for determining

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

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

<sup>7</sup> *Id.* P 3.

contingent facilities;<sup>8</sup> (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.<sup>9</sup>

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. Smoky Mountain’s Compliance Filing**

6. On June 21, 2019, as amended on July 12, 2019,<sup>12</sup> Smoky Mountain submitted a compliance filing with proposed revisions to its Tariff, including revisions to its LGIP

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<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 ¶ 61,043 at P 4.

<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>11</sup> *Id.* P 5.

<sup>12</sup> Smoky Mountain amended its filing to add a new section 38.3.2 to its LGIP, which includes a process for surplus interconnection service.

and *pro forma* LGIA, to comply with the requirements of Order Nos. 845 and 845-A.<sup>13</sup> Smoky Mountain requests that the Commission make the proposed Tariff revisions in its compliance filing effective on May 22, 2019, consistent with the effective date established in Order No. 845-A.

7. Smoky Mountain states that it 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 models and assumptions, definition of a generating facility, requesting interconnection service below generating facility capacity, and provisional interconnection service.

8. Smoky Mountain 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, Smoky Mountain proposes Tariff revisions for the following reforms: interconnection study deadlines, surplus interconnection service, and material modifications and incorporation of advanced technologies.

### **III. Notice and Responsive Pleadings**

9. Notice of the June 21, 2019 filing was published in the *Federal Register*, 84 Fed. Reg. 30,710 (2019), with interventions and protests due on or before July 12, 2019. On June 25, 2019, an errata notice was issued shortening the due date for interventions and protests to July 5, 2019.<sup>14</sup> None was filed.

10. Notice of the July 12, 2019 amended filing was published in the *Federal Register*, 84 Fed. Reg. 34,882 (2019), with interventions and protests due on or before August 2, 2019. None was filed.

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<sup>13</sup> Smoky Mountain's Tariff section numbering differs from the Commission's *pro forma* LGIP. Rather than beginning at section 1, Smoky Mountain's Tariff provisions for its LGIP begin at section 36. However, Smoky Mountain's Tariff article numbering for its *pro forma* LGIA reflects the numbering contained in the Commission's *pro forma* LGIA.

<sup>14</sup> Errata Notice Shortening Comment Period, *Smoky Mountain Transmission LLC*, Docket No. ER19-2233-000 (June 25, 2019).

#### IV. Discussion

##### A. Substantive Matters

11. As discussed below, we find that Smoky Mountain's compliance filing partially complies with the requirements of Order Nos. 845 and 845-A. Accordingly, we accept Smoky Mountain's compliance filing, effective May 22, 2019, subject to a further compliance filing that must be submitted within 120 days of the date of this order, as discussed below.

##### 1. Interconnection Customer's Option to Build

12. In Order No. 845, the Commission revised articles 5.1, 5.1.3, and 5.1.4 of the *pro forma* LGIA to allow interconnection customers to unilaterally exercise the option to build for stand alone network upgrades and the transmission provider's interconnection facilities, regardless of whether the transmission provider can complete construction of such facilities by the interconnection customer's proposed in-service date, initial synchronization date, or commercial operation date.<sup>15</sup> 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.<sup>16</sup> 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."<sup>17</sup>

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

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

<sup>16</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>17</sup> Order No. 845, 163 FERC ¶ 61,043 at P 85.

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

**a. Smoky Mountain's Compliance Filing**

14. Smoky Mountain proposes to revise the definition of stand alone network upgrades in its LGIP and *pro forma* LGIA to incorporate revisions to the definition adopted in Order Nos. 845 and 845-A without modification.<sup>22</sup> Smoky Mountain also proposes revisions to its *pro forma* LGIA to amend articles 5.1, 5.1.3, 5.1.4, and 5.2(12) to incorporate the *pro forma* LGIA provisions adopted by Order Nos. 845 and 845-A without modification.

**b. Commission Determination**

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

**2. 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>23</sup> The

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

<sup>19</sup> *Id.* P 61.

<sup>20</sup> *Id.* P 75.

<sup>21</sup> *Id.* P 33.

<sup>22</sup> *Id.* P 68; *see also* Smoky Mountain proposed LGIP § 1 (Definitions), "Stand Alone Network Upgrades," and Smoky Mountain *pro forma* LGIA art. 1 (Definitions), "Stand Alone Network Upgrades."

<sup>23</sup> Order No. 845, 163 FERC ¶ 61,043 at P 133; *see also pro forma* LGIP § 13.5.5.

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>24</sup>

**a. Smoky Mountain's Compliance Filing**

17. In a new section 48.5.5 of its LGIP, Smoky Mountain proposes to adopt the Commission's new section 13.5.5 of the *pro forma* LGIP without modification.

**b. Commission Determination**

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

**3. Identification and Definition of Contingent Facilities**

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.<sup>25</sup> 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.<sup>26</sup> 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.<sup>27</sup> The Commission stated that this transparency will ensure that the method is

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<sup>24</sup> Order No. 845, 163 FERC ¶ 61,043 at P 139.

<sup>25</sup> *Id.* P 218; *see also pro forma* LGIP § 1 (Definitions).

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

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

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>

**a. Smoky Mountain's Compliance Filing**

20. Smoky Mountain proposes to add a new section 38.8 to its LGIP to provide a method for identifying and listing contingent facilities in the system impact study. The proposed section states that the transmission provider shall 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. Proposed section 38.8 also explains that any such planned upgrades, contingent facilities or planned transmission projects upon which the interconnection request's costs, timing, and study findings are dependent, and if delayed or not built, could cause a need for restudies of the interconnection request or a reassessment of the interconnection facilities and/or network upgrades and/or costs and timing, shall each be identified and listed in the system impact study. The proposed section also states that the transmission provider shall provide a written explanation as to why a facility was identified as a contingent facility and how it relates to the interconnection request. Further, proposed section 38.8 states that the transmission provider shall 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.

**b. Commission Determination**

21. We find that the revised provisions that identify and describe Smoky Mountain's method for determining contingent facilities, as Smoky Mountain proposes in its LGIP, partially comply with the requirements of Order Nos. 845 and 845-A. We find that Smoky Mountain complies with the requirements of Order Nos. 845 and 845-A because Smoky Mountain has adopted the definition of contingent facilities and the language regarding the need for the transmission provider to include in LGIP section 38.8 a method for identification of contingent facilities without modification. Further, Smoky

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

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



Mountain'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.

22. However, as specified in Order No. 845, transmission providers must include, in 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> Smoky Mountain'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 Smoky Mountain will use as part of its method to identify contingent facilities. Without this information, an interconnection customer will not understand how Smoky Mountain 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 Smoky Mountain's LGIP will ensure Smoky Mountain's technical screens or analyses will be applied to interconnection requests on a consistent, not unduly discriminatory or preferential basis.

23. We therefore direct Smoky Mountain to describe in section 38.8 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 Smoky Mountain 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

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

<sup>31</sup> *Id.* P 200.

<sup>32</sup> *Id.*

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

specify the triggering percentage impact that causes a facility to be considered contingent. Similarly, if a transmission provider relies on the system impact study to identify which facilities the new generating facility will impact, it must specify in its tariff which power system performance attributes (voltages, power flows, etc.) violated a specific threshold of a 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.

24. Because Smoky Mountain 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 Smoky Mountain to submit a further compliance filing, within 120 days of the date of this order, which adds in section 38.8 of Smoky Mountain's LGIP (1) the method Smoky Mountain 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.

#### **4. Transparency Regarding Study Models and Assumptions**

25. 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."<sup>36</sup> 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).<sup>37</sup>

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

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

26. 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.<sup>38</sup> 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.<sup>39</sup> 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.<sup>40</sup>

**a. Smoky Mountain’s Compliance Filing**

27. Smoky Mountain proposes to revise section 37.3 of its LGIP to incorporate the language regarding study models and assumptions adopted by Order Nos. 845 and 845-A without modification.

**b. Commission Determination**

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

**5. Definition of Generating Facility**

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

Generating Facility shall mean Interconnection Customer’s device for the production *and/or storage for later injection* of electricity identified in the Interconnection Request, but shall

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

<sup>40</sup> *Id.* P 88.

not include the interconnection customer's Interconnection Facilities.<sup>41</sup>

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>42</sup>

**a. Smoky Mountain's Compliance Filing**

30. Smoky Mountain proposes revisions to its LGIP and *pro forma* LGIA to incorporate the revised definition of "Generating Facility" adopted by Order Nos. 845 and 845-A without modification.<sup>43</sup>

**b. Commission Determination**

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

**6. Interconnection Study Deadlines**

32. 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>44</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>45</sup> The Commission also revised the *pro forma* LGIP to add section 3.5.4 to require transmission providers to file

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<sup>41</sup> Order No. 845, 163 FERC ¶ 61,043 at P 275 (additions italicized); *see also pro forma* LGIP § 1.

<sup>42</sup> Order No. 845, 163 FERC ¶ 61,043 at P 275.

<sup>43</sup> Smoky Mountain proposed LGIP § 1, "Generating Facility;" *see also* Smoky Mountain *pro forma* LGIA art. 1.

<sup>44</sup> Order No. 845, 163 FERC ¶ 61,043 at P 305; *see also pro forma* LGIP §§ 3.5.2 and 3.5.3.

<sup>45</sup> *Id.*

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>46</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>47</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>48</sup>

**a. Smoky Mountain’s Compliance Filing**

33. Smoky Mountain proposes revisions to its LGIP to add new sections 38.5.2, 38.5.3 and 38.5.4, that incorporate the *pro forma* language of Order Nos. 845 and 845-A without modification. In addition, Smoky Mountain proposes Tariff revisions to LGIP section 38.5.2.1 to provide for a feasibility study completion deadline of “45 Calendar Days;” LGIP section 38.5.2.2 to provide for a system impact study completion deadline of “90 Calendar Days;” and LGIP section 38.5.2.3 to provide for a facilities study completion deadline of “ninety (90) or one hundred eighty (180) Calendar Days, as appropriate for that study before the quarter end.”

**b. Commission Determination**

34. We find that the revised provisions that address Smoky Mountain’s study deadline statistics and informational reporting requirements, as proposed in Smoky Mountain’s LGIP, comply with the requirements of Order Nos. 845 and 845-A because Smoky Mountain 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.

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

35. 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

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<sup>46</sup> Order No. 845, 163 FERC ¶ 61,043 at P 305; *see also pro forma* LGIP § 3.5.4.

<sup>47</sup> Order No. 845, 163 FERC ¶ 61,043 at P 307.

<sup>48</sup> Order No. 845-A, 166 FERC ¶ 61,137 at P 107.

interconnection service that is lower than the proposed generating facility's capacity,<sup>49</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>50</sup>

36. 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>51</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.

37. 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>52</sup>

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<sup>49</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.

<sup>50</sup> 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.

<sup>51</sup> Order No. 845, 163 FERC ¶ 61,043 at PP 383-84.

<sup>52</sup> *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

38. 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>53</sup>

**a. Smoky Mountain's Compliance Filing**

39. Smoky Mountain proposes revisions to its LGIP that largely adopt the Commission's proposed reforms to *pro forma* LGIP sections 38.1, 39.4.1, 39.4.2, 41.3, 42.3, and 43.2, and Appendix 1 to incorporate the language set forth in Order Nos. 845 and 845-A without modification. However, Smoky Mountain's proposed Tariff revisions do not fully incorporate the *pro forma* LGIP language adopted by Order No. 845.<sup>54</sup> Order No. 845 adopted the following language as the second sentence of the final paragraph in *pro forma* LGIP section 3.1 and Smoky Mountain omits some of this provision in its LGIP section 38.1:

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>55</sup>

**b. Commission Determination**

40. We find that Smoky Mountain'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. Smoky Mountain adopts most of the *pro forma* language without modification. However, as discussed above, Smoky Mountain's revisions to section 38.1 of its LGIP

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generating facility capacity, then it must provide a detailed explanation for such a determination in writing to the interconnection customer. *Id.*

<sup>53</sup> *Id.* P 406; *see also pro forma* LGIP §§ 4.4.1 and 4.4.2.

<sup>54</sup> *See* Order No. 845-A, 166 FERC ¶ 61,137 at P 117.

<sup>55</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 Smoky Mountain'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.

omit some of the *pro forma* LGIP language required by Order No. 845.<sup>56</sup> Accordingly, we direct Smoky Mountain to file, within 120 days of the date of this order, a further compliance filing that incorporates the *pro forma* revisions to section 38.1 of its LGIP, as required by Order No. 845.

## 8. Provisional Interconnection Service

41. In Order No. 845, the Commission required transmission providers to allow all interconnection customers to request provisional interconnection service.<sup>57</sup> 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.<sup>58</sup> To implement this service, the Commission revised the *pro forma* LGIP and *pro forma* LGIA to add a definition for “Provisional Interconnection Service”<sup>59</sup> and for a “Provisional Large Generator Interconnection Agreement.”<sup>60</sup>

42. In addition, the Commission added *pro forma* LGIA article 5.9.2, which details the terms for provisional interconnection service.<sup>61</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>62</sup> The

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<sup>56</sup> *Id.* PP 347, 367, & app. B.

<sup>57</sup> *Id.* P 438.

<sup>58</sup> *Id.* P 441.

<sup>59</sup> *Pro forma* LGIP § 1 (Definitions); *pro forma* LGIA art. 1 (Definitions).

<sup>60</sup> *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.

<sup>61</sup> *Id.* P 438; *see also pro forma* LGIP § 5.9.2.

<sup>62</sup> Order No. 845, 163 FERC ¶ 61,043 at P 448.



Commission stated that interconnection customers are responsible for the costs for performing these provisional interconnection studies.<sup>63</sup>

**a. Smoky Mountain's Compliance Filing**

43. Smoky Mountain proposes revisions to adopt the Commission's *pro forma* definitions related to provisional interconnection service and the *pro forma* language in LGIA article 5.9.2 without modification.<sup>64</sup> In its *pro forma* LGIA article 5.9.2, Smoky Mountain also proposes to fill in the bracketed placeholder to state that it will study and update the maximum permissible output of generating facilities taking provisional interconnection service on an annual basis.

**b. Commission Determination**

44. We find that Smoky Mountain's proposed LGIP and *pro forma* LGIA revisions regarding provisional interconnection service comply with the requirements of Order Nos. 845 and 845-A because Smoky Mountain adopts the Commission's *pro forma* definition of provisional interconnection service and incorporates article 5.9.2 of the Commission's *pro forma* LGIA without modification, except to fill in the bracketed placeholder to state that it will study and update the maximum permissible output of generating facilities taking provisional interconnection service on an annual basis.<sup>65</sup>

**9. Surplus Interconnection Service**

45. 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>66</sup> Surplus interconnection service enables a new interconnection customer to utilize the unused portion of an existing interconnection customer's interconnection service within specific

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<sup>63</sup> *Id.*

<sup>64</sup> Smoky Mountain proposed LGIP § 1 (Definitions), "Provisional Interconnection Service;" *see also* Smoky Mountain *pro forma* LGIA art. 1 (Definitions), "Provisional Interconnection Service;" art. 5.9.2 (Provisional Interconnection Service).

<sup>65</sup> Order No. 845, 163 FERC ¶ 61,043 at PP 438, 448.

<sup>66</sup> *Id.* P 467; *see pro forma* LGIP § 1 (Definitions); *pro forma* LGIP art. 1 (Definitions).

parameters.<sup>67</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 process outside of the interconnection queue for surplus interconnection service.<sup>68</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.<sup>69</sup> 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>70</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>71</sup> When the 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>72</sup>

**a. Smoky Mountain's Compliance Filing**

46. Smoky Mountain proposes revisions to sections 36, 38.3, and 38.3.1 of its LGIP and article 1 of its *pro forma* LGIA to comply with the Commission's directives in Order Nos. 845 and 845-A. In those revised sections, Smoky Mountain adopts the Commission's *pro forma* LGIP and *pro forma* LGIA revisions for surplus interconnection service without modification.

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<sup>67</sup> Order No. 845, 163 FERC ¶ 61,043 at P 467; Order No. 845-A, 166 FERC ¶ 61,137 at P 119.

<sup>68</sup> Order No. 845, 163 FERC ¶ 61,043 at P 467; *see pro forma* LGIP §§ 3.3 and 3.3.1.

<sup>69</sup> Order No. 845, 163 FERC ¶ 61,043 at P 483; *see pro forma* LGIP § 3.3.

<sup>70</sup> Order No. 845, 163 FERC ¶ 61,043 at PP 455, 467.

<sup>71</sup> *Id.* P 481.

<sup>72</sup> *Id.* P 499.

47. Smoky Mountain proposes a new section 38.3.2 (Surplus Interconnection Study and Agreement) in its LGIP, which describes a process for interconnection customers to use surplus interconnection service.<sup>73</sup> In this section, Smoky Mountain proposes that a surplus interconnection customer will execute an appropriate study agreement and provide a deposit of \$10,000 within 5 business days after execution of the study agreement. This provision also provides the surplus interconnection customer shall compensate the transmission provider for the actual cost of the studies, and that any studies conducted under section 38.3.1 will be completed outside the interconnection queue within 60 calendar days after execution of the study agreement. Smoky Mountain also proposes that the transmission provider, original interconnection customer, and surplus interconnection customer shall develop any agreements necessary to establish the parameters of the surplus interconnection agreement, and will file such agreements with the Commission. Smoky Mountain further proposes that a transmission provider is not required to execute a surplus interconnection agreement if the agreements do not meet the definition set forth in its Tariff or if the surplus interconnection customer does not agree to the terms of such service.<sup>74</sup>

**b. Commission Determination**

48. We find that Smoky Mountain's proposed Tariff revisions regarding surplus interconnection service comply with the requirements of Order Nos. 845 and 845-A because Smoky Mountain adopts the *pro forma* LGIP and *pro forma* LGIA revisions for surplus interconnection service, as required by Order Nos. 845 and 845-A, without modification, and also proposes a procedure by which it will evaluate surplus interconnection service requests in a separate queue.

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

49. 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>75</sup> without risking the loss of its queue position. The

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<sup>73</sup> Smoky Mountain proposed LGIP § 38.3.2.

<sup>74</sup> *Id.*

<sup>75</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

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>76</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>77</sup>

50. 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.<sup>78</sup> 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.<sup>79</sup>

51. 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.<sup>80</sup> 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.<sup>81</sup> In addition, the Commission required that

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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>76</sup> *Id.* P 518.

<sup>77</sup> *Id.*; *see also pro forma* LGIP § 4.4.6.

<sup>78</sup> Order No. 845, 163 FERC ¶ 61,043 at P 519.

<sup>79</sup> *Id.*

<sup>80</sup> *Id.*; Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

<sup>81</sup> Order No. 845, 163 FERC ¶ 61,043 at P 521.

the technological change procedure explain how the transmission provider will evaluate the technological advancement request to determine whether it is a material modification.<sup>82</sup>

52. Further, the Commission required that the technological change procedure outline a time frame of no more than 30 days after the interconnection customer submits a formal technological advancement request for the transmission provider to perform and complete any necessary additional studies.<sup>83</sup> 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.<sup>84</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.<sup>85</sup>

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

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

<sup>83</sup> *Id.* P 535.

<sup>84</sup> *Id.* P 534. The Commission set the default deposit amount to \$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.*

<sup>85</sup> *Id.* P 522.

whether the proposed technological change materially impacts the timing and costs of lower-queued interconnection customers.<sup>86</sup>

a. **Smoky Mountain's Compliance Filing**

54. Smoky Mountain proposes revisions to its LGIP and its *pro forma* LGIA that incorporate a new section 4.4.6 to the LGIP and add a definition of permissible technological advancement to section 36 of its LGIP. The definition states that:

**Permissible Technological Advancement** shall mean an advancement in turbines, inverters, plant supervisory controls, or other advancement that achieves cost or grid performance efficiencies and: (1) does not increase the Interconnection Customer's requested Interconnection service; (2) does not cause any adverse impacts to the Transmission System; (3) does not cause any reliability concerns; (4) does not degrade the electrical characteristics of the generating equipment (including but not limited to the ratings, impedances, efficiencies, capabilities, and performance of the equipment under steady-state and dynamic conditions); and (5) does not change the generation technology or fuel type.

55. Smoky Mountain proposes to include a new section 39.4.4 in its LGIP that describes the procedure by which an interconnection customer may submit a written request, prior to the return of the interconnection facilities study agreement, to make a technological change to its generating facility. Smoky Mountain's proposed language in section 39.4.4 states that such written requests must include a description of the proposed technological change and must provide details necessary to demonstrate that the proposed technological advancement would result in electrical performance that is equal to, or better than, the electrical performance expected prior to the proposed technology advancement and would not cause any reliability concern. Smoky Mountain's proposed tariff language explains that "if the proposed technological advancement does not meet the definition of a Permissible Technological Advancement, the Transmission Provider will review the information provided in the proposed technological advancement request and any impact on lower queued projects to determine whether a requested technological advancement is a Material Modification or whether a study is necessary to determine whether the technological advancement is a Material Modification."<sup>87</sup>

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<sup>86</sup> Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

<sup>87</sup> Smoky Mountain proposed LGIP § 39.4.4.

56. Smoky Mountain's proposed LGIP section 39.4.4 further states that if the transmission provider finds a study is necessary to determine whether a proposed change may be a material modification, then the interconnection customer will provide a study deposit of \$10,000 and any appropriate study scenarios, modeling data, and other assumptions within five business days after notification that additional studies are required. Smoky Mountain's proposed LGIP section 39.4.4 concludes by stating that studies conducted under this section will be completed within 30 calendar days after the interconnection customer submits its proposed technological advancement request.<sup>88</sup>

**b. Commission Determination**

57. We find that Smoky Mountain's proposed LGIP revisions to incorporate a definition of a permissible technological advancement and a technological change procedure partially comply with the requirements of Order Nos. 845 and 845-A. Specifically, we find that Smoky Mountain'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.

58. However, although Smoky Mountain established a procedure by which to evaluate a technological change proposed by an interconnection customer, we find that Smoky Mountain's proposed LGIP section 39.4.4 does not include an explanation of the studies that Smoky Mountain will conduct to determine whether a proposed technological change will be deemed to be a material modification. 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.<sup>89</sup> Accordingly, we direct Smoky Mountain to file, within 120 days of the date of this order, a further compliance filing to provide a more detailed explanation of the studies that Smoky Mountain will conduct to determine whether the technological advancement request will result in a material modification.

59. In addition, we note that there is a typographical error in Smoky Mountain's proposed section 39.4.4: the reference to "this Section 4.4.4" should read "this Section 39.4.4." Therefore, we direct Smoky Mountain to file, within 120 days of the date of this order, a further compliance filing to remedy this typographical error described above.

60. Finally, because Smoky Mountain'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

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<sup>88</sup> *Id.*

<sup>89</sup> Order No. 845, 163 FERC ¶ 61,043 at P 521.

required to do so if it cannot accommodate a proposed technological advancement without triggering the material modification provision of the *pro forma* LGIP.<sup>90</sup>

The Commission orders:

(A) Smoky Mountain'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) Smoky Mountain is hereby directed to submit a further compliance filing, within 120 days of the date of issuance of this order, as discussed in the body of this order.

By the Commission.

( S E A L )

Kimberly D. Bose,  
Secretary.

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<sup>90</sup> *Id.* P 522.