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## FEDERAL ENERGY REGULATORY COMMISSION

\*1 Commission Opinions, Orders and Notices

Before Commissioners: Pat Wood, III, Chairman; William L. Massey, and Nora Mead Brownell.

Standardization of Generator Interconnection Agreements and Procedures

Docket No. RM02-1-000 FINAL RULE (Issued July 24, 2003)

ORDER NO. 2003

### I. INTRODUCTION

- 1. This Final Rule requires all public utilities that own, control or operate facilities used for transmitting electric energy in interstate commerce to have on file standard procedures and a standard agreement for interconnecting generators larger than 20 MW. The Commission expects that this Final Rule will prevent undue discrimination, preserve reliability, increase energy supply, and lower wholesale prices for customers by increasing the number and variety of new generation that will compete in the wholesale electricity market.
- 2. This Final Rule requires public utilities that own, control, or operate facilities for transmitting electric energy in interstate commerce to file revised open access transmission tariffs (OATTs) to add Standard Large Generator Interconnection Procedures (Final Rule LGIP) <sup>1</sup> and a Standard Large Generator Interconnection Agreement (Final Rule LGIA). <sup>2</sup> Any non-public utility that seeks voluntary compliance with the reciprocity condition of an open access transmission tariff may satisfy this condition by adopting this Agreement and these procedures.
- 3. The Final Rule LGIP sets forth the procedures that Interconnection Customers and Transmission Providers are required to follow during the interconnection process. The Final Rule LGIA sets forth the legal rights and obligations of each Party, addresses cost responsibility issues, and establishes a process for resolving disputes.
- 4. The Federal Energy Regulatory Commission's (Commission's) authority to require the addition of the Final Rule LGIA and Final Rule LGIP to the OATT derives from its findings of undue discrimination in the interstate electric transmission market that formed the basis for Order No. 888. The Commission here adopts standard procedures and a standard agreement to be used by Transmission Providers with Interconnection Customers proposing to interconnect a generator of more than 20 MW to sell energy at wholesale in interstate commerce. The Final Rule LGIP and Final Rule LGIA apply to any new Interconnection Request to a Transmission Provider's Transmission System. The Commission is not requiring any retroactive changes to individual (versus generic) interconnection agreements filed with the Commission prior to the effective date of this Final Rule.

# A. Background

5. The electric power industry continues to be in transition. Where the industry once comprised mainly large, vertically integrated utilities providing bundled power at cost-based rates, companies selling unbundled wholesale power at rates set by

competitive markets have now become common. Balanced market rules and sufficient infrastructure are essential for achieving power markets that will provide customers with reasonably priced and reliable service.

- \*2 6. The Commission continues to work to encourage fully competitive bulk power markets. The effort took its first major step with Order No. 888, which required public utilities to provide other entities comparable access to their facilities for transmitting electricity in interstate commerce, and continued with Order No. 2000, <sup>6</sup> which encouraged the development of Regional Transmission Organizations (RTOs).
- 7. In this proceeding the Commission, pursuant to its responsibility under Sections 205 and 206 of the Federal Power Act (FPA) to remedy undue discrimination, requires all public utilities that own, control, or operate facilities for transmitting electric energy in interstate commerce to append to their OATTs a Final Rule LGIP and Final Rule LGIA. The Commission believes that these documents will provide just and reasonable terms and conditions of transmission service while ensuring that reliability is protected and that they will provide a reasonable balance between the competing goals of uniformity and flexibility.

## 1. Need for Standard Generator Interconnection Procedures and Agreement

- 8. In April 1996, in Order No. 888, the Commission established the foundation necessary to develop competitive bulk power markets in the United States: non-discriminatory open access transmission services by public utilities and stranded cost recovery rules to provide a fair transition to competitive markets. Order No. 888 did not directly address generator interconnection issues.
- 9. In Tennes see Power Company <sup>7</sup> (<u>Tennessee</u>) the Commission clarified that interconnection is a critical component of open access transmission service and thus is subject to the requirement that utilities offer comparable service under the OATT. In <u>Tennessee</u> the Commission encouraged, but did not require, each Transmission Provider to revise its OATT to include interconnection procedures, including a standard interconnection agreement and specific criteria, procedures, milestones, and time lines for evaluating Interconnection Requests. <sup>8</sup>
- 10. The Commission to date has addressed interconnection issues on a case-by-case basis. Although a number of Transmission Providers have filed interconnection procedures as part of their OATTs, <sup>9</sup> many industry participants remain dissatisfied with existing interconnection policy and procedures. With the increasing number of interconnection-related disputes, it has become apparent that the case-by-case approach is an inadequate and inefficient means to address interconnection issues.
- 11. Interconnection plays a crucial role in bringing much-needed generation into the market to meet the growing needs of electricity customers. Further, relatively unencumbered entry into the market is necessary for competitive markets. However, requests for interconnection frequently result in complex, time consuming technical disputes about interconnection feasibility, cost, and cost responsibility. This delay undermines the ability of generators to compete in the market and provides an unfair advantage to utilities that own both transmission and generation facilities. The Commission concludes that there is a pressing need for a single set of procedures for jurisdictional Transmission Providers and a single, uniformly applicable interconnection agreement for Large Generators. <sup>10</sup> A standard set of procedures as part of the OATT for all jurisdictional transmission facilities will minimize opportunities for undue discrimination and expedite the development of new generation, while protecting reliability and ensuring that rates are just and reasonable.
- \*3 12. Interconnection is a critical component of open access transmission service, and standard interconnection procedures and a standard agreement applicable to Large Generators will serve several important functions: they will (1) limit opportunities for Transmission Providers to favor their own generation, (2) facilitate market entry for generation competitors by reducing interconnection costs and time, and (3) encourage needed investment in generator and transmission infrastructure. The Commission expects that the Final Rule LGIP and Final Rule LGIA (as well as the documents that will be developed in the Small Generator Interconnection proceeding see footnote 10, supra) will resolve most disputes, minimize opportunities for undue discrimination, foster increased development of economic generation, and protect system reliability. Therefore, the Commission

adopts the Final Rule LGIP and Final Rule LGIA, which will be required as an amendment to the OATT of each public utility that owns, controls, or operates facilities for transmitting electric energy in interstate commerce. As discussed below, more flexibility is available to independent transmission entities in the procedures and agreement they must adopt as compared with the standard provisions adopted herein.

### 2. Interconnection ANOPR

- 13. The Commission issued an Advance Notice of Proposed Rulemaking (ANOPR) regarding generator interconnection on October 25, 2001. <sup>11</sup> As a point of departure, the ANOPR presented the Standard Generator Interconnection Procedures and Standard Generation Interconnection Agreement of the Electric Reliability Council of Texas (ERCOT). <sup>12</sup> The Commission supplemented and modified the ERCOT documents with various "best practices" that were identified in Attachment A to the ANOPR. These "best practices" were based, in part, on generator interconnection procedures and agreements that had been approved by the Commission in past cases. The ANOPR instructed the commenters and parties to assume that the Commission's current pricing policy, as described in ANOPR Attachment B, would remain in effect.
- 14. The ANOPR initiated a consensus-making process in which members of various segments of the electric power industry, government, and the public had an opportunity to provide input. This effort resulted in two documents that largely shaped the Notice of Proposed Rulemaking (Large Generator Interconnection NOPR) that followed. <sup>13</sup> These two documents are referred to as the Consensus LGIP and Consensus LGIA (although a consensus was not reached on all issues). The Commission received numerous comments, primarily from Transmission Providers, Transmission Owners, generators (herein called Interconnection Customers), and state regulators, on the ANOPR and the Consensus LGIP and Consensus LGIA.

#### 3. Interconnection NOPR

### a. Overview of the NOPR

15. Although the negotiators did not reach consensus on every issue, the Consensus LGIP and LGIA reflect substantial agreement among diverse interests. The Commission used these documents and the comments on them to create the proposed standard LGIP and LGIA documents (NOPR LGIP and NOPR LGIA). Generally, the NOPR used the Consensus LGIP and LGIA provisions where there was agreement. Where the participants could not reach consensus on a particular issue and options were presented in the Consensus LGIP and LGIA, the Commission chose between those options guided by the principle of minimizing barriers to entry of new generation without increasing the risk of reliability problems. Where an issue remained unresolved and no option was presented, the Commission generally proposed the ERCOT provision.

## b. Severing of Small Generator Issues from the NOPR

- \*4 16. In their comments on the interconnection NOPR, supporters of Small Generators (which are defined herein as devices for the production of electricity having a capacity no more than 20 MW) requested that the Commission adopt separate rules and procedures for interconnecting Small Generators. They argued that use of a Final Rule LGIP and Final Rule LGIA designed for Large Generators would unduly hinder the development of Small Generators. They sought streamlined procedures and requirements that would allow an Interconnection Customer with a Small Generator to avoid delays caused by studying sequentially the effects of interconnecting its generator with the Transmission Provider's electric system.
- 17. Persuaded by this request, the Commission decided to propose separate Small Generator interconnection procedures and an agreement (SGIP and SGIA) to provide the right incentives for both Transmission Providers and Interconnection Customers with Small Generators. <sup>14</sup> To that end, the Commission severed the issues related to interconnecting generators no larger than 20 MW from this proceeding and initiated another rulemaking docket, RM02-12-000, for the former. <sup>15</sup>

## **B.** Legal Authority

### 1. The Federal Power Act and Order No. 888

18. In fulfilling its responsibilities under Sections 205 and 206 of the Federal Power Act, <sup>16</sup> the Commission is required to address, and has the authority to remedy, undue discrimination. The Commission must ensure that the rates, contracts, and practices affecting jurisdictional transmission do not reflect an undue preference or advantage for non-independent Transmission Providers and are just and reasonable. Additionally, as discussed in Order No. 888, the Commission's regulatory authority under the Federal Power Act "clearly carries with it the responsibility to consider, in appropriate circumstances, the anticompetitive effects of regulated aspects of interstate utility operations pursuant to [FPA] §§ 202 and 203, and under like directives contained in Sections 205, 206, and 207." <sup>17</sup>

19. The record underlying Order No. 888 showed that public utilities owning or controlling jurisdictional transmission facilities had the incentive to engage in, and had engaged in, unduly discriminatory transmission practices. <sup>18</sup> The Commission in Order No. 888 also thoroughly discussed the legislative history and case law involving Sections 205 and 206, concluded that it had the authority and responsibility to remedy the undue discrimination it had found by requiring open access, and decided to do so through a rulemaking on a generic, industrywide basis. <sup>19</sup> The Supreme Court affirmed the Commission's decision to exercise this authority by requiring non-discriminatory (comparable) open access as a remedy for undue discrimination. <sup>20</sup>

\*5 20. The Commission has identified interconnection as an element of transmission service that is required to be provided under the OATT. <sup>21</sup> Thus, the Commission may order generic interconnection terms and procedures pursuant to its authority to remedy undue discrimination and preferences under Sections 205 and 206 of the Federal Power Act.

## 2. Commission Interconnection Case Law

- 21. Unless expressly changed in this Final Rule, the holdings in the Commission's existing interconnection precedents will remain a useful guide during the implementation of this Final Rule. The Commission's interconnection cases have drawn the distinction between Interconnection Facilities and Network Upgrades. Interconnection Facilities are found between the Interconnection Customer's Generating Facility and the Transmission Provider's Transmission System. The Commission has developed a simple test for distinguishing Interconnection Facilities from Network Upgrades: Network Upgrades include only facilities at or beyond the point where the Interconnection Customer's Generating Facility interconnects to the Transmission Provider's Transmission System. The Commission has made clear that Interconnection Agreements are evaluated by the Commission according to the just and reasonable standard. Most improvements to the Transmission System, including Network Upgrades, benefit all transmission customers, but the determination of who benefits from such Network Upgrades is often made by a non-independent transmission provider, who is an interested party. In such cases, the Commission has found that it is just and reasonable for the Interconnection Customer to pay for Interconnection Facilities but not for Network Upgrades. Agreements between the Parties to classify Interconnection Facilities as Network Upgrades, or to otherwise directly assign the costs of Network Upgrades to the Interconnection Customer, have not been found to be just and reasonable and have been rejected by the Commission.
- 22. Regarding pricing for a non-independent Transmission Provider, the distinction between Interconnection Facilities and Network Upgrades is important because Interconnection Facilities will be paid for solely by the Interconnection Customer, and while Network Upgrades will be funded initially by the Interconnection Customer (unless the Transmission Provider elects to fund them), the Interconnection Customer would then be entitled to a cash equivalent refund (<u>i.e.</u>, credit) equal to the total amount paid for the Network Upgrades, including any tax gross-up or other tax-related payments. The refund would be paid to the Interconnection Customer on a dollar-for-dollar basis, as credits against the Interconnection Customer's payments for transmission services, with the full amount to be refunded, with interest within five years of the Commercial Operation Date. The

Commission has clarified that transmission credits may be used whether or not a Generating Facility is being dispatched and that credits must be accepted for all network transmissions by the Interconnection Customer, regardless of whether the plant from which the credits originated is dispatched. <sup>25</sup> Credits are not tied to any particular Generating Facility. <sup>26</sup> The Commission has stated that peaking facilities, for instance, must be allowed to use credits even when the Generating Facility is not dispatched. <sup>27</sup> The Commission has also allowed Transmission Providers to require several Interconnection Customers to share the costs of Network Upgrades, under certain circumstances. <sup>28</sup>

- \*6 23. The Commission has also clarified that an Interconnection Customer need not enter into an agreement for the delivery component of transmission service to interconnect with a Transmission Providers' Transmission System. <sup>29</sup> At the same time, Interconnection Service or an interconnection by itself does not confer any delivery rights from the Generating facility to any points of delivery. <sup>30</sup>
- 24. The Commission has clarified that ownership of the Interconnection Facilities does not have a direct effect on reliability of the system. Therefore, as long as the Transmission Provider operates the Interconnection Facilities, the Commission will allow an Interconnection Customer to own part, or all, of those facilities. 31

## C. Differences Between the Proposed and Final Rules

- 25. The Final Rule LGIP and Final Rule LGIA largely track the proposed documents. Changes made in the Final Rule tend to be specific to an individual LGIP section or LGIA article, and do not require fundamental changes to the documents. That being said, there are a few significant issues, some substantive and others organizational, that the Commission summarizes here.
- 26. Most importantly, we note that the Final Rule applies to independent and non-independent Transmission Providers alike, but non-independent Transmission Providers are required to adopt the Final Rule LGIP and Final Rule LGIA into their OATTs, with deviations from the Final Rule justified using either the "regional differences" or "consistent with or superior to" standard. We also allow Regional Transmission Organizations (RTOs) and ISOs more flexibility to customize an LGIP and LGIA to meet their regional needs. This applies to terms and conditions as well as pricing. While RTOs and ISOs are required to submit compliance filings, they may submit LGIP and LGIA terms and conditions that meet an "independent entity variation" standard that is more flexible than the "consistent with or superior to" standard and the regional differences standard.
- 27. We are also including in the Final Rule LGIA an article addressing insurance requirements and limiting liability for consequential damages, both of which were absent from the NOPR. Provision for liquidated damages had been removed from the Final Rule LGIP but remains an option in the Final Rule LGIA. Also, in the Final Rule LGIP, when a Transmission Provider elects to study Interconnection Requests in Clusters, it would simultaneously study all Interconnections Requests received within a 180 day window, rather than a 90 day window as proposed.
- 28. On pricing, we clarify the approach set forth in the NOPR. We continue our current policy of requiring a Transmission Provider that is not an independent entity to provide transmission credits for the cost of Network Upgrades needed for a Generating Facility interconnection. For a Transmission Provider that is an independent entity, such as an RTO or ISO, we allow flexibility as to the specifics of the interconnection pricing policy. Also, an RTO or ISO may propose participant funding for Network Upgrades for a generator interconnection, and, for a transitional period not to exceed a year, a region may use participant funding as soon as an independent administrator has been approved by the Commission and the affected states.
- \*7 29. Where the policy of transmission credits for upgrades required as a result of the interconnection applies, the Commission provides several clarifications in this Final Rule. For example, the Interconnection Customer should receive transmission credits only if its Generating Facility has achieved commercial operation. Transmission credits are to be paid to the Interconnection Customer when upgrades to an Affected System <sup>32</sup> are constructed and the Interconnection Customer has paid for them. Finally,

the Transmission Provider may decline to award credits for only those transmission charges that are designed to recover outof-pocket costs, such as the cost of line losses, associated with the delivery of the output of the Generating Facility.

### II. DISCUSSION

- 30. In Part A of this discussion we address the Standard Large Generator Interconnection Procedures (Final Rule LGIP) that specify the details of the uniform process a prospective Interconnection Customer and its Transmission Provider shall use to initiate, evaluate, and implement an Interconnection Request pursuant to the Final Rule.
- 31. In Part B we discuss the details of the Standard Large Generator Interconnection Agreement (Final Rule LGIA) to be executed by the prospective Interconnection Customer, the Transmission Provider and, where appropriate, the Transmission Owner. This document is incorporated as Appendix 6 to the Standard Large Generator Interconnection Procedures and covers the related rights and obligations of the Parties. 33
- 32. In Part C, we discuss a number of other significant policy issues in connection with this rulemaking, including pricing policies; the required Interconnection Services; the treatment of "Distribution" level interconnections; Qualifying Facility matters; variations from the Final Rule and accommodation of regional differences; the availability of waivers for small entities; OATT reciprocity implications for interconnection requests; assorted clarifications to the NOPR's proposals; insurance and liquidated damages matters; two-versus three party interconnection agreements; and consequential damage issues.
- 33. In Part D, we address Compliance Issues pertaining to the requirement for a Transmission Provider to file conforming amendments to its existing OATT; the treatment to be accorded existing interconnection agreements (grandfathering); and the method a Transmission Provider is to use to file executed and unexecuted interconnection agreements in accord with this Final Rule.

# A. Issues Related to the Standard Large Generator Interconnection Procedures (LGIP)

## 1. Overview <sup>34</sup>

- 34. The Final Rule Standard Large Generator Interconnection Procedures (LGIP) document specifies the steps that must be followed and deadlines that must be met when an Interconnection Customer requests interconnection of either a new Generating Facility or the expansion of an existing Generating Facility with the Transmission Provider's Transmission System. <sup>35</sup> The Commission directs each public utility to amend its OATT with a single compliance filing to incorporate the Final Rule LGIP and the Standard Large Generator Interconnection Agreement (LGIA) documents. RTOs and ISOs must also make compliance filings, but as discussed above, will have more flexibility to propose different procedures and a different agreement.
- \*8 35. The Final Rule LGIP sets forth the following steps to secure an interconnection. First, the prospective Interconnection Customer will submit an Interconnection Request to the Transmission Provider along with a \$10,000 deposit, preliminary site documentation, and the expected In-Service Date. <sup>36</sup> The Transmission Provider will acknowledge receipt of the request and promptly notify the Interconnection Customer if its request is deficient. When the Interconnection Request is complete, the Transmission Provider will place it in its interconnection queue with other pending requests. The Transmission Provider will assign a Queue Position to each completed Interconnection Request based on the date and time of its receipt. <sup>37</sup> Queue Position is used to determine the order of performing the various Interconnection Studies and the assignment of cost responsibility for the construction of facilities necessary to accommodate the Interconnection Request. <sup>38</sup> The Transmission Provider will also maintain a list of all Interconnection Requests <sup>39</sup> on its OASIS. <sup>40</sup>

- 36. The Parties will then schedule a Scoping Meeting to discuss possible Points of Interconnection and exchange technical information, including data that would reasonably be expected to affect such interconnection options. <sup>41</sup> The Scoping Meeting is followed by a series of Interconnection Studies to be performed by, or at the direction of, the Transmission Provider to evaluate the proposed interconnection in detail, identify any Adverse System Impacts on the Transmission Provider's Transmission System or Affected Systems, and specify the facility modifications that are needed to safely and reliably complete the interconnection. <sup>42</sup> These studies include:
- (1) <u>Interconnection Feasibility Study</u> to evaluate on a preliminary basis the feasibility of the proposed interconnection, using power flow and short-circuit analyses (to be completed within 45 Calendar Days from the date of signing of an Interconnection Feasibility Study Agreement) (study requires a \$10,000 deposit);
- (2) <u>Interconnection System Impact Study</u> to evaluate on a comprehensive basis the impact of the proposed interconnection on the reliability of Transmission Provider's Transmission System and Affected Systems, using a stability analysis, power flow, and short-circuit analyses (to be completed within 60 Calendar Days from the date of signing of an Interconnection System Impact Study Agreement) (study requires a \$50,000 deposit); <sup>43</sup>
- (3) <u>Interconnection Facilities Study</u> to determine a list of facilities (including Transmission Provider's Interconnection Facilities and Network Upgrades as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Generating Facility with the Transmission Provider's Transmission System (to be completed within 90-180 Calendar Days from the date of signing of an Interconnection Facilities Study Agreement) (study requires a \$100,000 deposit or an estimated monthly cost developed by the Transmission Provider for conducting the Interconnection Facilities Study); and
- \*9 (4) Optional Interconnection Study or sensitivity analysis of various assumptions specified by the Interconnection Customer to identify any Network Upgrades that may be required to provide transmission delivery service over alternative transmission paths for the electricity produced by the Generating Facility and (study requires a \$10,000 deposit).
- 37. The Interconnection Feasibility Study, the Interconnection System Impact Study, and the Interconnection Facilities Study must be performed in the above order, with completion of each study before the next begins. <sup>44</sup> An Interconnection Customer may also request a restudy of any of the above if a higher-queued project either drops out of the queue, is subjected to Material Modifications, or changes its Point of Interconnection. <sup>45</sup> The Interconnection Customer will pay the actual costs for performing each of the Interconnection Studies and restudies.
- 38. The Transmission Provider's Interconnection Facilities Study report <sup>46</sup> will include a best estimate of the costs to effect the requested interconnection which are to be funded up-front by the Interconnection Customer. At the same time as the report is issued, the Transmission Provider shall also give the Interconnection Customer a draft interconnection agreement completed to the extent practicable. <sup>47</sup> The Transmission Provider and the Interconnection Customer will then negotiate the schedule for constructing and completing any necessary Transmission Provider Interconnection Facilities and Network Upgrades, and incorporate this schedule into the interconnection agreement that is signed by the Parties. <sup>48</sup>

## 2. Section-by-Section Discussion of the Proposed LGIP

39. What follows is a discussion of the standard interconnection procedures the Commission proposed, the comments received, and the Commission's conclusion. The order of discussion follows the organization of the proposed LGIP, covering Sections 1-13. Only subsections for which issues are raised are presented. For example, we discuss Section 2.3, but not Sections 2.1 or 2.2 because no significant issues were raised regarding Sections 2.1 or 2.2. Readers should note that section numbers referred to in the following discussion are the numbers contained in the proposed LGIP. Some proposed sections are renumbered in the

Final Rule; mention of that fact will be made in the Commission Conclusions discussion, where appropriate. Also, note that Proposed LGIP Section 14 is eliminated from the Final Rule in its entirety because provisions for interconnection procedures and an interconnection agreement for Small Generators have been severed from this proceeding, as discussed, <u>supra</u>.

- 40. **Section 1 Definitions** Section 1 of the NOPR LGIP and Article 1 of the NOPR LGIA contained defined terms that appeared in the respective documents. For the sake of consistency, the Final Rule LGIP and Final Rule LGIA contain one common set of terms. Included in the list of defined terms are a number of new terms which were not included in the NOPR LGIP and NOPR LGIA. Comments relating to the definition of terms in both documents are discussed below.
- \*10 41. <u>Ancillary Services</u> (In the NOPR: Ancillary and Other Services) The NOPR proposed that Ancillary and Other Services would have the same meaning as defined in the Transmission Provider's OATT and include some other services such as generator balancing, black start, and automatic generation control.

#### **Comments**

42. Cinergy and Entergy claim that this term is not used in the LGIA and that its definition should be deleted.

#### **Commission Conclusion**

- 43. The Commission disagrees that the definition should be deleted. The term is used in Article 9 of the NOPR LGIA and elsewhere. However, to be consistent with the OATT, the Commission here adopts the definition of Ancillary Services in Order No. 888: "Those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the Transmission Provider's Transmission System in accordance with Good Utility Practice."
- 44. <u>Commercial Operation Date</u> The NOPR proposed to define Commercial Operation Date as the date on which the Generating Facility commences commercial operation of a unit at the Generating Facility after Trial Operation of the unit is completed, as confirmed in writing, in accordance with proposed Appendix F to the NOPR LGIA.

## **Comments**

45. Central Maine points out that when a Generating Facility consists of more than one generating unit, under the NOPR, the Commercial Operation Date depends on the operability of a generating unit after its testing. Central Maine requests that the Commission define the term Commercial Operation Date as the date on which the Generating Facility as a whole commences commercial operation, not the individual generating units.

- 46. The Commission is not adopting Central Maine's proposal. The Generating Facility (referred to as the Facility in the NOPR LGIP and NOPR LGIA) could consist of multiple generating units with substantially different Commercial Operation Dates. Under Central Maine's proposal, all of the Generating Facilities at the complex would be required to undergo a pre-commercial Trial Operation each time a new generating unit at the Generating Facility is ready to commence commercial operation. Central Maine gives no reason why this should be required. Furthermore, revising the NOPR LGIP is unnecessary because Article 6.1 of the NOPR LGIA (Pre-Commercial Operation Date, Testing and Modifications) addresses testing of the Generating Facility and the Interconnection Customer's Interconnection Facilities to ensure their safe and reliable operation.
- 47. **Generating Facility** (In the NOPR: Facility) The NOPR proposed to define the term Facility as the Interconnection Customer's generator, as identified in the Interconnection Request, but excluding the Interconnection Customer's Interconnection Facilities. In this Final Rule, the Commission has renamed Facility to Generating Facility to avoid confusion between other facilities and equipment.

\*11 48. Central Maine states that a full description of the Generating Facility should be attached to the interconnection agreement as an appendix.

### **Commission Conclusion**

- 49. The Commission concludes that it unnecessary to append a description of the Generating Facility to the interconnection agreement because Appendix 1 of the Final Rule LGIP (Interconnection Request) already provides detailed information about the Generating Facility. Accordingly, the Commission adopts the proposed definition but changes the defined term from Facility to Generating Facility.
- 50. <u>Generator</u> In the NOPR, the Commission proposed to define the term Generator to mean any Generating Facility, regardless of ownership.

### **Comments**

51. Dairyland Power points out that the term Generator is used in the NOPR LGIP to refer to the entity that owns the Generating Facility, as well as the facility itself. It asks for clarification.

#### **Commission Conclusion**

- 52. To clarify, we use the term Interconnection Customer in this preamble and the Final Rule to refer to the owner of the Generating Facility. The terms Small Generator and Large Generator refer to the class of energy producing devices no larger than 20 MW and larger than 20 MW, respectively.
- 53. <u>Good Utility Practice</u> In the NOPR, the Commission defined Good Utility Practice to mean any of the practices, methods and acts generally accepted in the region, including Applicable Reliability Standards and the National Electrical Code.

## **Comments**

- 54. NERC states that although the terms Good Utility Practice and Applicable Reliability Standards have separate definitions, they have often been used interchangeably. It notes that the Commission has defined Applicable Reliability Standards to include NERC and regional reliability council requirements while Good Utility Practice is a broader term that includes Applicable Reliability Standards. NERC comments that it is important that these terms be used consistently.
- 55. Cinergy notes that Good Utility Practice is defined to include compliance with the National Electrical Code. It states that because it is not subject to the National Electrical Code, it would be improper to attempt to bind it to such compliance.

- 56. The Commission agrees with NERC that there is some overlap in the proposed definitions of Good Utility Practice and Applicable Reliability Standards. To remove any misunderstanding in the definition of Good Utility Practice, the Commission is adopting in the Final Rule the Order No. 888 definition, which contains no references to Applicable Reliability Standards and National Electrical Code. This also addresses Cinergy's concern.
- 57. <u>Interconnection Guidelines</u> The NOPR stated that the technical requirements to be followed by the Parties are set forth in the proposed Appendix G (Interconnection Guidelines).

\*12 58. Southern observes that proposed Appendix G is blank, inferring that the Interconnection Customer and Transmission Provider negotiate the technical and operational requirements. Southern believes that this is inappropriate because interconnection guidelines should be established by the Transmission Provider, not by negotiation. Southern contends that requiring a Transmission Provider to negotiate the technical and operational requirements with each Interconnection Customer is inconsistent with the goal of uniform interconnection procedures.

### **Commission Conclusion**

- 59. Proposed Appendix G was intended to set forth uniform technical and operational requirements applicable to all Interconnection Customers established by the Transmission Provider, not to be a vehicle for the Parties to negotiate technical and operational requirements on a case-by-case basis. The Commission concludes, however, that most, if not all, of the generic technical and operational requirements are already set forth in the Final Rule LGIA. We are therefore not defining the term Interconnection Guidelines as well as not including proposed Appendix G in the Final Rule LGIA.
- 60. <u>Joint Operating Committee</u> The NOPR proposed to define Joint Operating Committee to mean a committee comprised of members of individual operating committees that addresses issues arising out of the duties, roles, and responsibilities of individual operating committees described in Article 29 of the NOPR LGIA.

### **Comments**

61. FirstEnergy and PSNM state that the Joint Operating Committee would impose additional administrative costs on the Transmission Provider and is also unnecessary.

### **Commission Conclusion**

- 62. The Commission is not deleting the term. As discussed later, the Final Rule does not require the Parties to form individual operating committees. Instead, the Final Rule requires a Joint Operating Committee comprising the Transmission Provider and all of its Interconnection Customers. Among other things, the committee will address issues arising out of the duties, roles, and responsibilities of the Parties under their interconnection agreements.
- 63. **Network Upgrades** In the NOPR, Network Upgrades were defined as additions, modifications, and upgrades to the Transmission System required beyond the Point of Interconnection in order to accommodate the interconnection of the Generating Facility. Network Upgrades are identified by the Parties in Appendix A to the interconnection agreement (including any modifications, additions or upgrades made to such facilities). The NOPR also stated that Network Upgrades benefit all users of the Transmission System, without distinction or regard as to the purpose of the upgrade.

## **Comments**

64. Several commenters, including Calpine and SoCal Water District, request that the definition of Network Upgrades be clarified and made as specific as possible. Calpine and Nevada Power propose that Network Upgrades should include only facilities shown to be "integrated" to the Transmission System, that is, likely to be used by entities other than the Interconnection Customer. Some commenters <sup>50</sup> contend that circuit breakers are not Network Upgrades, since they benefit only the new Interconnection Customer.

- \*13 65. The Final Rule revises the definition of Network Upgrade to include the phrase "at or beyond the Point of Interconnection," instead of "beyond the Point of Interconnection," to make it consistent with established Commission precedent. The network begins at the point where the Interconnection Customer connects to the Transmission System, not somewhere beyond that point. <sup>51</sup> Facilities beyond the Point of Interconnection are part of the Transmission Provider's Transmission System and benefit all users. We are also removing the concept of beneficiary from the definition so as to avoid implying a pricing policy in the definition.
- 66. We disagree with the comments stating that the term is not well defined. The Commission has defined Network Upgrades as those facilities "at or beyond the Point of Interconnection" partially in order to clarify to all entities exactly what is a Network Upgrade. We are removing references to beneficiaries from the definition, because our well-established precedent regarding what constitutes Network Upgrades does not require a case-specific determination that all users benefit from Network Upgrade; instead we look only as whether the upgrade is at or beyond the Point of Interconnection. <sup>52</sup>
- 67. **Reasonable Efforts** The NOPR proposed to define Reasonable Efforts as actions that are timely and consistent with Good Utility Practice and are substantially equivalent to those a Party would use to protect its own interests.

68. Some commenters including Central Maine found this definition to be vague. They also contend that only Good Utility Practice should be required.

## **Commission Conclusion**

- 69. The Commission adopts the proposed definition. The standard in the NOPR is necessary to ensure comparable treatment. If a Party normally exceeds Good Utility Practice when it protects its own interests, it must do so for others as well.
- 70. **System Protection Facilities** The NOPR proposed to define System Protection Facilities as the equipment required to protect the Transmission System from faults and other electrical disturbances occurring at the Interconnection Customer's Generating Facility, and vice versa.

## **Comments**

71. NERC proposes that the definition of System Protection Facilities should include "necessary protection signal communications equipment" in addition to the other equipment mentioned in the definition. It argues that such communications equipment is needed to coordinate and monitor the operation of protective devices.

## **Commission Conclusion**

- 72. The Commission agrees with NERC and adopts the recommended language.
- 73. <u>Transmission Owner and Transmission Provider</u> In the NOPR, the Commission proposed to define Transmission Owner to mean any entity that owns, leases or otherwise possesses an interest in the Transmission System at the Point of Interconnection. It proposed to define Transmission Provider to mean the entity that provides transmission service under its OATT.

\*14 74. EEI proposes that the definition of Transmission Provider be revised to include Transmission Owner. National Grid states that the proposed LGIA should clearly delineate the rights and responsibilities of Transmission Owners that are not Transmission Providers.

## **Commission Conclusion**

- 75. We agree with EEI. Accordingly, the definition of Transmission Provider in the Final Rule includes the Transmission Owner as well. While we recognize that the Transmission Provider and the Transmission Owner may be distinct entities in some cases, throughout the Final Rule we will refer to both the Transmission Provider and the Transmission Owner generically as the Transmission Provider. There are a few instances in which the distinction between Transmission Owner and Transmission Provider becomes relevant and there we use the appropriate terms.
- 76. **Section 2 Scope and Application Section 2** of the NOPR LGIP provided that the Transmission Provider receive, process, and analyze all Interconnection Requests in the same manner as it does for itself, its subsidiaries or Affiliates.
- 77. **Section 2.3 Base Case Data** Section 2.3 of the NOPR LGIP required the Transmission Provider to provide base case power flow, short-circuit and stability databases to the Interconnection Customer upon request so that the Interconnection Customer may independently study its Interconnection Request.

#### **Comments**

- 78. Mirant notes that certain of the language from the Consensus LGIP Section 2.3 concerning confidentiality provisions and the makeup of the Base Case data appears to have been unintentionally left out of the NOPR LGIP Section 2.3. <sup>53</sup>
- 79. Dominion Resources asks that the Commission revise LGIP Section 2.3 to state that Base Case data is subject to a confidentiality provision between the Parties. Sempra comments that the Transmission Provider should protect the confidentiality of other Interconnection Customers' information that is part of those databases. Entergy states that this Section should apply only to information that is not commercially sensitive, so as to avoid providing a competitive advantage to other Interconnection Customers.
- 80. Calpine argues that the Transmission Provider should provide, in addition to the stated databases, all underlying assumptions, data files and documents used to create the Base Case, because otherwise the provision could be interpreted as a narrow set of data files that are meaningless.
- 81. The Ohio PUC contends that the Commission should ensure that rules for handling critical energy infrastructure information (CEII) are not abused by utilities that seek to withhold from public disclosure commercial information that is not really CEII and that has historically been central to public regulatory proceedings. It believes that there must be procedures to ensure protection of critical public interests. The Ohio PUC recommends that the procedures be carried out by an entity, such as the newly formed Department of Homeland Security, that has specific experience in CEII and is qualified to review the Commission's CEII decisions.

## **Commission Conclusion**

\*15 82. As Mirant correctly notes, segments of the Consensus LGIP Section 2.3 relating to confidentiality and the makeup of the Base Case data were inadvertently omitted from the NOPR; this text is included in the Final Rule. Both confidentiality and the Base Case data format were significant topics in the Commission Staff Queuing Technical Conference held on January 21, 2003. Most conference participants agreed that providing this Base Case data was reasonable in that it would help the Interconnection Customer and its subcontractor conduct Interconnection Studies independently, expedite the evaluation process, and free up the Transmission Provider's resources, and reduce the time that would otherwise be devoted to performing Interconnection Studies

or acting as the Interconnection Customer's consultant. The Commission believes that adding the missing text addresses other commenters' concerns regarding the need for confidential treatment of the Base Case data and other commercially sensitive information that may be provided to the Interconnection Customer.

- 83. In response to Calpine, we clarify that Transmission Providers must provide all underlying assumptions and data files so that the Interconnection Customer or its subcontractor can independently conduct Interconnection Studies.
- 84. As to the concerns of the Ohio PUC and others regarding the security of critical energy infrastructure information, the security of the energy infrastructure is essential. The Commission expects that all Transmission Providers, market participants, and Interconnection Customers will comply with the recommendations of the President's Critical Infrastructure Protection Board, as well as any best practice recommendations or requirements that may be issued by NERC or any other electric reliability authorities. In particular, all public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices. However, they are not to abuse security requirements in an effort to withhold from public disclosure commercial information that lacks legitimate CEII status.
- 85. **Section 3 Interconnection Request** In NOPR LGIP Section 3, the Commission proposed that each Interconnection Request include, among other things, a refundable deposit of \$10,000 that would be applied toward the cost of the Interconnection Feasibility Study.
- 86. **Section 3.1 General** NOPR LGIP Section 3.1 would have required that the Interconnection Customer submit to the Transmission Provider an Interconnection Request and a refundable deposit of \$10,000 to be applied toward the cost of an Interconnection Feasibility Study. The Interconnection Customer would submit a separate Interconnection Request for each site to be studied and may submit multiple Interconnection Requests for a single site. At the Interconnection Customer's option, the Parties could identify alternative Points of Interconnection and configurations at the Scoping Meeting and attempt to eliminate alternatives from further consideration. The Interconnection Customer would be required to select the Point of Interconnection no later than the execution of the Interconnection Feasibility Study Agreement.

#### **Comments**

- \*16 87. Some commenters, including Entergy and PJM, state that an initial evaluation of several alternative interconnection sites is inconsistent with regional planning and can be accomplished only at the expense of Transmission Providers and lower queued Interconnection Customers seeking swift interconnection.
- 88. Cal ISO raises several questions related to the possibility of multiple Interconnection Requests for a single site: (1) Do multiple Interconnection Requests refer only to routing and interconnection arrangements? (2) If so, how many alternatives are acceptable under one submittal? (3) Is an Interconnection Request for one site that is to be evaluated at two different voltage levels, one or two Interconnection Requests? and (4) Is the \$10,000 deposit required for each Interconnection Request, resulting in multiple deposits for multiple requests at a single site?
- 89. ISO New England recommends revising this section to give an RTO or ISO authority to set reasonable interconnection deposit amounts, taking into account the requested study's complexity. It also states that concerns about discriminatory treatment of Interconnection Customers should be alleviated because the RTO or ISO is independent.

### **Commission Conclusion**

90. Except as noted below, we are adopting Section 3.1 in the Final Rule as proposed. Allowing the Interconnection Customer the option to have the Parties evaluate alternative interconnection sites and configurations at the Scoping Meeting will greatly reduce the need to conduct detailed analyses of interconnection options that are found to have little merit. Providing the Interconnection

Customer with more information prior to authorizing an Interconnection Feasibility Study should lead to more efficient use of the Transmission Provider's planning resources and higher quality Interconnection Studies.

- 91. With regard to Cal ISO's first question, multiple Interconnection Requests at a single site could involve more than just alternative routing and interconnection arrangements. For example, they could also involve substantially different Generating Facility designs. Regarding Cal ISO's second question, we do not set a generic limit on the number of Interconnection Requests that may be included in a single submittal, but leave it to the Parties to reach agreement at the Scoping Meeting, or, if they fail to agree, pursue dispute resolution. As to the third question, a request to evaluate one site at two different voltage levels would be two Interconnection Requests. With respect to Cal ISO's fourth question, the Interconnection Customer must submit a deposit with each Interconnection Request when more than one request is submitted for a single site. However, if an Interconnection Request is withdrawn before the execution of an Interconnection Feasibility Study Agreement, perhaps as a result of discussions at the Scoping Meeting, the Transmission Provider must promptly return the deposit to the Interconnection Customer. Finally, the Commission is clarifying Section 3.1 to eliminate the uncertainty underlying Cal ISO's questions 3 and 4.
- \*17 92. The Commission is not revising proposed LGIP Section 3.1 to provide the flexibility that the New England ISO seeks. The proposed study deposit requirements appropriately balance the interests of the Transmission Provider and the Interconnection Customer. However, as explained elsewhere in this preamble, we will entertain proposals by an RTO or ISO to adopt alternative interconnection procedures that reflect regional differences.
- 93. Section 3.2 Identification of Types of Interconnection Services Section 3.2 of the NOPR LGIP stated that, when the Interconnection Customer submits its Interconnection Request, it must identify the type of Interconnection Service it desires. The Final Rule provides for two service products: (1) Energy Resource Interconnection Service, which is a basic or minimal interconnection service, and (2) Network Resource Interconnection Service, which is a more flexible and comprehensive service. However, any Interconnection Customer requesting Network Resource Interconnection Service may request that it also be studied for the less comprehensive Energy Resource Interconnection Service up to the point when an Interconnection Facility Study Agreement is executed. Comments and conclusions relating to Section 3.2 of the NOPR LGIP are discussed in Part II.C.2 (Interconnection Products and Scope of Service).
- 94. **Section 3.3.1 Initiating an Interconnection Request** According to NOPR LGIP Section 3.3.1, in order to initiate an Interconnection Request, the Interconnection Customer would be required to submit a \$10,000 deposit, a completed Interconnection Request, and either a demonstration of Site Control (e.g., securing land rights, air permit, etc.) or an additional deposit of \$10,000, with the deposits applied toward any required Interconnection Studies. The latter deposit would be refundable only if the Interconnection Customer demonstrates Site Control within the time period specified in the proposed LGIP Section 3.3.3.
- 95. Proposed LGIP Section 3.3.1 would allow the expected In-Service Date of the Generating Facility to be no later than the completion date of the relevant region's expansion planning period, not to exceed seven years from the date of the Interconnection Request, unless the Interconnection Customer can demonstrate that engineering, permitting and construction of the Generating Facility will take longer. Under the proposal, the In-Service Date may not exceed ten years from the date the Interconnection Request is received by the Transmission Provider.

## **Comments**

96. Some commenters contend that an Interconnection Customer should be required to demonstrate Site Control when it submits an Interconnection Request. <sup>54</sup> They disagree with the proposed LGIP Section 3.3.1 provision that allows for the posting of an additional \$10,000 deposit in lieu of the demonstration of Site Control. For example, PJM states that Site Control is a strong indication of a serious project and is essential for establishing a queue that will consist of projects that are likely to be completed. PJM claims that this is not a burdensome requirement, and that every one of the 285 requests for generator interconnection that it has received since 1999 has included evidence of Site Control at the Interconnection Feasibility Study stage. Edison Mission

believes that the Interconnection Customer must have uninterrupted Site Control throughout the interconnection process. It states that a \$10,000 deposit is not sufficient to discourage Interconnection Customers from filing premature Interconnection Requests (in order to secure a favorable Queue Position) and only later find themselves to be unable to secure Site Control. Edison Mission further contends that such a minimal deposit requirement may encourage Interconnection Customers, not acting in good faith, to speculate in interconnection rights by placing deposits for Interconnection Requests at promising locations. It believes that such speculation will frustrate other Interconnection Customers that obtain a site but are locked out of interconnection due to the superior Queue Position of a Party that merely posted a deposit. Edison Mission predicts that this will become an even greater issue as market designs based on locational marginal pricing become the norm.

- \*18 97. Cleco believes that the only deposit that should be refundable is the \$10,000 deposit paid in lieu of demonstrating Site Control, not the original deposit initiating an Interconnection Request. Moreover, Cleco states that the Commission should make clear that the \$10,000 deposited in lieu of Site Control should be refundable if the Interconnection Customer demonstrates Site Control within the time period specified in Section 3.3.3.
- 98. Central Maine takes exception to allowing an Interconnection Customer to remain in the queue for a period not to exceed ten years from the date of receipt of the Interconnection Request; it says this period is too long. FirstEnergy recommends replacing "Regional Expansion Planning Period" with "Transmission Provider Expansion Planning Period." Salt River Project seeks clarification as to how to reconcile a situation where the original In-Service Date is ten years out and there is then a three year extension.
- 99. Some commenters, including American Wind Energy, Edison Mission, NMA, Peabody, and WEPCO, contend that the development time for certain large scale coal, wind power, and other types of projects raise special issues. For example, they want the ten year restriction eliminated because their equipment is not "off-the-shelf," and siting and permitting can exceed ten years. Some commenters also want the Commission to revise Section 3.3.1 to allow them up to nine months after the Interconnection Request is made to submit final design specifications. They contend that because large non-gas-fired generators are unique and not "off-the-shelf," completion of the final design specifications requires nine or more months after the Interconnection Request is submitted.

- 100. We retain the proposed text that requires a demonstration of Site Control or a posting of an additional deposit of \$10,000. There may be instances when requiring Site Control could unduly delay the interconnection process.
- 101. We also share Edison Mission's concern that some participants may attempt to game the system by filing Interconnection Requests at multiple sites knowing that Site Control is unlikely to be obtainable at every site. However, under NOPR LGIP Section 11.3, the Interconnection Customer must provide reasonable evidence of Site Control within 15 Business Days after the receipt of the Final Interconnection Agreement or post additional security of \$250,000, which will be applied toward future construction costs when the demonstration of Site Control is made. This is sufficient incentive for an Interconnection Customer to refrain from engaging in the speculative behavior suggested by Edison Mission.
- 102. With respect to the ten-year period for allowing an Interconnection Customer to remain in the queue, we believe that ten years should be adequate time to complete the siting, permitting and construction requirements for all plants unless major permitting delays are encountered. Large non-gas-fired projects (e.g., coal or oil projects) generally take eight years or less to complete. Thus, a ten-year period gives large projects at least a two year buffer. Moreover, we note that numerous Interconnection Customers and Transmission Providers negotiated this time limit during the Consensus process. Finally, if an Interconnection Customer believes it needs additional time to complete its project, it should seek the approval of the Transmission Provider to extend the In-Service Date. Accordingly, the Commission clarifies that the term of the Final Rule LGIP Section 3.3.1 is ten years, or longer if the Parties agree, with such agreement not to be unreasonably withheld.

\*19 103. Regarding the need for additional time for some Interconnection Customers to complete design specifications, the Commission is not convinced that an exception should be made in the Final Rule LGIP to allow an Interconnection Customer proposing to construct a large non-gas-fired Generating Facility to submit final design specifications nine months after the Interconnection Request is made. The Interconnection Customer should have its design substantially completed prior to submitting its Interconnection Request so that it does not block or disrupt the queuing process. The Transmission Provider is not able to act on an Interconnection Request unless it includes all necessary information, and to give one class of Interconnection Customers extra time to submit design specifications would be unfair to other Interconnection Customers in the queue.

104. As to FirstEnergy's recommendation, the Commission clarifies that, in the absence of a regional expansion planning period, the appropriate expansion planning period would be that of the Transmission Provider.

105. **Section 3.3.4 - Scoping Meeting** (In the NOPR: Initial Scoping Meeting) - Proposed LGIP Section 3.3.4 would have required the Transmission Provider to hold a Scoping Meeting with the Interconnection Customer no later than 30 Calendar Days from receipt of the Interconnection Request. The purpose of the Scoping Meeting would be to discuss alternative interconnection options, including potential feasible Points of Interconnection. The Interconnection Customer would designate its Point of Interconnection and one or more alternative Points of Interconnection on the basis of information gathered at the Scoping Meeting. Section 3.3.4 would also provide that the Interconnection Customer may forgo the Interconnection Feasibility Study and proceed directly to an Interconnection System Impact Study.

#### **Comments**

106. Several commenters, including El Paso, Entergy, FirstEnergy, and Georgia Transmission, state that the Parties should be able to agree to schedule a Scoping Meeting outside the 30 day window.

107. El Paso believes that the Interconnection Customer should not make the final decision on designation of the Point of Interconnection; instead, the Transmission Provider should designate the Point of Interconnection with the Interconnection Customer's consent. At a minimum, El Paso recommends that Section 3.3.4 be modified to state that the Transmission Provider must consent to the designation of Point of Interconnection and that such consent will not be unreasonably withheld. El Paso explains this is because the designation of Point of Interconnection has serious cost consequences for the Transmission Provider and its customers.

108. PJM states that the Interconnection Feasibility Study is an important first step in evaluating an Interconnection Request and that about one-third of the Interconnection Requests are withdrawn after the Interconnection Feasibility Study. PJM adds that the Interconnection Customer should not be allowed to skip the Interconnection Feasibility Study and go directly to the Interconnection System Impact Study because this omission would have serious implications for the Clustering of Interconnection of Studies and would create the need for a large number of restudies. PJM proposes that this provision be deleted from the Final Rule LGIP.

## **Commission Conclusion**

\*20 109. In the Final Rule LGIP, the Commission is revising Section 3.3.4 to allow the Parties to hold the Scoping Meeting outside the 30 Calendar Day window upon agreement of the Parties, since either Party can object to the postponement. With respect to El Paso's concern regarding the designation of the Point of Interconnection, the purpose of the Scoping Meeting is to discuss alternative interconnection options, including potential Points of Interconnection. The Commission notes that the Transmission Provider will have an opportunity to voice its concerns at the Scoping Meeting and assess the likely cost consequences of interconnecting at various points. It is appropriate that the Interconnection Customer decide its Point of Interconnection based on input from the Transmission Provider because the former must consider its investment in the Generating Facility and its site selection criteria, as well as its initial funding of Network Upgrades. For these reasons, we adopt Section 3.3.4 as proposed.

- 110. Regarding PJM's concern about allowing the Interconnection Customer to skip the Interconnection Feasibility Study and proceed directly to the Interconnection System Impact Study, the Commission agrees with PJM that the Interconnection Feasibility Study is an important first step in evaluating an Interconnection Request and should not be skipped. The Commission is therefore deleting this text from the Final Rule LGIP Section 3.3.4.
- 111. **Section 3.4 OASIS Posting** Proposed LGIP Section 3.4 required that the Transmission Provider post on its OASIS a list of all Interconnection Requests. It must post the following information for each Interconnection Request: the location by county and state; the station or transmission line or lines where the interconnection will be made; and the projected In-Service Date. The list will not disclose the identity of the Interconnection Customer until the Interconnection Customer executes an interconnection agreement or requests that the Transmission Provider file an unexecuted Agreement with the Commission. The Transmission Provider also must post deviations from the study time lines set forth in the interconnection procedures. Interconnection Study reports and Optional Interconnection Study reports also must be posted after the Parties meet to discuss the applicable study results.

- 112. Avista states that listing the location of a Generating Facility by county and state is not sufficient. The location should be specified in greater detail, because some counties cover hundreds of square miles. Mirant and NYTO state that the identity of the Interconnection Customer should be posted on the OASIS when the Interconnection Request is made because it will help identify Interconnection Customers that are unlikely to see their projects through completion and drop out of the queue. Mirant claims that the identity of the Interconnection Customer is important for conducting meaningful Optional Interconnection Studies.
- \*21 113. NSTAR seeks clarification about whether entire studies consisting of base case data are to be posted on the OASIS, or just the interpretive analysis contained in the study reports. Salt River Project seeks clarification as to whether the posting of deviations refers to the study time lines in proposed LGIP Section 6.3 (Interconnection Feasibility Study Procedures) or the study time lines that were agreed to by the Parties in advance. MidAmerican recommends that changes in the Generating Facility's In-Service Date should also be posted on the OASIS.

- 114. The Commission is not requiring that the location of a Generating Facility be specified in any greater detail than proposed because the OASIS posting also includes the substation or transmission line where the interconnection is to be made. We are also not requiring that the identity of the Interconnection Customer be posted when the Interconnection Request is made because disclosing the identity at that early stage may put the Interconnection Customer at a competitive disadvantage and its project at risk. With regard to Mirant's assertion that the identity of the Interconnection Customer is important in conducting meaningful Optional Interconnection Studies because it helps identify who may drop out of the queue, we note that the Optional Interconnection Studies are to be performed after the Interconnection System Impact Study, at which point only serious projects are likely to remain in the queue.
- 115. The Commission clarifies that the study reports are to be posted, not the actual studies. Regarding deviations from the study time lines, the Commission clarifies that the Transmission Provider is to post deviations from the study time lines as projected by the Transmission Provider for completing future Interconnection Studies. For example, Section 6.3 (Interconnection Feasibility Study Procedures) calls for the Interconnection Feasibility Study to be completed within 45 Calendar Days after the Transmission Provider receives the fully executed Interconnection Feasibility Study Agreement. If the Transmission Provider anticipates that it will not able to complete the Interconnection Feasibility Study within 45 Calendar Days, it should post its deviation along with an explanation for the delay (e.g., backlog). Finally, we adopt MidAmerican's recommendation, and Final Rule LGIP Section 3.4 requires the posting of any expected deviation from a Generating Facility's In-Service Date.

116. **Section 3.5 - Coordination with Affected Systems** - Proposed LGIP Section 3.5 dealt with interconnections that may affect a Transmission System other than that of the Transmission Provider. A third party Transmission System was proposed to be defined in the NOPR LGIA as an Affected System. Section 3.5 also proposed obligations and rights of the Affected System, the Transmission Provider, and the Interconnection Customer, including a requirement to coordinate Interconnection Studies.

#### **Comments**

\*22 117. Interconnection Customers including Duke Energy, Independent Producers, Norton Energy, and Peabody support requiring the Transmission Provider (rather than the Interconnection Customer) to coordinate and perform all necessary Interconnection Studies and Network Upgrades with an Affected System. Duke Energy agrees that the Affected System Operator should be required to cooperate with the Transmission Provider in completing necessary studies. Duke Energy also wants the Affected System Operator to enter into an agreement with the Interconnection Customer. Other commenters, predominately Transmission Providers, oppose placing these responsibilities on the Transmission Provider. They contend that (1) a contract cannot bind a third party that is not a signatory to it, (2) it is unfair to impose liability for liquidated damages for an incomplete study on the Transmission Provider where the Transmission Provider has no control over the Affected System, (3) the Transmission Provider should be required to use only "reasonable efforts" to coordinate with an Affected System, (4) the Interconnection Customer should pay any costs of conducting Interconnection Studies on an Affected System, including all costs of delays caused by the studies, (5) the Interconnection Customer should be required to pay for the necessary upgrades on the Affected System and not be allowed to operate until such upgrades are completed, and (6) the Transmission Provider should not be responsible for actions (or inactions) of third parties either with regard to funding or construction of Network Upgrades.

## **Commission Conclusion**

118. The Commission continues to treat interconnection and delivery as separate aspects of transmission service, and an Interconnection Customer may request Interconnection Service separately from transmission service (delivery of the Generating Facility's power output). In the majority of circumstances, interconnection alone is unlikely to affect the reliability of any neighboring Transmission System. However, in those rare instances in which the interconnection alone may cause a reliability problem on an Affected System, the Commission adopts the approach of Order No. 888 for Network Upgrades required to protect an Affected System from a reliability problem due to delivery service. <sup>56</sup> Under Order No. 888, the Transmission Provider is required to assist the Transmission Customer in coordinating with the Affected System on any Network Upgrades needed to protect the reliability of that system. <sup>57</sup> We will also allow the Transmission Provider to coordinate the timing of construction of Network Upgrades to its Transmission System with the construction required on the Affected System. <sup>58</sup> As provided in the OATT, the Commission's Dispute Resolution Service is available should the Interconnection Customer wish to challenge the Transmission Provider's decision to delay construction pending completion of the Affected System's upgrades. <sup>59</sup>

- \*23 119. The Commission reiterates that under Order No. 888, economic losses from having to redispatch generation do not justify delaying the provision of the delivery component of transmission service. <sup>60</sup> The Commission adopts the same standard here for interconnections.
- 120. Thus, unless the interconnection alone will endanger the reliability of an Affected System, a Transmission Provider may not require an Interconnection Customer, as a condition of interconnection, to accept responsibility for Network Upgrades on other systems. To hold new Interconnection Customers responsible for upgrades to all interconnected systems, including not only the system to which the Generating Facility interconnects, but other, more distant systems as well would create an unreasonable obstacle to the construction of new generation. <sup>61</sup> We reiterate that requiring a Transmission Provider to coordinate intermediate studies and upgrades with other systems is just and reasonable.
- 121. Although the owner or operator of an Affected System is not bound by the provisions of the Final Rule LGIP or LGIA, the Transmission Provider must allow any Affected System to participate in the process when conducting the Interconnection

Studies, and incorporate the legitimate safety and reliability needs of the Affected System. However, the Affected System is not required to participate in the interconnection of the Generating Facility, as proposed by Duke Energy. If the Affected System declines to work with the Transmission Provider, or fails to provide information in a timely manner, the Transmission Provider may proceed in the interconnection process without taking into account the information that could have been provided by the Affected System. Neither the Final Rule LGIP nor the Final Rule LGIA is intended to expose the Transmission Provider to liability as a result of delays by the Affected System.

- 122. In addition, we note that NERC Planning Standards require Transmission Providers to work together to minimize effects on each others' systems. When a Transmission Provider adds its own new generation to its system, this may have a reliability effect on other systems, requiring coordination among systems. Such coordination must extend to new generation of any Interconnection Customer because, as stated in this provision, a Transmission Provider must offer all generators service that is comparable to the service that it provides to its own generation or that of its Affiliates.
- 123. **Section 3.6 Withdrawal** Proposed LGIP Section 3.6 provided that the Interconnection Customer would have the option to withdraw its Interconnection Request at any time with written notice to the Transmission Provider. If the Interconnection Customer fails to adhere to the requirements of the interconnection procedures, its request would be deemed withdrawn and the Transmission Provider would provide written notice of the deemed withdrawal along with a written explanation. In either instance, the Interconnection Customer would lose its Queue Position and pay all of the Transmission Provider's prudently incurred costs up to the withdrawal. The Transmission Provider would be required to update its OASIS queue posting and to refund the Interconnection Customer any portion of the Interconnection Customer's deposits or study costs that exceeds the costs that the Transmission Provider has incurred, including interest. In the event of a withdrawal, the Interconnection Customer would be able to request all information the Transmission Provider developed for any completed Interconnection Studies, up to the date of withdrawal of the Interconnection Request, subject to the confidentiality provisions of Section 13.1.

### **Comments**

- \*24 124. FirstEnergy and WEPCO assert that an Interconnection Customer should be given a reasonable amount of time to address purported deficiencies before a Transmission Provider deems a request withdrawn because the purported deficiency may not have been adequately communicated to the Interconnection Customer.
- 125. Cinergy requests that this section be modified to require that a Transmission Provider provide written notice to the Transmission Owner of any Interconnection Customer withdrawal notice it receives or, alternatively, that the Interconnection Customer provide notice to both the Transmission Provider and the Transmission Owner.
- 126. When an Interconnection Customer withdraws its application, NYTO supports having the Interconnection Customer pay the Transmission Provider all monies due to the Transmission Provider before it is allowed to obtain any Interconnection Study data or results. Duke Energy argues that an Interconnection Customer's responsibility for prudently incurred costs terminates either when the Transmission Provider receives the Interconnection Customer's notice of withdrawal or, in the event the Interconnection Customer is deemed to have withdrawn its application for interconnection, when the Transmission Provider provides notice of withdrawal.
- 127. PJM believes that the proposed language implies that if an Interconnection Customer disputes its loss of Queue Position, it would remain in the queue pending Dispute Resolution. PJM advocates instead the approach the Commission has accepted in the PJM Tariff, that is, when an Interconnection Customer is disqualified from the queue, it is eliminated from the queue unless and until a Dispute Resolution process restores its position.

- 128. The Commission agrees with FirstEnergy and WEPCO that Interconnection Customers should be given an opportunity to address any deficiencies before their requests are deemed withdrawn by the Transmission Provider. Proposed LGIP Section 3.6 is revised in the Final Rule LGIP accordingly.
- 129. The Commission agrees with Duke Energy that an Interconnection Customer's responsibility for a Transmission Provider's prudently incurred cost terminates at the earlier of either when the Transmission Provider receives the Interconnection Customer's notice of withdrawal or when the Transmission Provider provides a notice of withdrawal after deeming an Interconnection Request to be withdrawn. The Commission also agrees with NYTO that when the Interconnection Customer withdraws its application, it must pay all monies due to the Transmission Provider before it is allowed to obtain any Interconnection Study data or results.
- 130. We agree with PJM that it is unreasonable for an Interconnection Customer to maintain its Queue Position pending Dispute Resolution. In most cases, Dispute Resolution and any related litigation would create delays, and it would be unfair to delay the projects of lower queued Interconnection Customers while a higher-queued Interconnection Customer's Queue Position is in dispute. The Commission clarifies this section in the Final Rule LGIP accordingly.
- \*25 131. Section 4 Queue Position Proposed LGIP Section 4 would establish the Interconnection Customer's Queue Position (i.e., the chronological priority assigned to an Interconnection Request), which would be used to determine both the order in which studies are performed and the cost responsibility for the facilities necessary to accommodate the Interconnection Request. At the Transmission Provider's option, Interconnection System Impact Studies would be performed serially as Interconnection Requests are received or in clusters, as discussed below. Proposed LGIP Section 4 also described when a Queue Position can be transferred to another entity, and when an Interconnection Customer could modify its Interconnection Request without losing its Queue Position.
- 132. Section 4.1 General Proposed LGIP Section 4.1 required the Transmission Provider to assign a Queue Position to the Generating Facility based on the date and time of receipt of a valid Interconnection Request. However, if the sole reason that an Interconnection Request is deemed invalid is lack of information required in the Interconnection Request, and if the Interconnection Customer provides such information in accordance with Section 3.3.3 of the proposed LGIP, the Transmission Provider would then be required to assign the Interconnection Customer a Queue Position based on the date and time that the Interconnection Request was initially filed. The Queue Position of each Interconnection Request would be used to determine the order of performing the Interconnection Studies, which would determine the cost responsibility for the facilities necessary to accommodate the Interconnection Request. This is because the facilities needed for one Interconnection Customer are affected by the facilities needed for other generators that come before it in the queue.

- 133. TVA observes that the level of commitment by Interconnection Customers to complete an interconnection varies. A change in the request of a higher queued Generating Facility will affect lower queued generators because it may require restudies. It states that the "first-come, first-served" method rewards an Interconnection Customer that simply is the first in line, even if it has not done the preparation to make a complete and legitimate Interconnection Request. According to TVA, this is costly and unfair to other Interconnection Customers. It also asserts that if an Interconnection Customer seeks to change its Point of Interconnection, it should be placed in a lower position in the queue. Ameren has similar concerns and states that it has a high withdrawal rate for Interconnection Requests. It claims that fewer restudies would be needed if a Transmission Provider could study only "serious" requests.
- 134. American Wind Energy believes that projects in the queue when the Final Rule takes effect should receive equal treatment under the new rule. It states that since summer 2000 several developers have accelerated their projects and have executed interconnection agreements. These developers should be able to have their interconnection agreements revised to be consistent with the Final Rule LGIA.

- \*26 135. PJM believes that the proposed procedures do not help eliminate projects that are not economically feasible. Accordingly, the Interconnection Customer should be required to meet milestones to show significant commitment to a project. The fixed schedule approach (which fixes a time period for completing an Interconnection Study after the receipt of an Interconnection Request) undermines integrated regional planning, since it forces planners to study each Interconnection Request independently of other Interconnection Requests that are located in close electrical proximity. PJM also notes that such projects could have related effects on the Transmission System and overall expansion alternatives.
- 136. PacifiCorp believes that there will be problems in the queuing and the Interconnection System Impact Study process if an Interconnection Customer is allowed to request an Interconnection Study when it does not expect to begin construction or operations for a long time. According to PacifiCorp, long lead times substantially increase the uncertainty that the project will be completed. An independent Transmission Provider should be given more flexibility in addressing these issues.
- 137. TECO Energy states that the Interconnection Request must provide a demonstration of Site Control for the Generating Facility at the time of the initial request before it may enter the queue. It states that it is inefficient to commit a Transmission Provider's resources to the study of a request until the project achieves a level of certainty and specificity that justifies the commitment of resources, even though the Interconnection Customer pays for the Interconnection Studies.
- 138. EEI, PSEG, and SoCal Edison all state that they generally support establishing a single integrated queue per RTO region.
- 139. EEI states that Interconnection Service and delivery service are separate and that there is no need to combine them. It believes that any combination of the two services requires a single Interconnection Feasibility Study for several generators, would likely overly complicate the queuing process, and subsequently delay study completions. It contends that the separation of interconnection and delivery services is critical to designing a queue that is appropriate for both non-Standard Market Design and Standard Market Design service.
- 140. Xcel observes that the "first-come, first-served" queue process does not take into account either the transmission planning requirements of RTOs or state integrated resource planning statutes and rules, which often require the use of a "portfolio approach" whereby state-regulated load-serving entities select between competing generation providers based on the total cost of generation and transmission.
- 141. Xcel supports a process similar to the periodic "open season" used for gas pipelines, in which the Transmission Provider or RTO would periodically solicit market interest in incremental transmission capacity and then develop a transmission plan that serves the various market needs at the lowest overall cost.
- \*27 142. TXU wants the Final Rule to allow a Transmission Provider, RTO, or ISO to create queues that are periodically opened and closed, based on a predetermined time period. Proposed projects should be placed into a queue according to the date of the Interconnection Request.
- 143. American Wind Energy, NYISO, and Tenaska believe that Queue Position should not be used exclusively to determine the cost responsibility for the facilities necessary to accommodate the Interconnection Request. American Wind Energy states that the first wind project in the queue should not be required fund the Network Upgrades for what logically will be a long term large scale build-out of an entire wind resource area. NYISO also contends that the Commission's proposal is not workable in the NYISO system because its interconnection cost allocation rules are not based on Queue Position. Instead, Interconnection Facility costs are determined each year and allocated on the basis of pro-rata electrical impact among the members of a group of projects that have reached a specified point in the New York State project permitting process.

- 144. The Commission understands Ameren's and PJM's concerns that uncertainty about project withdrawal creates difficulties for a Transmission Provider in planning for necessary Network Upgrades. Having an Interconnection Customer and a Transmission Provider establish agreed upon milestones at the Scoping Meeting should help to ensure that the Transmission Provider's planning process reflects only the interconnection of Generating Facilities that are making satisfactory progress toward completion. Also, a Transmission Provider facing difficulties of this sort may wish to consider conducting Interconnection Studies on a clustered basis (see discussion below). Factors other than Queue Position also must be considered in determining the cost responsibility of an Interconnection Customer, especially when a Transmission Provider conducts Interconnection Studies on a clustered basis. However, we believe that Queue Position must play a critical role in determining cost responsibility, and expect the Transmission Provider to give appropriate recognition to Queue Position when it develops its cost allocation rules.
- 145. We agree with TVA's comment that moving the proposed Point of Interconnection should lead to a lower Queue Position if it is a Material Modification under Final Rule LGIP Section 4.4.3. Section 4.1 is revised accordingly in the Final Rule.
- 146. With respect to TECO Energy's comments on the need to demonstrate Site Control in the initial application, the Commission notes that LGIP Section 3.3.1 and the definition of Site Control in the Final Rule already require early demonstration of Site Control or posting a deposit of \$10,000. Section 7.2 of the Final Rule LGIP requires a demonstration of Site Control prior to executing the Interconnection System Impact Study Agreement. We conclude that these provisions adequately demonstrate Site Control.
- \*28 147. There must be a single integrated queue per geographic region. We note that it was the method generally agreed upon during the Commission staff's Technical Conference on Queuing. However, we will afford an RTO or ISO the flexibility to propose queues and queuing rules designed to meet its regional needs.
- 148. Xcel's and TXU's comments are addressed in the Commission Conclusions discussion for Section 4.2 (Clustering), which follows.
- 149. **Section 4.2 Clustering** For the purpose of the Interconnection System Impact Study, Section 4.2 of the NOPR LGIP permitted the Transmission Provider to study Interconnection Requests serially or in clusters. The Transmission Provider would be allowed to simultaneously study all Interconnection Requests received during a period not to exceed 90 Calendar Days ("the queue cluster window") except requests for Energy Resource Interconnection Service, which would be studied serially. The Transmission Provider would be permitted to study an Interconnection Request separately if warranted by Good Utility Practice based upon the electrical remoteness of the proposed Generating Facility.

- 150. Various Transmission Providers including BPA, NYTO, and PJM recommend that the queue cluster window be extended from 90 to 180 days so that the study process may be fully integrated into the Transmission Provider's planning process, and to ensure that one set of Interconnection Studies can be completed before the next round begins. PJM states that a 180-day window reasonably balances the competing objectives of completing Interconnection Studies as rapidly as possible and ensuring that the study process produces meaningful regional expansion plans that induce economically efficient decisions by generation developers. PSEG sees merit in the clustering approach, but states that it should be tied to the planning process and have specified start and end dates. PJM opposes the requirement to study requests for Energy Resource Interconnection Service serially, arguing that most of the tests applied to Energy Resource Interconnection Service are the same.
- 151. The Midwest ISO seeks clarification whether a cluster refers to a group of Interconnection Requests that were submitted during a specified time period, such as 90 Calendar Days, or to a group of Generating Facilities that are located in geographic proximity to one other, or both. The Midwest ISO seeks further clarification whether each Interconnection Request is to be

studied serially within the cluster in order to determine the cost of Network Upgrades for each, or all of the Interconnection Requests are to be studied simultaneously, which will determine only the total cost of Network Upgrades. It argues that if the latter is the case, the Commission will need to prescribe a way to allocate the total cost of Network Upgrades to each Interconnection Customer within the cluster.

152. American Wind Energy states that clustering is the best method to interconnect both large and small generators in a balanced regional planning process, and also facilitates the coordinated completion of a useful Interconnection System Impact Study.

### **Commission Conclusion**

\*29 153. In the Final Rule, we are setting the queue cluster window for conducting Interconnection System Impact Studies at 180 Calendar Days. As the commenters make clear, the principal benefit of studying Interconnection Requests in clusters is that it allows the Transmission Provider to better coordinate Interconnection Requests with its overall transmission planning process, and, as a result, achieve greater efficiency in both the design of needed Network Upgrades and in the use of its planning resources. We are persuaded by the arguments of PJM and others that the proposed 90-day cluster window is too short to achieve this result, and that a 180-day window is more appropriate.

154. We are also persuaded by PJM that if the Transmission Provider elects to study Interconnection Requests in clusters, requests for both Energy Resource Interconnection Service and Network Resource Interconnection Service should be included in the clustered Interconnection Studies. Requiring the Transmission Provider to perform System Impact Studies for Energy Resource Interconnection Service requests on a serial basis would mean that many of the efficiency benefits of clustering would be lost. When a Transmission Provider conducts Interconnection Studies on a clustered basis, the Interconnection Customer may have to wait longer to obtain study results than it would if its request were studied serially. However, some of the information that an Interconnection Customer needs is provided by the Interconnection Feasibility Study, which is conducted serially and early in the study process.

155. Clustering is strongly encouraged in queue management and the Interconnection Study process for all Transmission Providers. We vigorously support the use of queue windows to manage the Interconnection Study process. In response to the Midwest ISO's comments, Final Rule IP Section 4.2 has been modified to better explain the clustering process. Queue windows with regular, fixed opening and closing dates are essential to an orderly process. Once fixed, any changes to these dates should be announced with a posting on the Transmission Provider's OASIS at least 180 days in advance of the change. Cluster windows enable the Transmission Provider to evaluate all pending Interconnection Requests periodically and systematically in light of the Transmission Systems's capabilities at the time of each clustered Interconnection System Impact Study.

156. Clustering (by queue position and electrical location) ensures that the regional expansion plan considers all uses of the Transmission System and enables expansion of the system to be accomplished in the most efficient manner reasonably achievable. However, projects that are electrically isolated can still be studied independently. Additionally, allocation of cost responsibility for system upgrades and jointly used facilities is more readily managed by studying requests in clusters. Absent the ability to cluster interconnection requests, it is difficult to distinguish the Transmission Provider's cost responsibility for baseline reliability upgrades from the responsibility of Interconnection Customers and other developers for the costs of upgrades required to accommodate their Interconnection Requests since each request would have to be studied serially. Equally important, Interconnection Studies for smaller generators can be more easily expedited. These efficiencies are best obtained using clustered queue windows, not through the sequential processing of Interconnection Requests.

\*30 157. Section 4.3 - Transferability of Queue Position - The Commission proposed in Section 4.3 of the NOPR LGIP that an Interconnection Customer may transfer its Queue Position to another entity if such entity acquires the Generating Facility identified in the Interconnection Request and the Point of Interconnection does not change.

158. National Grid states that the Commission should resist requests from those that propose to make Queue Position a tradable commodity to gain flexibility over the timing of their proposed projects. National Grid offers several arguments against allowing this: (1) it would create an unnecessary commodity that would encourage gaming in competitive markets, (2) it would render the interconnection queue process unmanageable because the trading of Queue Positions would make it impossible to build sets of assumptions on which to base studies, (3) it would add another layer of administrative burdens for Transmission Providers; and (4) the disputes over Queue Position that are likely to arise would divert the Transmission Provider's attention away from facilitating reasonably prompt interconnections. Instead, the Commission should adopt a subordinate application process like the one implemented in NEPOOL, which allows a project sponsor to accelerate the construction and operation of its facilities application ahead of other projects in the queue in return for the sponsor's assumption of the risks associated with building the facilities in a sequence different from the study order of the queue.

159. The CPUC believes that changes resulting from an Interconnection Customer selling its Queue Position could harm subsequent Interconnection Customers in the queue, since it could affect the portfolio of technologies in the queue and the diversity of the Transmission System as a whole. According to the CPUC, an Interconnection Customer wishing to sell its position should be required to provide assurances that it will pay not only for any Interconnection Studies needed as a result of the change, but also for the costs to subsequent Interconnection Customers in the queue as a result of the change. The seller of the Queue Position should also be liable for any obligations that the buyer of the position is unable to fulfill in the event of a Default.

### **Commission Conclusion**

160. While the commenters raise legitimate concerns with Queue Position trading in general, we conclude that the restrictions on transferability that are already contained in Section 4.3 address these concerns. Section 4.3 of the Final Rule LGIP permits an Interconnection Customer to transfer its Queue Position to another entity only if such entity acquires the specific Generating Facility identified in the Interconnection Request and the Point of Interconnection does not change. These limitations on transferability greatly reduce the potential impact on lower queued Interconnection Customers. The new Interconnection Customer would also be required to show, under Section 4.4.3 of the Final Rule LGIP, that any proposed change is not a Material Modification.

\*31 161. Section 4.4 - Modifications - Proposed LGIP Section 4.4 would have required that the Interconnection Customer submit to the Transmission Provider, in writing, modifications to any information provided in the Interconnection Request. Either the Interconnection Customer or the Transmission Provider would be permitted to identify changes to the planned interconnection that may reduce the costs and increase the benefits (including reliability) resulting from the interconnection. If the changes are acceptable to the Transmission Provider and Interconnection Customer (such acceptance not to be unreasonably withheld), the Transmission Provider would make the necessary changes and proceed with interconnection restudies in accordance with Sections 6.4, 7.6 and 8.5 of the LGIP, as applicable. Accordingly, the Generating Facility would retain its Queue Position.

162. **Section 4.4.1** - Proposed LGIP Section 4.4.1 LGIP would allow an Interconnection Customer to make the following modifications to its Interconnection Request, provided that it makes them before returning the executed Interconnection System Impact Study Agreement to the Transmission Provider: (1) a reduction of as much as 60 percent in the megawatt output of the proposed project, (2) modification of the technical parameters associated with the Generating Facility technology or the step-up transformer impedance characteristics, (3) modification of the interconnection configuration, or (4) any other type of change except to the proposed Point of Interconnection. Any increase in the Generating Facility's megawatt output would be placed at the end of the queue.

163. Dynegy argues that item (4) is confusing, makes the other items in the list redundant, and does not belong in this section. Several commenters, including Duke Energy and WEPCO, advocate allowing an Interconnection Customer to increase the output of its Generating Facility by up to ten percent of the voltage level of the line to which it is interconnecting without affecting its Queue Position.

#### **Commission Conclusion**

164. We agree with Dynegy that item (4) does not belong in this section. The item more appropriately belongs in Section 4.4.3. Accordingly, Final Rule LGIP Section 4.4.3 includes the following sentence: "Any change to the Point of Interconnection shall constitute a Material Modification."

165. We reject the other commenters' proposal to allow an Interconnection Customer to increase the output of its Generating Facility by up to ten percent. The percentage by which the capacity of the proposed Generating Facility could be increased without substantially changing the size and configuration of necessary Network Upgrades needed to accommodate the change in output would depend on the size and location of the Generating Facility and the voltage level at the Point of Interconnection, among other things. This could vary significantly from case to case, and may well be less than ten percent.

\*32 166. Section 4.4.3 - Proposed LGIP Section 4.4.3 would have required that, prior to making a modification other than one specifically permitted by Sections 4.4.1, 4.4.2, and 4.4.5, the Interconnection Customer may first ask the Transmission Provider to evaluate whether the modification is actually a Material Modification. A Material Modification would be a modification that has a material effect on the cost or timing of a lower queued Interconnection Customer. The Transmission Provider would be required to evaluate the proposed modification and inform the Interconnection Customer in writing whether the modification would considered be a Material Modification. The Interconnection Customer could then either withdraw the proposed modification or submit a new Interconnection Request for such modification.

### **Comments**

167. SoCal Water District and Dynegy ask the Commission to clarify the definition of Material Modification to avoid disputes between the Parties regarding the Generating Facility's Queue Position. Ameren argues that a modification that is proposed as not being "material" may in fact be a Material Modification. FirstEnergy opposes giving the Transmission Provider the discretion to determine whether a request is a Material Modification. El Paso observes that reading proposed LGIP Sections 4.4.3 and 4.4.5 together implies that the Transmission Provider will be forced to judge whether an extension of three years or more is material and to determine if a cost effect or other project change is material. El Paso supports defining a Material Modification as: (1) a change greater than 12 months in Commercial Operation Date, (2) an increase of greater than \$100,000 or 10 percent in the Transmission Provider's cost that a later queued Interconnection Customer would bear; or (3) a change greater than five miles in the location of, or any change in the voltage level at, the Point of Interconnection. Edison Mission believes that the Final Rule LGIP should clarify the effect of material improvements and modifications to existing Generating Facilities on the interconnection status and the rights of such Generating Facilities. The Bureau of Reclamation expresses concern that the NOPR does not define how or when an existing Interconnection Customer would be affected by Material Modifications. The Bureau of Reclamation is concerned because design and approval of its generator refurbishment is a federal responsibility and would be subject to the federal appropriation process.

## **Commission Conclusion**

168. It is not necessary to revise proposed LGIP Section 4.4.3 to define precisely what constitutes a Material Modification. The impact of a modification depends in large part on the size, location, type of project and the configuration of the Transmission Provider's Transmission System. The various Interconnection Studies will identify the modification's impact on other Interconnection Customers. This impact determines if the change is indeed a Material Modification. We leave it to the Transmission Provider to make that determination; however, it must do so on a reasonable basis.

\*33 169. Section 4.4.4 - Proposed LGIP Section 4.4.4 in the NOPR LGIP provided that, upon receipt of an Interconnection Customer's request for modification permitted under Section 4.4, the Transmission Provider would perform any necessary additional Interconnection Studies as soon as practicable, but in no event later than 30 Calendar Days after receiving notice of the Interconnection Customer's request. Any additional Interconnection Studies resulting from such modification would be done at the Interconnection Customer's expense.

### **Comments**

170. Exelon asserts that this section is not practical and is punitive to all lower queued Interconnection Customers. It contends that each time a modification is requested, a Transmission Provider or Transmission Owner must begin studying the modification within 30 Days and all work on the Interconnection Studies of all lower queued Interconnection Customers must be halted.

## **Commission Conclusion**

- 171. We adopt Section 4.4.4 as proposed. While any modification that requires additional study can pose a challenge to the Transmission Provider's schedules and resources, the modifications that are permitted under Section 4.4 occur early enough in the study process that their effect on Interconnection Customers lower in the queue should be limited. Furthermore, since all Interconnection Requests are evaluated in the same restudy, this provision appropriately balances the Interconnection Customer's need for flexibility to change the project with the Transmission Provider's need for certainty in resource costs and schedules.
- 172. **Section 4.4.5** Section 4.4.5 of the NOPR LGIP provided that an extension of less than three cumulative years in the Commercial Operation Date of the Generating Facility should not be considered a Material Modification and should be treated in the same manner as in Section 12.3 (Construction Sequencing).

#### **Comments**

- 173. Salt River Project seeks clarification on what to do when the original In-Service Date is at the maximum allowable ten years (under Proposed LGIP Section 3.3.1) and there is a request for a three year extension. Duke Energy supports allowing an Interconnection Customer to request an extension of all dates, including the In-Service Date, for periods of less than three cumulative years. Sempra believes that the Transmission Provider needs greater flexibility to manage and evaluate its Transmission System for delays of more than one year.
- 174. Westconnect RTO finds that two provisions in this Section contradict Western Electricity Coordinating Council (WECC) procedures. They are allowing the Interconnection Customer to decide to extend its Generating Facility's Commercial Operation Date for up to a total of three cumulative years and providing that such extensions are not material and should be handled through construction sequencing. Westconnect RTO asserts that regional practices concerning transmission planning and reliability should be honored.
- \*34 175. SoCal PPA and El Paso believe that a three year period is an unreasonably long time to permit suspension of interconnection because it interferes with the Transmission Provider's ability to manage the queue and plan its system.

# **Commission Conclusion**

176. With respect to Salt River Project's request, we clarify that the term contained in Final Rule LGIP Section 3.3.1 is ten years, or longer if the Transmission Provider agrees. Furthermore, such agreement shall not be unreasonably withheld. This clarification also addresses Duke Energy's and Sempra's concerns.

- 177. With respect to Westconnect RTO's assertion that this section contravenes WECC procedures, as stated above, we would permit modifications to the Final Rule LGIA and Final Rule LGIP where the Transmission Provider shows that there are legitimate regional differences, such as the WECC procedures, that would support such modifications. As to other arguments that three years is an unreasonably long time to permit extensions of the Commercial Operation Date, the Commission recognizes that such flexibility places a burden on the Transmission Provider's expansion planning process, but these extensions in most cases are well within the scope of other unforeseen changes that affect the planning process. The Final Rule therefore adopts Section 4.4.5 as proposed.
- 178. Section 5 Procedures for Interconnection Requests Submitted Prior to Effective Date of Interconnection Procedures Section 5 of the proposed LGIP described the procedures for assigning a Queue Position prior to the effective date of the Final Rule LGIP. It also proposed a transition process for a Transmission Provider with an Interconnection Request that is outstanding when the Final Rule takes effect.
- 179. Section 5.1 Queue Position for Pending Requests Proposed LGIP Section 5.1 provided that any Interconnection Customer assigned a Queue Position prior to the effective date of the Final Rule LGIP would retain that Queue Position. Also, if an Interconnection Study Agreement has not been executed as of the Final Rule effective date, then that Interconnection Study and subsequent Interconnection Studies would be processed in accordance with the Final Rule. However, an executed Interconnection Study Agreement would be completed in accordance with the terms in place at the time of execution of that agreement. The proposed section also provided that if an interconnection agreement has been tendered as of the Final Rule effective date, the Transmission Provider and Interconnection Customer would finalize its terms. To the extent necessary, outstanding requests would transition to the Final Rule procedures within a reasonable period of time, not to exceed 60 Calendar Days. Reasonable extensions would be granted.

- 180. The Midwest ISO recommends adding a subsection to the LGIP that permits Interconnection Requests in existing queues of non-RTO Transmission Providers to be merged into the queue of the RTO or ISO based on the original request dates at the time the Transmission Provider joins the RTO.
- \*35 181. Central Maine supports the grandfathering of existing interconnection agreements that are filed with and accepted by the Commission as of the effective date of the Final Rule LGIP and Final Rule LGIA.
- 182. Sempra argues that it is inappropriate to mandate Parties to agree to an interconnection agreement tendered but not fully negotiated prior to the issuance of the Final Rule because, otherwise, the tendering Party could tender them on the eve of the Final Rule going into effect and the other Party would be compelled to negotiate under the Final Rule's terms and conditions. Therefore, either Party should be permitted to set aside unexecuted but tendered interconnection agreements prior to the effective date of the Final Rule.
- 183. MidAmerican states that the proposed provision of Section 5.1.2, which established a transition period from the old queue processes to the new Final Rule provisions that should not exceed 60 days, is practical only for projects that are in their early stages. It proposes adding the phrase "provided that any existing interconnection agreement or Interconnection Study Agreement shall remain in full force and effect" for projects that have an executed interconnection agreement. MidAmerican also states that the Commission should clarify that this transition period is only for those outstanding requests for which Interconnection Studies Agreements and interconnection agreements have yet to be executed prior to the Final Rule going into effect. Similarly, Central Maine seeks clarification of the meaning of pending or outstanding requests.
- 184. BPA states that this provision should be clarified with regard to the circumstances under which an Interconnection Customer with an existing Interconnection Request may request an extension of applicable deadlines.

### **Commission Conclusion**

185. The purpose of Proposed LGIP Section 5.1 was to ensure that a Generating Facility that has an established Queue Position prior to the Final Rule taking effect will continue to hold its position. This is also the case mentioned by the Midwest ISO for merging new members into the RTO's queue when the Transmission Provider joins an RTO. However, on compliance, discretion will be granted to RTOs or ISOs to propose queuing rules customized to their needs, in accordance with the "independent entity standard" (described in Part II.C.5).

186. Under proposed LGIP Section 5.1.1, the Interconnection Studies for which the Parties have an executed Interconnection Study Agreement would be completed under the Interconnection Study Agreement's terms, but any remaining studies would be completed under the Final Rule LGIP study procedures. The Commission concludes that this situation may cause confusion and unnecessary complications in the event that the Transmission Provider's existing study procedures conflict with those in the Final Rule LGIP. To provide further clarification, and to prevent situations in which an Interconnection Customer may be forced to comply with conflicting or redundant study requirements, the Commission modifies this section to give the Interconnection Customer a choice. Under the Final Rule LGIP Section 5.1.1.2, if an Interconnection Customer has signed an Interconnection Study Agreement as of the effective date of the Final Rule, the Interconnection Customer will have the option to either continue with the rest of its Interconnection Studies under the Transmission Provider's existing study process or complete those remaining studies for which it does not have a signed Interconnection Study Agreement under the Final Rule LGIP.

\*36 187. In response to Central Maine, we clarify that existing interconnection agreements that are filed with and accepted by the Commission prior to the effective date of this Final Rule will remain in effect. Regarding Sempra's request to allow the Parties to set aside interconnection agreements tendered but not executed before the issuance of the Final Rule, the Commission concludes that this decision is best left to the discretion of the Parties. If the Parties decide to continue their negotiations, they have until the Final Rule's effective date to submit their agreement to the Commission to qualify for grandfathering. Accordingly, Final Rule LGIP Section 5.1.1.3 states that an executed or unexecuted interconnection agreement submitted for approval by the Commission before the effective date of the Final Rule will be grandfathered and will not be rejected simply for failing to conform to the Final Rule LGIA.

188. With respect to Central Maine's and MidAmerican's requests for clarification of the term "outstanding requests" in Section 5.1.2, we clarify that the term refers to any request for interconnection that has been submitted to a Transmission Provider but has not yet been submitted to the Commission for approval prior to the effective date of this Final Rule.

189. There is no need to adopt MidAmerican's proposed language regarding the adequacy of a 60 day transition period in Section 5.1.2 since the Final Rule allows an Interconnection Customer to extend deadlines, and the 60 day period applies only to Interconnection Requests with outstanding studies for which an Interconnection Study Agreement has not been executed. We expect the Parties to work together during the transition period to ensure that no Interconnection Request is unreasonably delayed.

190. Finally, we deny BPA's request to explain the circumstances under which an Interconnection Customer may request an extension because these circumstances are likely to differ in each case. However, we expect that a Transmission Provider will grant an extension if it can be reasonably accommodated in a nondiscriminatory manner in the transition to the Final Rule LGIP.

191. **Section 5.2 - New Transmission Provider** - Proposed LGIP Section 5.2 provided that if the Transmission Provider transfers control of its Transmission System to a successor Transmission Provider while an Interconnection Request is pending, the original Transmission Provider would also transfer to the successor any deposit or payment that exceeds the cost that it has incurred. The original Transmission Provider would be required to coordinate with the successor to complete any appropriate Interconnection Study. If an Interconnection Agreement has not been executed or if an unexecuted Interconnection Agreement

has been filed with the Commission, the Interconnection Customer would have the option to complete negotiations with either the initial Transmission Provider or the successor.

#### **Comments**

\*37 192. Dairyland Power observes that the initial Transmission Provider should provide interest to the successor when the balance of deposits or payments is transferred. Also, if the study costs of the new Transmission Provider exceed the amount of the deposit, it is reasonable that the Interconnection Customer make up the difference.

193. Without explanation, NYTO states that the Interconnection Customer should not have the option of negotiating with a successor Transmission Provider.

## **Commission Conclusion**

194. With respect to Dairyland Power's comment, the Commission clarifies that any additional costs incurred by the successor in excess of the deposit amounts must be treated in accordance with the Final Rule and paid upon completion of the Interconnection Studies. The Commission does not adopt NYTO's position and instead permits the Interconnection Customer to negotiate with the successor Transmission Provider.

195. Section 6 - Interconnection Feasibility Study

Section 7 - Interconnection System Impact Study

**Section 8 - Interconnection Facilities Study** 

## Section 10 - Optional Interconnection Study - Proposed LGIP Sections 6, 7 and

8 describe (1) the analyses that would be conducted for each of the Feasibility, System Impact, and Facilities Studies, (2) the Interconnection Customer's responsibility regarding the actual cost of each study and of any restudies that may be required; and (3) the right an Interconnection Customer would have to maintain its Queue Position and substitute a Point of Interconnection, identified by either the Transmission Provider or the Interconnection Customer, if any of these Interconnection Studies uncovers a result that the Interconnection Customer and Transmission Provider did not contemplate during the Scoping Meeting. These sections would also allow an Interconnection Customer to direct that one of the alternative Points of Interconnection specified in the related Interconnection Feasibility Study Agreement and Scoping Meeting be used if the Transmission Provider cannot agree on a substitute Point of Interconnection.

196. Section 10 proposed that the Interconnection Customer may ask the Transmission Provider to perform a reasonable number of Optional Interconnection Studies. An Optional Interconnection Study would be a sensitivity analysis based on assumptions provided by the Interconnection Customer. The scope of the Optional Interconnection Study would be to identify the Interconnection Facilities, Network Upgrades and the costs that may be required to provide transmission service or Interconnection Service.

197. The following paragraphs group together discussions of Sections 6, 7, 8, and 10 because of the relationships among the topics and provisions.

General Comments Related to the Feasibility Study, the

System Impact Study, the Facilities Study and the

**Optional Interconnection Study** 

198. A number of commenters, including El Paso, FirstEnergy, the Midwest ISO, National Grid, and PJM, are concerned that the proposed Interconnection Studies will take longer to complete than the Interconnection Studies that a Transmission Provider typically performs today, and will lead to delays in the development of new generation projects. TVA believes that the study deadlines are unrealistic, particularly for Transmission Providers with medium to large interconnection queues. It opposes having to study the Energy Resource Interconnection Service and Network Resource Interconnection Service during each phase of the Interconnection Study process. Instead, TVA proposes that the Interconnection Customer should be able to designate only one Interconnection Service for study purposes or adjusting the time lines in Sections 6, 7, 8, and 10 to reflect the increased scope of work required by giving the Interconnection Customer such alternatives. Imperial Irrigation opposes the NOPR's proposed Interconnection Studies because it does not have enough resources to conduct them. NYISO urges the Commission to allow for regional differences in the Final Rule.

\*38 199. Entergy opposes giving the Interconnection Customer the ability to continually modify its selected Point of Interconnection throughout the study process. TVA opposes an Interconnection Customer maintaining its position in the queue if the Interconnection Customer changes its Point of Interconnection in any of the Interconnection Studies. PJM believes that to allow the Interconnection Customer to require restudies throughout the Interconnection Study process is inconsistent with a workable regional planning process.

200. Sempra opposes setting a dollar figure for good faith estimates of Interconnection Study costs in the standardized study agreements that are attached as appendices to the Final Rule LGIA. It supports leaving the cost estimates blank in the appendices, with the expectation that the Transmission Provider would provide the timely good faith estimate later. Sempra also supports limiting the Transmission Provider's ability to pass on cost overruns to the Interconnection Customer.

201. Central Maine notes that the proposed Interconnection Study agreements would fix the "good faith estimated cost for performance" of each particular study. It argues that this is inappropriate because Interconnection Study costs vary greatly from one Generating Facility to another. It believes that Transmission Providers should be able to tailor each Interconnection Study agreement to the particular Generating Facility, and to include the good faith Interconnection Study cost estimate in each such agreement. If prepayment of Interconnection Study costs is not required, the deposit should be a percentage of the estimated total Interconnection Study cost, as opposed to a fixed dollar amount.

202. Several commenters seek additional requirements in assigning cost responsibility for Interconnection Studies to the Interconnection Customer. Central Maine notes that there are no proposed payment terms governing restudies, and supports clearly stating that the Interconnection Customer should bear full cost responsibility for a restudy. BPA supports requiring the Interconnection Customer to pay the estimated cost of the Interconnection Feasability Study in advance under Sections 6.1 and 7.2. National Grid's position is that the Interconnection Customer should prepay the costs of all Interconnection Studies because the Transmission Provider is exposed to the risk of nonpayment. Central Vermont PSC believes that the Interconnection Customer should bear study costs involving an Affected System.

203. Several entities seek clarification on the proper scope of, and standards for, the Interconnection Studies. Cal ISO believes that a study should encompass conditions that include off-peak scenarios and contingency conditions. Entergy and Westconnect RTO argue that the NOPR LGIP does not mention types of Interconnection Studies other than load flow, short circuit, and stability studies. They suggest that the scope of the Interconnection Studies not be limited to these named analyses, but be expanded to include additional Interconnection Studies conducted in accordance with Good Utility Practice. PSNM supports expanding the scope of Interconnection Studies to encompass any analyses dictated by Good Utility Practice and allow for additional time on specialized Interconnection Studies, if needed. PacifiCorp supports permitting the Transmission Provider to require additional Interconnection Studies recommended or required by a regional reliability council, including remedial action margin studies. Georgia Transmission believes that the Transmission Provider's obligation under Sections 6.2 and 6.3 is inconsistent with the limited scope of the Interconnection Feasibility Study, which is defined to consist only of a power flow study and a short circuit analysis.

\*39 204. Southern asks whether, if one Interconnection Request is required to be restudied by a date certain, all other lower queued requests would have to be restudied by that same date. Southern believes that this would be unworkable and unrealistic.

205. NYTO seeks details on specific study procedures for each of the Interconnection Studies.

## **Comments Related to Interconnection Feasibility Studies**

206. SoCal Water District argues that an Interconnection Customer should lose its position in the queue when the Interconnection Feasability Study uncovers a result that was not contemplated during the Scoping Meeting, instead of being allowed to designate a different site for the Point of Interconnection, as proposed. It says that this will encourage the Interconnection Customer to make the right choice at the beginning. It also comments that the Interconnection Customer should not be assigned a Queue Position until after the completion of the Interconnection Feasability Study.

207. NSTAR believes that Interconnection Feasibility and Interconnection Facilities Studies should be at the option of the Interconnection Customer.

208. The Midwest ISO points out that it is not always possible to determine accurately when an Interconnection Customer in a high Queue Position will actually come on line and that this could affect the accuracy of the Interconnection Feasability Study requested by a lower queued Interconnection Customer.

209. Sempra supports allowing a Transmission Provider or Transmission Owner to consider in its Interconnection Studies the In-Service Dates of all proposed generation projects, even those lower in the queue. This is so that the studies produce sound results for reliability purposes and consider all projects that will come on line at approximately the same time.

## **Comments Related to Interconnection System Impact Studies**

210. FirstEnergy opposes as unreasonably short the proposed three day period of time during which a Transmission Provider must give an Interconnection Customer a non-binding good faith estimate of the cost and time frame for completing an Interconnection System Impact Study.

## **Comments Related to Optional Interconnection Studies**

- 211. Proposed LGIP Section 10.1 would allow the Interconnection Customer to ask the Transmission Provider to perform a reasonable number of Optional Interconnection Studies on or after the date the Interconnection Customer receives the results of the Interconnection System Impact Study associated with its Interconnection Request. A Transmission Provider would have five days from the date it receives a request for an Optional Interconnection Study to give the Interconnection Customer an Optional Interconnection Study Agreement. Commenters raise concerns with the requirement to perform Optional Interconnection Studies, cost responsibilities for such studies, and the proposed deadlines.
- 212. Southern opposes allowing an Interconnection Customer to require that a Transmission Provider perform Optional Interconnection Studies. Southern believes that Optional Interconnection Studies will delay the process by tying up Transmission Provider resources that could be dedicated to performing the required studies. BPA contends that allowing the Interconnection Customer to require an unspecified number of Optional Interconnection Studies, while requiring that the standard Interconnection Studies be performed within the standard deadlines, places an unreasonable burden on the Transmission Provider.

- \*40 213. Nevada Power opposes having to conduct Optional Interconnection Studies on the grounds that allowing changes to the original Interconnection Request violates the queue rights of other Interconnection Customers by giving additional study time and priority to the Optional Interconnection Study request. Dominion Resources makes a similar point.
- 214. SoCal Edison believes that the Final Rule should provide for Optional Interconnection Studies (1) that are performed outside the NOPR LGIP time line, (2) if it is understood by the Interconnection Customer who elects to implement a study that implements Material Changes, that it could impact the Generating Facility's Queue Position; and (3) may not exceed for each requester a maximum of two Optional Interconnection Studies. NYISO urges the Commission to delete Section 10.1 to reduce the number of studies that the Transmission Provider must perform. The Midwest ISO believes that the Interconnection Feasibility Study may be elected and can serve as the Optional Interconnection Study described in Section 10.
- 215. On the issue of cost responsibility, Central Vermont PSC supports having the Interconnection Customer compensate the Transmission Provider for the costs of an Optional Interconnection Study, including all charges incurred by an Affected System.
- 216. With respect to the deadlines associated with Optional Interconnection Studies, FirstEnergy believes that the five day turnaround period for the Transmission Provider to provide an Optional Interconnection Study Agreement, as called for in Section 10.1, is too short and that a ten day period would be better. Cal ISO also supports a ten day turnaround time.

# **Commission Conclusion - General Comments**

- 217. The proposed time frames for completing Interconnection Studies are reasonable. For each of the studies, the NOPR LGIP allows for the possibility that the Transmission Provider will not be able to complete the study within the allotted time. In these cases, the NOPR LGIP provides that the Interconnection Customer and the Transmission Provider will come to an acceptable accommodation. As to Imperial Irrigation's concern that it lacks sufficient resources to conduct the Interconnection Studies, Section 13.4 gives the Parties the option of using a contractor to complete the required studies at the Interconnection Customer's expense and Section 4.2 allows the Transmission Provider to cluster Interconnection Studies, thereby saving time and money.
- 218. We believe that the proposed Interconnection Study deposit amounts are high enough to ensure that an Interconnection Customer is serious about its Interconnection Request. In the absence of standardized Interconnection Study cost estimates, a Transmission Provider could set the Interconnection Study costs at such high levels so as to discourage entry by competing generators.
- 219. Central Maine does not identify the benefits of making Interconnection Study deposits a percentage of the estimated Interconnection Study costs. Because the proposed dollar amounts are reasonable and are the result of the consensus process, the Commission adopts them for the Final Rule LGIP.
- \*41 220. We find that the proposed provisions regarding the payment of study costs by the Interconnection Customer are adequate. The NOPR LGIP makes clear that the Interconnection Customer is responsible for the actual costs of all Interconnection Studies. We reject the proposal that the Interconnection Customer fully prepay the costs of Interconnection Studies because the advance payment would be based on Transmission Provider estimates rather than actual costs. The Commission recognizes that the costs of performing Interconnection Studies may vary by Interconnection Customer because each interconnection is unique. The unique features of each interconnection should be identified either in the Scoping Meeting or early in the Interconnection Study process so that the Transmission Provider can offer the Interconnection Customer a reasonable estimate of what the actual study costs will be. However, we will require the Transmission Provider to provide a detailed and itemized accounting of the Interconnection Study costs in the relevant invoices. If the Interconnection Customer disputes the study cost, it may pursue dispute resolution procedures as described in Section 13.5 of the Final Rule LGIP.
- 221. With regard to commenters' various concerns about the proper scope of, and standards for, the Interconnection Studies, the Commission emphasizes that the Final Rule LGIP should not be interpreted as preventing the Transmission Provider

from studying Interconnection Requests in accordance with Good Utility Practice and regional reliability requirements. The Transmission Provider may conduct necessary Interconnection Studies using any standards that are generally accepted within the region and consistently applied to all generation projects, including those of the Transmission Provider. If these standards differ from those specified in the LGIP, the Transmission Provider must include them in its compliance filing and may implement them only upon approval of the Commission. For this reason, we decline to specify detailed study procedures for each Interconnection Study beyond what is specified in the Final Rule LGIP.

## **Commission Conclusion - Interconnection Feasibility Studies**

222. With regard to the concern that allowing changes to original Interconnection Requests would be unworkable and would violate the rights of lower queued Interconnection Customers due to the need to conduct numerous restudies, the Final Rule allows the Transmission Provider to take additional time to complete the necessary work. In addition, although lower queued Interconnection Customers may be harmed when their Interconnection Requests must be restudied due to actions of an Interconnection Customer higher in the queue, they also benefit from the flexibility to request that the Transmission Provider study a substitute Point of Interconnection. In this respect, the Commission finds that the NOPR LGIP strikes an appropriate balance and, accordingly, adopts it in the Final Rule.

\*42 223. Regarding Sempra's question about which projects within the queue should be considered when performing Interconnection Studies, the Commission requires the Transmission Provider to consider in its Interconnection Studies all generators with both higher and lower queued Interconnection Requests that could affect the Network Upgrades associated with integrating these generators with the Transmission System, as specified in the Final Rule LGIP.

## **Commission Conclusion - Interconnection System Impact Studies**

224. In response to FirstEnergy's comment that there is insufficient time to provide cost and time estimates for completing an Interconnection System Impact Study, we find that three Business Days is reasonable. We note that prior to the Interconnection System Impact Study, the Transmission Provider will have conducted the Interconnection Feasibility Study and the Parties will have met to discuss the study results. Accordingly, through this ongoing process, the Transmission Provider will have had ample time to anticipate and prepare such estimates.

## **Commission Conclusion - Optional Interconnection Studies**

225. The Commission finds that commenters' concerns about allowing an Interconnection Customer to request Optional Interconnection Studies are misplaced. Such studies are for informational purposes only and are to be completed within an agreed upon time period using Reasonable Efforts. If Optional Interconnection Studies place too great a burden on the resources of the Transmission Provider, the Final Rule permits the use of a contractor at the Interconnection Customer's expense. The Commission is neither eliminating these provisions nor, as SoCal Edison proposes, limiting the number of Optional Interconnection Studies an Interconnection Customer may request. These studies may provide information needed by the Interconnection Customer. Since the Interconnection Customer pays for the Optional Interconnection Study and a contractor may be used for this purposes, the impact on a Transmission Provider is minimal.

226. Section 9 - Engineering & Procurement ("E&P") Agreement (In the NOPR: Agreements) - Proposed LGIP Section 9 provided a mechanism for the Transmission Provider and the Interconnection Customer to enter into an Engineering & Procurement Agreement prior to executing the LGIA. An Interconnection Customer may ask that the Transmission Provider begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. The Transmission Provider is not obligated to offer an agreement if the Interconnection Customer is in Dispute Resolution as a result of an allegation that the Interconnection Customer has failed to meet any milestones or comply with any other sections of the LGIP. This section also specifies the cost and other obligations of the Interconnection Customer.

227. Calpine and Duke Energy propose that Section 9.1 be expanded to cover situations where the construction of certain Network Upgrades takes place prior to the execution of the LGIA. Duke Energy states that the Transmission Provider should be prohibited from refusing to enter into an interim Engineering & Procurement Agreement unless the Interconnection Customer's failure to meet milestones directly affects the Transmission Provider's ability to meet its obligation under the Engineering & Procurement Agreement. FirstEnergy states that it is inappropriate to enter into an Engineering & Procurement Agreement prior to the execution of an LGIA, or the filing of an unexecuted LGIA with the Commission.

### **Commission Conclusion**

- \*43 228. We disagree with Calpine and Duke Energy regarding construction. The Final Rule does not require the construction of Network Upgrades prior to the execution of the LGIA; nor do we see why the Transmission Provider should be placed at risk by committing to the construction of such Network Upgrades prior to the execution of an LGIA. Regarding FirstEnergy's comments, we conclude that it is reasonable to allow the Parties to enter into an Engineering & Procurement Agreement for long lead-time items necessary to accommodate the interconnection as long as the Interconnection Customer bears the cost risk. Likewise, in response to Duke Energy and consistent with the language in the NOPR, we conclude that it is reasonable to require a Transmission Provider to offer an Engineering & Procurement Agreement only if the Interconnection Customer has met its obligations under the Final Rule LGIP. Accordingly, we adopt Section 9 in the Final Rule as proposed.
- 229. **Section 11 Standard Large Generator Interconnection Agreement** (In the NOPR: Interconnection Agreement) Proposed LGIP Section 11 includes procedures for tendering, negotiating, executing, and filing an interconnection agreement.
- 230. **Section 11.1 Tender** Proposed LGIP Section 11.1 provided that the Transmission Provider simultaneously submit to the Interconnection Customer the draft Interconnection Facilities Study Report and a draft LGIA, to the extent practicable, in the form of the <u>pro forma</u> LGIA. Within 30 Calendar Days after the issuance of the draft Interconnection Facilities Study report and a draft <u>pro forma</u> LGIA, the Transmission Provider shall submit the completed draft of the LGIA.

## **Comments**

231. Central Maine believes that 30 days is an unreasonable time frame in which to prepare such technically detailed documents as the appendices to the interconnection agreement, and it should therefore be increased to 60 days.

### **Commission Conclusion**

- 232. Central Maine has not convinced us of the difficulty of preparing the interconnection agreement appendices in 30 Calendar Days or shown a need to extend the time in which to prepare them to 60 Calendar Days. Accordingly, the Commission retains the proposed 30 Calendar Day requirement for the Transmission Provider to tender the completed interconnection agreement.
- 233. **Section 11.2 Negotiation** Proposed LGIP Section 11.2 provided that the Transmission Provider and the Interconnection Customer be required to negotiate the terms contained in the appendices to the interconnection agreement for up to 60 Calendar Days after tender of the final Interconnection Facilities Report. If the Interconnection Customer determines that negotiations are at an impasse, it could either request termination of the negotiations and request submission of the unexecuted interconnection agreement to the Commission, or initiate Dispute Resolution procedures. If the Interconnection Customer requests termination of the negotiations, but within 60 Calendar Days thereafter fails to request either the filing of the unexecuted LGIA or initiate Dispute Resolution, it would be deemed to have withdrawn its Interconnection Request.

\*44 234. FirstEnergy contends that the provisions of this section unduly restrict the ability of the Parties to negotiate a resolution. It argues that proposed LGIP Section 11.2 provides no recourse for the Transmission Provider in circumstances where the negotiations are at an impasse and the Interconnection Customer neither terminates the Interconnection Request nor continues to negotiate in good-faith. FirstEnergy recommends that Section 11.2 of the NOPR IA be revised to include the following language: "Unless otherwise agreed to by the Parties, if the Interconnection Customer has not executed the Interconnection Agreement, requested the filing of an unexecuted [interconnection agreement], or initiated Dispute Resolution procedures within 60 days of the tender of the completed draft of the LGIA Appendices, the Interconnection Customer will have been deemed to have withdrawn its Interconnection Request.

### **Commission Conclusion**

- 235. The Commission agrees with FirstEnergy that there could be circumstances where the Parties could be unduly restricted in their negotiations and therefore adopts the language proposed by FirstEnergy in the Final Rule LGIP.
- 236. **Section 11.3 Execution and Filing -** Proposed LGIP Section 11.3 would have the Interconnection Customer demonstrate Site Control to the Transmission Provider, and provides specific milestones as evidence of Site Control. It would also provide that the Transmission Provider file the LGIA as soon as practicable, but not later than ten Business Days after receiving either the two executed originals of the LGIA, or the request by the Interconnection Customer to file an unexecuted LGIA.

#### **Comments**

- 237. Mirant does not oppose requiring an Interconnection Customer to maintain Site Control and provide reasonable evidence that the Interconnection Customer has met some of the specified milestones. However, it asks the Commission to clarify what constitutes "reasonable evidence" of Site Control. Other commenters, including PJM and PJMTO, assert that the Commission should give the Interconnection Customer more milestones to meet.
- 238. PJM opposes letting an Interconnection Customer deposit \$250,000 instead of demonstrating meaningful progress and believes that doing so can lead to clogging and gaming of the queue.
- 239. Central Maine requests that the Commission extend from ten to 30 days the obligation to file, as additional time is needed to prepare the filing. It claims that neither Party would be adversely affected by such an extension.

- 240. We shall modify Proposed LGIP Section 11.3 to better reflect the Commission's unexecuted agreement procedure in the OATT. <sup>62</sup> Accordingly, the unexecuted agreement should contain terms and conditions deemed appropriate by the Transmission Provider for the Interconnection Request. But the LGIA approach differs from the OATT approach, since the Parties' obligations may be significantly different in the LGIA context. The OATT unexecuted agreement provision requires the Transmission Provider to commence providing service as long as the Transmission Customer agrees to compensate the Transmission Provider at the rate the Commission ultimately determined to be just and reasonable. Since the LGIA involves obligations different from those in the OATT, including facilities construction that may be undertaken by either Party, it is appropriate to give both Parties more flexibility to determine whether to proceed under the non-disputed terms of their unexecuted agreement. Once the unexecuted agreement is filed, if the Parties agree to proceed with design, procurement, and construction of facilities and upgrades under the agreed upon terms of the unexecuted agreement, they may proceed pending Commission action.
- \*45 241. In response to Mirant's request to clarify what constitutes "reasonable evidence" of Site Control, the Commission notes that the Final Rule definition of the term specifically lists the types of documentation that reasonably demonstrates evidence of Site Control.

- 242. PJM proposes to eliminate the \$250,000 additional deposit if the Interconnection Customer is unable to provide evidence of Site Control. It would also have the Generating Facility lose its place in the queue if the Interconnection Customer misses a milestone. We find that the deposit is a sufficient showing that the Interconnection Customer is serious about the project and will continue to work to meet the requirements of Site Control and other milestones. Finally, this section provides sufficient milestones and penalties to reasonably ensure that the Interconnection Customer is intent on completing the project.
- 243. Central Maine has not provided any support for its request to extend the time from ten to 30 days to meet the filing obligations. Accordingly, the Final Rule retains the ten Business Days requirement.
- 244. Section 12 Construction of Transmission Provider's Interconnection Facilities and Network Upgrades Proposed LGIP Section 12 required the Transmission Provider and the Interconnection Customer to agree to a schedule for the construction of Interconnection Facilities and Network Upgrades that are needed to accommodate the Interconnection Request. It also provided for an Interconnection Customer to request the acceleration of Network Upgrades that are needed for a higher-queued Interconnection Customer that would not have otherwise been completed in time to support the lower queued Interconnection Customer's In-Service Date as long as it commits to pay any costs associated with expediting the project, including the cost of any Network Upgrades assigned to the higher-queued Interconnection Customer.
- 245. **Section 12.1 Schedule** Proposed LGIP Section 12.1 provided that the Transmission Provider and Interconnection Customer negotiate in good faith to develop a schedule for the construction of the Transmission Provider's Interconnection Facilities and Network Upgrades.

246. Duke Energy and FirstEnergy contend that this section should be deleted, since it is already covered in Article 5 of the NOPR LGIA.

## **Commission Conclusion**

- 247. The Commission finds no reason to delete Section 12.1. It merely states that the Parties must negotiate a construction schedule in good faith. The fact that the negotiated construction schedule is in Appendix B (Milestones) of the LGIA does not require us to delete Section 12.1 from the Final Rule LGIP.
- 248. **Section 12.2 Permits** Proposed LGIP Section 12.2 provided that the Parties specify in the LGIA each Party's responsibility for obtaining permits, licenses, and authorizations necessary to construct the Interconnection Facilities and Network Upgrades needed to accommodate the proposed interconnection in conformance with all Applicable Laws and Regulations.

## **Comments**

\*46 249. Duke Energy states that the first sentence of Section 12.2 should be stricken because it duplicates NOPR LGIA Article 14.1. FirstEnergy contends that the entire section should be deleted because the topic is more properly addressed in the LGIA. Cinergy asks the Commission to clarify that nothing in the section requires the Transmission Provider to exercise its power of eminent domain. Central Maine argues that the phrase "nothing in this Section 12.2 shall be construed to waive any rights under Applicable Laws and Regulations" should be either deleted or applied to the entire Final Rule LGIP, because its inclusion in just one provision creates confusion.

- 250. The Commission disagrees with Duke Energy. Proposed LGIP Section 12.2 merely requires the Parties to specify in the LGIA each Party's responsibility for obtaining permits, licenses, and authorizations necessary to construct the Interconnection Facilities and Network Upgrades. Article 14.1 of the NOPR LGIA, on the other hand, states that each Party's obligations under the LGIA are conditioned upon regulatory approval from relevant Governmental Authorities.
- 251. In response to Cinergy's assertion, while the Commission does not require that the Transmission Provider exercise its right of eminent domain in all instances, we do not prohibit it from doing so. Rather, in the Final Rule, consistent with the Commission's discussion of NOPR LGIA Article 5.11 (now Final Rule LGIA Article 5.13), Lands of Other Property Owners, we require that a Transmission Provider or Transmission Owner use efforts similar to those it typically undertakes on its own behalf (or on behalf of an Affiliate), which may include use of eminent domain rights, to secure permits for the Interconnection Customer, unless restricted from doing so by state law.
- 252. We agree with Central Maine's arguments and are therefore not incorporating into this section the proposed text dealing with the waiving of rights under Applicable Laws and Regulations.
- 253. Finally, the Commission agrees with FirstEnergy that the issues contained in this section are more appropriately discussed in the Final Rule LGIA. Accordingly, proposed LGIP Section 12.2 is being deleted from the Final Rule LGIP and is being incorporated into the Final Rule LGIA as Article 5.14.
- 254. Section 12.3 Construction Sequencing (In the Final Rule LGIP: Section 12.2) Proposed LGIP Section 12.3 stated that an Interconnection Customer may ask the Transmission Provider to advance construction of Network Upgrades supporting other generators that were assumed to be completed in time to support the Interconnection Customer's Generating Facility's In-Service Date. The Transmission Provider would have to use Reasonable Efforts to advance the construction of such Network Upgrades, provided that the Interconnection Customer commits to pay the Transmission Provider the cost of the Network Upgrades and any associated expediting costs. The Transmission Provider must refund to the Interconnection Customer the costs of any expedited Network Upgrades after the Transmission Provider receives payment from the entity for which the Network Upgrades were to be originally constructed. Until such costs are refunded, the Transmission Provider must provide the Interconnection Customer with transmission credits for the costs of the expedited Network Upgrades.

#### **Comments**

\*47 255. Duke Energy seeks clarification that (1) the Interconnection Customer earlier in the queue is obligated to pay the Transmission Provider only the amount not refunded, through credits, to the Interconnection Customer requesting the acceleration (and thus is eligible for transmission credits only for that amount), (2) the Interconnection Customer requesting the accelerated construction is reimbursed for Network Upgrade costs only up to the amount of the transmission credits not received, (3) the Transmission Provider is not required to advance funds for construction or to pay total credits in excess of the cost of the Network Upgrades; and (4) the higher-queued Interconnection Customer must pay for the expedited Network Upgrades on the date that it would have been required to pay were it not for the request for acceleration. Duke Energy also notes that there may be circumstances when acceleration requires greater expenditures than would be required to meet a reasonable construction schedule. It therefore recommends that if a Transmission Provider believes that the Commission would not allow such expenditures to be included in the revenue requirement under traditional ratemaking principles, the Transmission Provider should have the opportunity to challenge the provision of credits for these costs.

# **Commission Conclusion**

256. The Commission affirms that an Interconnection Customer higher in the queue is obligated to pay the Transmission Provider for only that portion of the costs of the expedited Network Upgrades not already paid to the Interconnection Customer that requested expedition through transmission credits. The Transmission Provider can then forward this amount to the expediting Interconnection Customer as a lump sum payment for the balance of costs that the higher-queued Interconnection

Customer is owed. At this point, the payment of credits will cease and the payment of credits to the higher-queued Interconnection Customer can begin. The latter credits will continue until the higher-queued Interconnection Customer has been reimbursed for the portion of the Network Upgrade costs that it has paid. The Transmission Provider is also not required to advance funds for construction or to pay total credits in excess of the cost of the Network Upgrades, including any interest that may be due. Finally, the higher-queued Interconnection Customer is responsible for paying the costs of the advanced Network Upgrade on the date that it would have been required to pay had there been no request for accelerated construction.

- 257. In response to Duke Energy's final concern, the Commission recognizes that there may be circumstances under which the Transmission Provider, in attempting to accommodate the Interconnection Customer's request to accelerate the project, may have to incur costs that would exceed what would normally be required to meet a reasonable construction schedule. However, we will consider such costs to have been prudently incurred unless it is demonstrated in a rate proceeding that the Transmission Provider could have met the Interconnection Customer's requested In-Service Date at a lower cost through the construction of alternative Network Upgrades, or by other means. Consequently, the Transmission Provider should have no reason to challenge the provision of credits for any costs that it prudently incurs.
- \*48 258. Consistent with the above discussion, the Final Rule clarifies Section 12.3 and removes certain text that is largely redundant.
- 259. This section is designated Section 12.2 in the Final Rule LGIP.
- 260. Section 13 Miscellaneous Proposed LGIP Section 13 included a variety of provisions, described below.
- 261. **Section 13.1 Confidentiality** Proposed LGIP Section 13.1 would have required that the Transmission Provider afford confidential treatment to all information it receives from the Interconnection Customer to process its request for Interconnection Service except for information that is in the Interconnection Request and information that is or becomes generally available to the public. The Transmission Provider would be permitted to use this information only for the Interconnection Study and to share it only with those who need it for Interconnection Studies and actions to interconnect the Generating Facility. The Transmission Provider would not be permitted to share such information with the merchant generation or marketing functions of the Transmission Provider or its Affiliates' merchant functions or as otherwise prohibited by Order No. 889.
- 262. The Transmission Provider would be liable to the Interconnection Customer for any Breach of confidentiality caused by its agent or contractor. If requested by the Interconnection Customer, the Transmission Provider would be required to destroy or return to the Interconnection Customer information no longer needed. If the Transmission Provider is required to disclose the information to any regulatory body, it would be obligated to request confidential treatment of the information. The Transmission Provider must provide the Interconnection Customer with prompt written notice if it receives a request for the Confidential Information to allow the Interconnection Customer an opportunity to contest the disclosure. The confidentiality provisions would not require the Transmission Provider or Interconnection Customer to disclose information in violation of any confidentiality obligations to third parties.

- 263. Several commenters, including Central Maine and MidAmerican, argue that these confidentiality protections should be extended to the Transmission Provider as well. Central Maine seeks a clear policy about what information may be disclosed, what information must be disclosed, the manner of disclosure, and what information must remain confidential as part of the interconnection process.
- 264. Lakeland seeks reconciliation of the differences between the confidentiality provisions of the NOPR LGIA and the NOPR LGIP. Specifically, the Final Rule LGIP should accommodate compliance with state Open Records laws, including Florida's, as in the NOPR LGIA.

265. Entergy opposes requiring a Transmission Provider to provide Confidential Information, or disclose anything not public, to an Interconnection Customer. If that disclosure is required by the Final Rule, the confidentiality requirements should be reciprocal and a Party should be required to designate which materials warrant confidential treatment.

\*49 266. The Midwest ISO agrees with the proposal that Confidential Information only be shared among employees of the Transmission Provider (including Transmission Owners of Affected Systems) and third parties that need the information to perform or review Interconnection Studies. Moreover, in accordance with Order No. 889, the information should not be shared with individuals responsible for merchant or marketing functions. The Midwest ISO also requests that the Commission clarify what type of planning information should be kept confidential for security reasons and what information should be made available, perhaps under a non-disclosure agreement executed by the Parties. Proposed LGIP Section 13.1 would have required that the Transmission Provider keep confidential all information provided by the Interconnection Customer related to Interconnection Service that is not provided in the Interconnection Request; the Midwest ISO and NERC state that some information in the Interconnection Request may be commercially sensitive, such as unit-specific data, and should be kept confidential.

267. GE Power notes that developers generally prefer to look at alternative project scenarios before going "on the record" with their plans. GE Power requests that the Commission address the balance between commercial confidentiality or security-based secrecy and the need to make the data available so that studies and business forecasting can be completed.

268. NERC comments that the information provided by Interconnection Customers that may be considered confidential under Section 13.1 is needed to protect reliability because it generally is shared not only with directly affected neighboring systems, but also with regional and NERC study groups for modeling inter-regional and interconnection reliability effects. NERC states that this data is generally provided in a manner that masks ownership and other commercial terms and that NERC has standards of conduct for Reliability Coordination and a data confidentiality agreement. It requests that mechanisms remain in place to ensure the availability and confidentiality of such data so that Interconnection Customers will provide data needed for reliability assessment. NERC proposes that an Interconnection Customer identify specific information to be protected as confidential and that the Transmission Provider share this information only with parties to confidentiality agreements.

#### **Commission Conclusion**

269. In response to Central Maine's and several others' requests that the confidentiality provision in the NOPR LGIP be made more specific, the Commission is incorporating into Section 13.1 certain aspects of the confidentiality provisions in Article 22 of the LGIA. These include a definition of Confidential Information, procedures for the release of Confidential Information, and guidance regarding how Confidential Information should be treated when it is requested by the Commission as part of an investigation. Both Parties are eligible to use the protection afforded by the revised section as long as the information is identified as Confidential Information in accordance with the section. This revision should satisfy commenters that sought greater specificity regarding procedures for maintaining and disclosing information in the confidentiality provisions in the LGIP. It also eliminates any significant conflicts between the LGIP and LGIA confidentiality provisions. The Final Rule LGIP Section 13.1 differs from Final Rule LGIA Article 22 only with respect to the provisions in Article 22 that address the fact that the confidentiality obligations arise under a signed Interconnection Agreement.

\*50 270. This revision eliminates from the Section 13.1 the exception for information that appears in the Interconnection Request. Under the revised provision, it is the Interconnection Customer's responsibility to designate the information submitted in its Interconnection Request that should remain confidential.

271. Lakeland requests that the Commission adopt provisions that accommodate compliance with state open records laws. Public utilities also may be subject to information restrictions arising from national security concerns. As noted above, the Commission expects all public utilities to meet basic standards for system infrastructure and operational security. In addition, if

state laws indeed conflict with the confidentiality and information sharing addressed in this provision, the Commission expects that public utilities will make conforming changes to these provisions in their compliance filings and explain the statutory basis for such changes.

- 272. The Commission agrees with the Midwest ISO and NERC that the Final Rule must allow information to be shared with Transmission Provider representatives of NERC and other regional planning groups, since to deny them this information may undermine Transmission System reliability and modeling efforts. Section 13.1 of the Final Rule allows the Parties to share Confidential Information with an independent transmission administrator or reliability organization as long as the disclosing party agrees to promptly notify the other Party in writing and to seek to protect the Confidential Information from public disclosure by separate confidentiality agreement or other reasonable measures. We do not, as the Midwest ISO requests, specify the planning information that may be made available, as it is likely that the data will vary by region.
- 273. Finally, GE Power proposes that this rulemaking address what information a Transmission Provider should make available to a would-be Interconnection Customer before the submission of an Interconnection Request. We decline to do so. This Final Rule addresses interconnection, not the general availability of information to all those who have not yet submitted an Interconnection Request.
- 274. **Section 13.3 Obligation for Study Costs** Proposed LGIP Section 13.3 would have required the Interconnection Customer to pay the actual costs of the Interconnection Studies. If any deposit exceeds the actual cost of the study, that amount would be refunded to the Interconnection Customer or offset against the cost of any future Interconnection Studies associated with the Interconnection Request. Proposed LGIP Section 13.3 also stated that the Transmission Provider would not be obligated to perform or continue to perform any Interconnection Studies unless the Interconnection Customer has paid all undisputed amounts under this section.

### **Comments**

- 275. PJM argues that the absence of significant milestones in Section 13.3 amplifies the opportunities for an Interconnection Customer to dispute its bill and string its project along at little cost. Any refusal to pay an invoiced study cost should be a Default that triggers withdrawal of the Interconnection Request.
- \*51 276. The Midwest ISO believes that the Transmission Provider should be permitted to collect interest on any unpaid amounts not in dispute, and Duke Energy believes that deposits in excess of the actual study cost should be entitled to earn interest from the day a deposit is credited to an account.
- 277. Sempra would require the Interconnection Customer to pay for simple and inexpensive Interconnection Studies up front, and to pay for expensive and complicated studies through periodic payments.

- 278. The Commission declines to adopt any of the proposed changes to Section 13.3 in the Final Rule. While an Interconnection Customer could delay the interconnection process merely by disputing its bill, the Commission is not convinced that a significant number of Interconnection Customers will to act in this manner, since most Interconnection Customers presumably will want to have their projects on line as soon as possible. Furthermore, requiring the Interconnection Customer to pay all invoiced amounts, no matter how unreasonable, or lose its Queue Position would invite abuse on the part of the Transmission Provider.
- 279. In response to the Midwest ISO and Duke Energy, the payment of interest on study deposits and unpaid study costs tend to offset one another over time. Moreover, the Commission is not persuaded that the interest costs would be large enough to warrant the additional administrative expense that the Transmission Provider would incur in tracking the amounts due. Also, the requirement to pay a deposit and then additional amounts as they come due will generally achieve the result that Sempra seeks.

280. Finally, to ensure that the Interconnection Customer is adequately informed regarding the actual costs of Interconnection Studies, we revise Section 13.3 to require the Transmission Provider to provide a detailed and itemized accounting of the Interconnection Study costs in the relevant invoices.

281. **Section 13.4 - Third Parties Conducting Studies** - Proposed LGIP Section 13.4 provided that the Interconnection Customer be able to require the Transmission Provider, within 30 days of its notification, to use a consultant to complete the Interconnection Study at issue if (1) the Parties cannot agree to the timing of the completion of the Interconnection Study, or (2) the Interconnection Customer receives notice from the Transmission Provider that the Transmission Provider will not complete an Interconnection Study within the applicable time frame, or (3) the Interconnection Customer receives from the Transmission Provider neither the Interconnection Study nor a notice about not completing the Interconnection Study. In such situations, the Interconnection Study would be conducted at the Interconnection Customer's expense and in the case of (3), the Interconnection Customer could submit a claim to Dispute Resolution to recover the costs of the third party study. The consultant would be required to follow the LGIP protocols and use the information it receives to do the Interconnection Study for the sole purpose of completing the study. The Transmission Provider would be required to cooperate with the consultant to complete and issue the Interconnection Study in the shortest reasonable time.

#### **Comments**

\*52 282. Some commenters, including Duke Energy, EPSA, NYISO, and Sunflower Electric, endorse the NOPR proposal to allow an Interconnection Customer to request a consultant to undertake or complete an Interconnection Study, while others advocate the Transmission Provider being allowed to initiate use of a consultant to accelerate completion of Interconnection Studies, as well. Sunflower Electric sees use of a consultant as a short-term means to alleviate a Transmission Provider's backlog. Central Maine seeks clarification of the process for selecting the consultant. It argues that a 30 day deadline for a Transmission Provider to issue an RFP and select a consultant is not realistic.

283. BPA, MidAmerican, and PJM question whether use of a consultant will speed up the study process, whether it will significantly reduce a Transmission Provider's overall study effort, and whether it will help a Transmission Provider to more efficiently study multiple Interconnection Requests. They are concerned that any benefits may be limited to situations in which Interconnection Customers' projects are studied individually, on a non-integrated basis, in isolation from other higher-queued Interconnection Requests and system improvements and expansions. Others recommend allowing a Transmission Provider to complete pending Interconnection Studies for higher-queued Interconnection Requests before turning its databases, workpapers, and study results over to the consultant to help it move forward with its study. In addition, PJM observes that an independent Transmission Provider, such as an RTO or ISO, has no incentive to delay completion of an Interconnection Study. NYISO would have the ISO direct and review any consultant Interconnection Studies.

284. BPA proposes allowing a Transmission Provider to ignore the consultant's study if it is not completed by the deadline. BPA also wants sufficient time for the Transmission Provider, as "the expert" in regard to its system, to review the study to ensure that it is adequate and to make necessary changes to it.

### **Commission Conclusion**

285. Based on the foregoing comments and a balancing of the interests of an Interconnection Customer (to obtain the results of any necessary Interconnection Studies as soon as possible) and the responsibility of Transmission Provider (to efficiently and effectively plan its Transmission System), the Commission will permit use of a consultant upon the request of an Interconnection Customer at any time during the Interconnection Study process. This is subject to the Transmission Provider deciding that such use will (1) help maintain or accelerate the study process for the Interconnection Customer's pending Interconnection Request and (2) not interfere with the Transmission Provider's planning processes or hamper the Transmission Provider's progress on any

other Interconnection Studies for pending Interconnection Requests. Moreover, a consultant hired to perform an Interconnection Study must follow the same rules and procedures as does a Transmission Provider that conducts the study in-house.

\*53 286. The Commission will not specify in Section 13.4 all the terms, conditions, and selection processes that would be applicable. Instead, the Final Rule leaves it up to the Parties to negotiate the details of the timing and process for selecting the consultant, the deadlines for the consultant's work, the Transmission Provider's direction and review of the consultant's work, the contingency rights and obligations of the Parties if the consultant fails to timely deliver a study of adequate quality, and any other relevant matters. This added flexibility may increase opportunities for the use of a consultant to accelerate the completion of necessary Interconnection Studies when it is feasible to do so.

287. **Section 13.6 - Disputes** - Proposed LGIP Section 13.6 detailed requirements for the Dispute Resolution process. Upon written notice of a dispute arising out of the Interconnection and Operating Agreement or its performance, a senior representative or representatives of each Party would be required to try to resolve the dispute informally. Failing informal resolution within 30 Calendar days, by mutual agreement the dispute would be submitted to arbitration, or each Party would exercise its other legal or equitable rights. Section 13.6.2 specified external arbitration procedures, and Section 13.6.3 stated that unless otherwise agreed, the arbitrator would be required to render a decision within 90 Calendar Days of its appointment that shall be binding upon each Party. Final decision affecting jurisdictional rates, terms, and conditions would be filed with the Commission. Finally, Section 13.6.4 delineated responsibility for costs related to the resolution of disputes.

#### **Comments**

288. Central Maine believes that the Parties should be precluded from settling by binding arbitration matters that are under the Commission's jurisdiction.

# **Commission Conclusion**

289. Although Section 13.6 proposed making Dispute Resolution available only for disputes arising under the LGIA, the Final Rule extends the procedures to disputes arising under the LGIP. This section is designated Section 13.5 in the Final Rule LGIP.

290. The Commission has long encouraged the use of alternative dispute resolution to resolve disagreements over Commission-jurisdictional contracts. The Commission's complaint rule, in fact, requires Parties to specify in a formal complaint whether they have attempted an informal resolution of contract-related disputes, and if they have not done so, to explain why not. <sup>63</sup> Final Rule LGIP Sections 13.5.1 through 13.5.3 reflect the Commission's policy of encouraging alternative dispute resolution without compromising the Commission's authority. Final Rule LGIP Section 13.5.3 prevents arbitrators from changing the provisions of the interconnection agreement in any manner. Arbitrators may only interpret and apply the provisions. Any such changes to the interconnection agreement could be made only pursuant to Sections 205 and 206 of the Federal Power Act, and would require Commission review. Although the arbitrator's decision is binding in so far as it is enforceable in any court having jurisdiction, an arbitrator's decision must be filed with the Commission if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades. Thus, the Commission retains the authority to review the arbitrator's decision. Nor do we agree that the provision circumscribes the Parties' right to avail themselves of the Commission's complaint process because under Section 13.5.1, a Party that does not agree to arbitration may exercise its rights, including its right to bring a complaint to the Commission.

\*54 291. The Commission also adds language to Section 13.6.1 to emphasize that Parties should consider using informal dispute resolution as well as more formal options. The Commission encourages Parties to settle their disputes through other mechanisms (e.g., mediation, assisted negotiations, settlement judge procedures) prior to commencing arbitration proceedings. Of course, at any point during the process the disputing Parties may have recourse to alternative methods of dispute resolution, provided that both Parties agree. 64

292. **Appendices** - Proposed Appendix 1 is the application form for making an Interconnection Request. Proposed Appendices 2, 3, 4, and 5 set forth the terms for the Interconnection Feasibility Study Agreement, the Interconnection System Impact Study Agreement, the Interconnection Facilities Study Agreement, and the Optional Interconnection Study Agreement; and require a deposit of \$10,000 for the Interconnection Feasibility Study, \$50,000 for the Interconnection System Impact Study, \$100,000 for the Interconnection Facilities Study, and \$10,000 for the Optional Interconnection Study. The Final Rule LGIP retains these appendices. In addition, the Final Rule LGIP incorporates the Final Rule Standard Large Generator Interconnection Agreement at Appendix 6.

# B. Issues Related to the Standard Large Generator Interconnection Agreement (LGIA)

### 1. Overview

293. The proposed LGIA contained the Parties' contractual Interconnection Service rights and obligations. It addressed matters such as the effective date and termination costs; regulatory filings; scope of service, including interconnection product options; generator provided services; Interconnection Facilities engineering, procurement and construction; testing and inspection, including start-up and synchronization, system protection and controls requirements; emergency, and disconnect obligations; metering and communications; operations and maintenance; Defaults and indemnifications; transmission crediting; audits; and Dispute Resolution.

294. The proposed LGIA also specified the allocation of the responsibilities among the Interconnection Customer, the Transmission Provider and Transmission Owner (where the latter is a Party other than the Transmission Provider that owns the facilities to which the interconnection is being made), in regard to obtaining all permits and authorizations necessary to accomplish the interconnection.

295. Under this Final Rule, if an Interconnection Customer agrees to pay for any modification to the Transmission Provider's facilities necessitated by the requested interconnection, the Transmission Provider is obligated to offer an executable form of LGIA to the Interconnection Customer. The interconnection agreement becomes effective upon execution by the Parties, subject to acceptance by the Commission. If the Interconnection Customer executes the LGIA, the Transmission Provider, the Interconnection Customer, and the Transmission Owner must perform their respective obligations in accordance with the terms of the executed interconnection agreement, subject to modification by the Commission.

\*55 296. If the Interconnection Customer determines that negotiations are at an impasse, it may initiate Dispute Resolution procedures and, if not successful, request submission of the unexecuted agreement to the Commission by the Transmission Provider in accordance with Final Rule LGIP Section 11. Pending Commission action, the Parties will comply with the unexecuted agreement to the extent they can proceed under the agreed upon terms.

# 2. Article-by-Article Discussion of the Proposed LGIA

297. What follows is a discussion of the proposed LGIA, the comments received, and the Commission's conclusion. The order of discussion follows the organization of the proposed LGIA, covering Articles 1 through 30. Similar to the section-by-section discussion of the proposed LGIP, only articles for which issues are raised are presented. Readers should note again that article numbers referred to in the following discussion are the numbers contained in the proposed LGIA. Some proposed articles are renumbered in the Final Rule; mention of that fact is made in the Commission Conclusions discussion, where appropriate. <sup>65</sup>

298. **Article 1 - Definitions** - Proposed LGIA Article 1 contained the definitions of terms used throughout the NOPR LGIA. Many of these terms appear both in the NOPR LGIP as well as the NOPR LGIA and we have decided that a common list of all the defined terms should be included in both the Final Rule LGIA and Final Rule LGIP. However, for simplicity, discussion of commenters' concerns regarding defined terms are discussed in Part II.A.2, Section 1 (Definitions).

299. **Article 2 - Effective Date, Term and Termination** - Proposed LGIA Article 2 included the proposed effective date, the term of the proposed LGIA, and the procedures for its termination.

300. **Article 2.2 - Term of Agreement** - Article 2.2 proposed that the LGIA remain in effect for ten years, or longer by request, and be automatically renewed for each successive one year period thereafter.

# **Comments**

301. Exelon, NYTO and PG&E believe that automatic renewal is unreasonable because it allows the LGIA to remain in effect for an indefinite period. PG&E argues that the LGIA should be for a fixed term (20 years, for example), because the ten year initial term coupled with automatic renewals could make it last forever without giving the Transmission Provider an opportunity to terminate the LGIA except in the case of a Default by the Interconnection Customer. PG&E further argues that a longer fixed term without automatic renewal gives the Parties the flexibility to change the terms of the LGIA at the end of the term to reflect new market structures as they may develop.

# **Commission Conclusion**

302. We adopt Article 2.2 as proposed. Automatic renewal is an efficient mechanism to renew the LGIA. It mitigates a non-independent Transmission Provider's market power by allowing the Interconnection Customer to renew without renegotiation. At the same time, the interests of the Transmission Provider are adequately protected as it can terminate the LGIA in case of Default by the Interconnection Customer.

\*56 303. The Commission also notes that the LGIA, in addition to addressing the electrical connection of the Interconnection Customer to the Transmission Provider's Transmission System, also fixes the performance, operational, and financial obligations of the Parties even after the Generating Facility begins commercial operation. These obligations and responsibilities are of indefinite duration, existing as long as the Generating Facility is connected to the Transmission Provider's Transmission System. Therefore, it is appropriate for the term of the LGIA to be indefinite as well.

304. In addition, a ten year minimum term allows the Parties to avoid tax liability for the payments to the Transmission Provider under current Internal Revenue Service policy. <sup>66</sup>

305. **Article 2.3.1 - Written Notice** - Proposed LGIA Article 2.3.1 provides that the Interconnection Customer may terminate the LGIA after giving the Transmission Provider 30 Calendar Days advance written notice.

### **Comments**

306. MidAmerican proposes requiring an Interconnection Customer to provide three years' advance notice to terminate the LGIA. According to MidAmerican, the unexpected retirement of the Generating Facility may result in reduced system reliability due to decreased generation resources, and a Transmission Provider may need to construct or upgrade its own generating or transmission facilities if this occurs. MidAmerican notes that three years is the time customarily required to construct such facilities. Therefore, a three year termination provision would provide a Transmission Provider the opportunity to maintain reliability if the Generating Facility shuts down unexpectedly.

### **Commission Conclusion**

307. We are not persuaded to increase the advance notice and termination period to three years as proposed by MidAmerican. MidAmerican's concern appears to be that the Generating Facility, due to several years of load growth and other changes, may be essential to system reliability. Utilities should not allow themselves to become critically dependent on one generator; however, if they do, they can enter into a "reliability must-run" contract before the Interconnection Customer exercises its right

to terminate. While there may be a problem if many Interconnection Customers were to cancel concurrently, we do not believe that the LGIA is the best vehicle for addressing this problem, or that every Interconnection Customer in every circumstance should be constrained by a three year termination provision whether or not such a general problem exists.

308. However, we extend the notice period to 90 Calendar Days in order to conform with the Commission's Regulations, which provide that the Transmission Provider is required to notify the Commission of the proposed cancellation or termination of a contract at least 60 Calendar Days, but no more than 180 Calendar Days, before the cancellation or termination is proposed to take effect. 67

309. **Article 2.3.2 - No Commercial Operation** - Proposed LGIA Article 2.3.2 would have provided that the Transmission Provider be allowed to terminate the LGIA if the Interconnection Customer has not met its obligation to achieve commercial operation of its Generating Facility within five years of the scheduled Commercial Operation Date or fails to be available for operation for a period of five years unless a major Generating Facility upgrade is in progress.

#### Comments

\*57 310. Mirant favors deleting this provision. It asserts that there is no valid reason for a Transmission Provider to terminate the LGIA if the Interconnection Customer has paid for the necessary system upgrades and has met every other obligation under the LGIA. Others point out that PJM's interconnection agreement does not include such a provision. Mirant argues that the Transmission Provider should be able to terminate the LGIA only if the Interconnection Customer defaults under the terms and conditions of the LGIA. PSNM and Dairyland Power also favor deleting this provision altogether and claim that, at best, it should be left to the Parties to negotiate a reasonable period for not achieving commercial operation without risking termination of the LGIA.

311. Most Transmission Providers, on the other hand, object to the five year window for achieving commercial operation as being too long, claiming that one to three years is a more reasonable period of time. <sup>68</sup> They point out that the Interconnection Customer determines the Generating Facility's Commercial Operation Date without any input from the Transmission Provider and that the Interconnection Customer should not have an additional five years to achieve commercial operation.

312. Central Vermont PSC also advocates shortening the period from five to two years, and expresses concern that proposed LGIA Article 2.3.2, read with proposed Article 4.1.2, might require a Transmission Provider to reserve transmission capacity on its transmission system for an Interconnection Customer taking Network Resource Interconnection Service for up to five years if the Interconnection Customer fails to meet its scheduled Commercial Operation Date or fails to be operable for a consecutive five-year period.

#### **Commission Conclusion**

313. We agree with Mirant that the Transmission Provider should not be allowed to terminate the LGIA if the Interconnection Customer has paid all costs for which it is responsible and has met all of its other obligations under the LGIA. The Commission is removing this provision from the Final Rule LGIA because it contains other provisions for termination, such as failure to meet milestones and other obligations. Furthermore, we note that an Interconnection Customer cannot begin to receive credits for Network Upgrades until its Generating Facility has achieved commercial operation, thereby providing an incentive to the Interconnection Customer to perform.

314. **Article 2.4 - Termination Costs** - Proposed LGIA Article 2.4 would have required a Party terminating the interconnection agreement to pay for all costs incurred by the other Party (including costs of cancellation orders or contracts for Interconnection Facilities and equipment).

315. Mirant argues that an Interconnection Customer should be held responsible only for the Network Upgrades that it has agreed to pay for. It and others are concerned that a higher-queued Interconnection Customer responsible for numerous Network Upgrades might terminate its LGIA and leave lower-queued Interconnection Customers to pay for the Network Upgrades that would otherwise have been assigned to the higher-queued Interconnection Customer. Dominion Resources argues that if a higher-queued Interconnection Customer suspends or terminates construction of its Generating Facility, the lower-queued Interconnection Customers must be made responsible for the costs of the Network Upgrades.

\*58 316. Some Transmission Providers argue that this provision does not make the Interconnection Customer responsible for all costs associated with the termination of an interconnection agreement. For example, Southern says that proposed LGIA Article 2.4.1 covers only that portion of the Transmission Provider's Interconnection Facilities not yet constructed or installed, and should be modified to include all Network Upgrades for which the Transmission Provider has incurred expenses. BPA argues that proposed LGIA Article 2.4.1 should be clear about which Party is responsible for the termination costs and allocate costs accordingly. Central Maine believes that the Transmission Provider and its other customers should not incur any costs associated with the termination of the LGIA, regardless of who is responsible for the termination. The Midwest ISO also states that the termination provision must ensure that the Transmission Provider is made whole for the costs it incurs.

#### **Commission Conclusion**

- 317. As for the obligations of the lower-queued Interconnection Customer with respect to the Network Upgrades that would have been paid for by the terminating Interconnection Customer, this issue is addressed in our discussion of Article 5.13 (Suspension).
- 318. We clarify that if an Interconnection Customer terminates the LGIA, it will be held responsible for all costs associated with that Interconnection Customer's interconnection, including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment, and any Network Upgrades for which the Transmission Provider has incurred expenses and has not been reimbursed by the Interconnection Customer. This clarification should resolve the Midwest ISO's and Mirant's concerns while ensuring that the Transmission Provider is made whole for the costs it incurs.
- 319. **Article 2.5 Disconnection** Proposed LGIA Article 2.5 would have provided that the cost of disconnecting the Generating Facility from the Transmission Provider's Transmission System be borne by the terminating Party unless the disconnection is the result of Default by the other Party.

# **Comments**

320. A number of commenters express concern that this article suggests that the Transmission Provider may somehow be responsible for certain disconnection costs. For example, PacifiCorp emphasizes that the Transmission Provider must be able to disconnect (and not reconnect) a Generating Facility if the Interconnection Customer materially Breaches its obligations to maintain electrical standards or operational requirements, or in the event of Default by the Interconnection Customer. In such a situation, PacifiCorp argues, the Transmission Provider should not be required to bear the costs of disconnecting the Generating Facility. Southern and Dairyland Power ask that this article be revised to make the Interconnection Customer responsible for all costs of disconnection under all circumstances.

# **Commission Conclusion**

\*59 321. We agree with PacifiCorp that the Transmission Provider must be able to disconnect the Generating Facility from the Transmission System to protect its system if the Interconnection Customer fails to maintain electrical standards and operational requirements. Accordingly, the Final Rule clarifies that all disconnection costs are borne by the terminating Party, unless the termination results from the non-terminating Party's Default of the LGIA.

322. **Article 2.7 - Reservation of Rights** - Proposed Article 2.7 would have reserved to each Party their rights to unilaterally seek modification to the executed LGIA pursuant to Sections 205 and 206 of the FPA, except as restricted by the other provisions of the executed LGIA.

### **Comments**

323. Dynegy and Mirant note that this clause is redundant because another Reservation of Rights provision appears in proposed Article 30.11.

### **Commission Conclusion**

- 324. We agree that this Article 2.7 is redundant, and we delete it from the Final Rule LGIA.
- 325. **Article 3 Regulatory Filings** Proposed LGIA Article 3 would have provided that the Transmission Provider is responsible for filing the LGIA with the appropriate state and federal regulatory authorities (collectively "Governmental Authorities") having jurisdiction over the Parties. Article 3 also describes how Confidential Information should be treated. It also prohibits an Interconnection Customer from protesting the filing of an LGIA or an amendment to an LGIA that the Interconnection Customer has executed.

#### **Comments**

326. MidAmerican recommends that Article 3 be modified to make both Parties responsible for maintaining the confidentiality of information provided by the other Party. The DG Alliance states that an Interconnection Customer has the right to file unilaterally an unexecuted LGIA if the Transmission Provider declines to negotiate in good faith.

- 327. MidAmerican's concerns are addressed in Article 22 of the Final Rule LGIA, which deals with the rights and responsibilities of each Party with respect to treatment of Confidential Information. The DG Alliance's comments are addressed in Section 10.3 of the Final Rule LGIP, which contains the procedure for filing an unexecuted agreement.
- 328. Regarding the prohibition against the Interconnection Customer protesting an executed and filed LGIA or amendment, the Commission concludes that this is contrary to the reservation of rights provision of the LGIA, which allows the parties to retain their respective rights to unilaterally amend their executed LGIA under Sections 205 and 206 of the FPA. Because this prohibition effectively negates the Interconnection Customer's Section 206 rights under the LGIA, this clause favors the Transmission Provider at the expense of the Interconnection Customer with respect to rights that, if present, should be mutual. Accordingly, we delete this prohibition from the Final Rule LGIA.
- \*60 329. Article 4 Scope of Service Proposed LGIA Article 4 identified two types of Interconnection Service from which the Interconnection Customer must choose: Energy Resource Interconnection Service, which is a basic or minimal service, and Network Resource Interconnection Service, which is a more flexible and comprehensive service. Because this topic generated so much controversy, and because the two services are addressed both in the NOPR LGIA and NOPR LGIP, discussion of proposed LGIA Articles 4.1 through 4.1.2.2 is included in Part II.C.2 (Interconnection Products and Scope of Service).
- 330. **Article 4.3.1 Generator Balancing Service Arrangements** Proposed LGIA Article 4.3.1 described certain requirements that the Interconnection Customer would have to satisfy before submitting a schedule for delivery service. In particular, the Interconnection Customer would have to ensure that the Generating Facility's actual output matches its scheduled delivery, on an integrated clock hour basis, including ramping into and out of its schedule. The Interconnection Customer would have to arrange for the supply of energy when there is a difference between actual and scheduled output.

#### **Comments**

- 331. Some commenters, such as NERC, PacifiCorp and American Wind Energy, argue that the provision of energy imbalance service is not related to interconnection and should not be addressed in this rulemaking.
- 332. Cinergy and others object to the use of a clock hour basis to match Generating Facility output to delivery, indicating that a 10-minute interval basis may be more appropriate so that energy injections will be more consistent across the scheduled hour. NERC likewise has concerns about adopting an integrated clock hour specification, and notes that the Generating Facility's scheduling period may be something other than a clock hour, as specified in the Transmission Provider's Commission-approved Tariff or market structure. NERC recommends revising this provision to ensure consistency with the Tariff and market structure.
- 333. Cinergy argues that any balancing arrangement to be implemented by the Interconnection Customer should be determined to be technically feasible by the Transmission Provider and recommends that ramp time be excluded in the balancing arrangement because it may conflict with NERC scheduling requirements. Arkansas Coops notes that use of the clock hour may be inconsistent with operating procedures developed in RTOs.

- 334. The Commission concludes that a provision for balancing service arrangements must be included in the Final Rule LGIA because it describes one of the important requirements that the Interconnection Customer must meet before it takes delivery service. Therefore, the Commission retains Article 4.3 in the Final Rule LGIA.
- 335. However, the Commission agrees with commenters that Article 4.3 of the NOPR LGIA is overly prescriptive. Accordingly, in the Final Rule, the Commission adopts NERC's proposal to revise NOPR LGIA Article 4.3.1 to omit the reference to an integrated clock hour basis, and to add the phrase, "consistent with the scheduling requirements of the Transmission Provider's Commission-approved Tariff and any applicable Commission-approved market structure."
- \*61 336. Article 5 Interconnection Facilities Engineering, Procurement, and Construction Proposed LGIA Article 5 described procedures for designing, procuring, and constructing the Transmission Provider's Interconnection Facilities and Network Upgrades and the Interconnection Customer's Interconnection Facilities. Construction options, rights, and responsibilities were also presented. This article would have provided that the Interconnection Customer will not be directly assigned the costs of modifications made to the Transmission Provider's Interconnection Facilities or the Transmission System to facilitate interconnection of a Generating Facility of another Interconnection Customer or to provide transmission service under the Transmission Provider's Tariff.
- 337. **Article 5.1 Options** Proposed LGIA Article 5.1 specified the method for determining which Party is responsible for the construction of the Transmission Provider's Interconnection Facilities and Network Upgrades. The Interconnection Customer would specify various construction completion dates (such as the In-Service Date, the Initial Synchronization Date, and the Commercial Operation Date), and the Transmission Provider would then choose among three options: (1) **Option A** would have provided that the Transmission Provider construct the Transmission Provider's Interconnection Facilities and Network Upgrades using Reasonable Efforts to complete construction by the dates designated by the Interconnection Customer, but would not be responsible for any liquidated damages in case it fails to meet the construction completion dates established by the Interconnection Customer; (2) **Option B(i)a** would have provided that the Transmission Provider construct the Transmission Provider's Interconnection Customer, and if it fails to meet those dates, it may be liable for liquidated damages; however, the Transmission Provider can opt out of this provision by notifying the Interconnection Customer of its intention to do so within 30 Calendar Days; and (3) **Option B(i)b** would have provided that, if the Transmission Provider notifies the Interconnection Customer that it cannot meet the dates established by the Interconnection Customer, the Interconnection Customer could assume responsibility

for the construction of the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades. <sup>69</sup> This option would also provide that if the Interconnection Customer does not want to assume responsibility for construction, the Parties would negotiate in good faith to revise the construction completion dates and other provisions. Any agreement reached by the Parties during this negotiation shall be binding. However, if the Parties are unable to reach an agreement, the Transmission Provider would assume responsibility for construction of its Interconnection Facilities and Network Upgrades in accordance with Option A. Proposed LGIA Article 5.1 would establish standards for the Interconnection Customer to follow if it assumes responsibility for constructing the Transmission Provider's Interconnection Facilities and system upgrades that are not Stand Alone Network Upgrades. It does not grant any right to the Interconnection Customer to construct upgrades that are not Stand-Alone Network Upgrades.

- \*62 338. Cinergy states that the distinction between Options A and B(i)a is not clear. Monongahela Power recommends that the Commission rename Option B(i)a as Option B and Option B(i)b as Option C. <sup>70</sup>
- 339. Cinergy and NSTAR seek clarification as to whether the Commission intended that the Interconnection Customer take the responsibility for the construction of upgrades that are not Stand-Alone Network Upgrades.
- 340. Several commenters, including Cinergy, NYTO, and SoCal PPA, argue that the Interconnection Customer may choose unrealistic construction completion dates and expose the Transmission Provider to liquidated damages. Cinergy states that if several Interconnection Customers choose their construction completion dates close to each other, the Transmission Provider may not be able to meet the dates due to limited construction staff. PacifiCorp recommends that any construction completion date should be treated as an estimate and that any delays on the part of the Interconnection Customer completing its Generating Facility should automatically extend the time for the Transmission Provider to complete its Interconnection Facilities and Network Upgrades.
- 341. A number of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades. TXU argues that this could threaten the reliability of the Transmission System. SoCal Edison argues that the Transmission Provider must retain adequate control of the engineering and construction of any Transmission Provider Interconnection Facilities and Stand Alone Network Upgrades because of its obligation to protect the safety of the public and maintain the reliability of the Transmission System. Cinergy and NYTO assert that if the Commission does not eliminate the Interconnection Customer's option to build, the Final Rule must provide that an Interconnection Customer exercising this right shall indemnify or hold harmless the Transmission Provider from any resulting liability.
- 342. Southern states that to ensure that construction of the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades does not impair the reliability or safety of the Transmission System: (1) the Transmission Provider should be allowed to approve the Interconnection Customer's contractors and engineers, as well as the vendors from which equipment and materials are purchased; (2) the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades should be constructed, and equipment and materials purchased, pursuant to contracts that are reasonably acceptable to the Transmission Provider, including acceptable equipment warranty provisions; (3) the Transmission Provider should retain some level of supervision over the construction, with unrestricted access to construction sites to perform inspections; (4) the Interconnection Customer should provide a construction schedule to the Transmission Provider before construction begins; (5) the Interconnection Customer should be required to respond promptly to all requests for information from the Transmission Provider; and (6) the Transmission Provider should be able to require the Interconnection Customer or its contractors to remedy any situation that does not meet the Transmission Provider's specifications or standards.
- \*63 343. Similarly, the Construction Issues Coalition argues that the Interconnection Customers' right to build the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades should be under specific conditions,

such as: (1) the Transmission Provider must provide approval and oversight during design and construction; (2) the Transmission Provider must approve contractors in advance; (3) adequate time should be provided to the Transmission Provider for approval of engineering and construction activities; and (4) all equipment and construction must carry warranties to avoid risk exposure to the Transmission Provider. SoCal Edison argues that costs associated with the Transmission Provider's oversight of the construction should be borne by the Interconnection Customer.

- 344. NERC argues that if the Interconnection Customer assumes responsibility for construction, it should comply with Good Utility Practice and the Transmission Provider's safety and reliability criteria.
- 345. NYTO claims that several essential elements of the ERCOT model are absent from the Commission's proposal. It argues, for example, that the Commission should adopt ERCOT's 15 month minimum time period for completing construction after siting permits and land rights have been obtained.
- 346. American Transmission argues that the Transmission Provider must have the right to step in and assume construction responsibilities to protect the integrity of the system and rights of the third parties in case of serious lapses by an Interconnection Customer.
- 347. Southern argues that the Final Rule LGIA should require the Interconnection Customer to transfer the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades to the Transmission Provider for ownership and operation after it completes construction.
- 348. PJMTO asserts that Final Rule LGIA Article 5.1 should contain more explicit provisions addressing the Transmission Owner's role in: (1) obtaining permits and authorizations, (2) obtaining land rights, (3) performing direct line attachment tie-in work, and (4) calibrating remote terminal unit settings.
- 349. American Transmission states that proposed LGIP Section 8 (Interconnection Facilities Study) requires the Transmission Provider to develop detailed cost estimates for constructing the Transmission Provider's Interconnection Facilities and Network Upgrades under the assumption that the Transmission Provider will perform all of the construction, yet the Interconnection Customer may assume the responsibility for part of the construction. It asks the Commission to clarify whether there is any relationship between the Transmission Provider's cost estimates and the actual cost of construction performed by the Interconnection Customer. It wants to require approval by the Transmission Provider of the Interconnection Customer's budget for the construction of the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades.
- \*64 350. Dynegy asserts that the last sentence of Article 5.1.A(iv), which provides that the Interconnection Customer's selection of subcontractors is subject to the Transmission Provider's standards and specifications, is overly broad and conflicts with proposed LGIA Article 26.1 (Subcontractors General), which states that "nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement."

- 351. The Commission is revising Proposed LGIA Article 5.1 to distinguish the various options more clearly. NOPR Option A is now renamed Standard Option. Under the Standard Option, the Transmission Provider shall construct the Transmission Provider's Interconnection Facilities and Network Upgrades using Reasonable Efforts to complete the construction by the dates designated by the Interconnection Customer, but shall not be responsible for any liquidated damages if it fails to complete the construction by the designated dates. The Standard Option also serves as the default in the event the Parties are unable to reach an agreement under the Negotiated Option
- 352. Option B(i)a is renamed Alternate Option. Under the Alternate Option, the Transmission Provider shall construct the Transmission Provider's Interconnection Facilities and Network Upgrades according to the construction completion dates

established by the Interconnection Customer, and if it fails to meet those dates, it may be liable for liquidated damages; however, the Transmission Provider can decline to use this option by notifying the Interconnection Customer of its intention to do so within 30 Calendar Days of executing the LGIA.

- 353. The last option Option B(i)b in the NOPR- gives the Interconnection Customer two choices in the Final Rule LGIA: the Option to Build and the Negotiated Option. This is because the proposed Option B(i)b actually presented two options. Under the Option to Build, the Interconnection Customer may assume responsibility for the construction of the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades if the Transmission Provider notifies the Interconnection Customer that it cannot meet the dates established by Interconnection Customer. However, as clarified in Final Rule LGIA Article 5.1.3, it does not grant any right to the Interconnection Customer to construct upgrades that are not Stand-Alone Network Upgrades. Furthermore, both the Transmission Provider and the Interconnection Customer must agree on which facilities are the Stand Alone Network Upgrades and identify them in Appendix A to the LGIA.
- 354. The <u>Negotiated Option</u> provides that, if the Transmission Provider notifies the Interconnection Customer that it cannot meet the dates established by Interconnection Customer, and the Interconnection Customer does not want to assume responsibility for construction, the Interconnection Customer may decide that the Parties shall negotiate in good faith to revise the construction completion dates and other provisions under which the Transmission Provider is responsible for the construction. If the Parties are unable to reach an agreement, the Transmission Provider shall assume responsibility for construction of the Transmission Provider's Interconnection Facilities and Network Upgrades in accordance with the Standard Option.
- \*65 355. Regarding Cinergy, NYTO, and SoCal PPA's concerns about the selection of unrealistic construction completion dates by an Interconnection Customer, the Final Rule Alternate Option allows the Transmission Provider to avoid unrealistic construction completion dates by notifying the Interconnection Customer that it is unable to meet the established dates. We agree with PacifiCorp that any delay on the part of the Interconnection Customer in meeting its construction completion dates should grant an automatic extension to the Transmission Provider. We note that Final Rule LGIA Article 5.3 (Liquidated Damages) provides that no liquidated damages shall be paid to the Interconnection Customer if the Interconnection Customer is not ready to commence use of the Transmission Provider's Interconnection Facilities and Network Upgrades on the specified construction dates except if such delay is due to the Transmission Provider's delay. 71
- 356. With regard to the concern that giving the Interconnection Customer the right to construct the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades could threaten the safety and reliability of the Transmission System, Final Rule LGIA Article 5.2 (General Conditions Applicable to Options to Build) has several safeguards. For example, the Interconnection Customer is required to use Good Utility Practice and the standards and specifications provided in advance by the Transmission Provider. In addition, the Transmission Provider has the right to approve the engineering design, the equipment acceptance tests, and the construction of the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades.
- 357. In response to those comments seeking an indemnification or hold harmless provision to protect the Transmission Provider from liability arising out of the Interconnection Customer's exercising its right to build, the Commission adds an indemnification clause to Final Rule LGIA Article 5.2 (General Conditions Applicable to Options to Build).
- 358. With respect to various modifications that Southern and the Construction Issues Coalition seek, Final Rule LGIA Article 5.2 (General Conditions Applicable to Options to Build) adds several provisions proposed by these commenters, such as a requirement that the Interconnection Customer (1) provide a construction schedule in advance of the start of construction, (2) remedy deficiencies brought to its attention by the Transmission Provider, and (3) carry warranties for equipment similar to those carried by the Transmission Provider. However, the Commission declines to grant fully the high level of Transmission Provider control that Southern and the Construction Issues Coalition seek, such as approval of subcontractors and vendors. Such control would be overly broad, and the Transmission Provider's ability to seek remedy of any deficiencies should enable it to carry out its responsibilities. The Commission also will deny SoCal Edison's request that the Interconnection Customer bear

the Transmission Provider's costs associated with the oversight of construction performed by the Interconnection Customer because such costs are de minimus.

- \*66 359. With respect to NERC's comment that an Interconnection Customer should follow Good Utility Practice and the safety and reliability criteria of the Transmission Provider, such standards are in Final Rule LGIA Article 5.2 (General Conditions Applicable to Option to Build).
- 360. Regarding NYTO's argument that a minimum of 15 months is needed to complete construction of the Transmission Provider Interconnection Facilities and Network Upgrades, we conclude that specifying such a minimum period is unnecessary because under the Alternate Option, the Transmission Provider will be protected from incurring liquidated damages liability due to delays beyond its reasonable control or reasonable ability to cure.
- 361. The Commission rejects American Transmission's proposal that the Transmission Provider have a right to step in and assume construction responsibilities in case of lapses by an Interconnection Customer. Since Article 5.1 permits the construction of only Transmission Provider Interconnection Facilities and Stand Alone Network Upgrades, the Commission believes that any such lapses would affect only the Interconnection Customer. If it has the potential to affect anyone other than the Interconnection Customer, the Commission will address such concerns when brought to its attention.
- 362. The Final Rule does not require that the Interconnection Customer transfer ownership of the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades to the Transmission Provider after the Interconnection Customer completes them; however, the Commission will require transfer of <u>control</u> of such facilities. Reliability does not require ownership, but it does require control by the Transmission Provider. 72
- 363. With respect to PJMTO's request for provisions regarding the Transmission Owner's role in obtaining permits and land rights, Final Rule LGIA Articles 5.12 (Access Rights) and 5.13 (Lands of Other Property Owners) do not distinguish between the role of the Transmission Provider and the Transmission Owner in assisting the Interconnection Customer in obtaining land rights and permits. The Final Rule LGIA is not the appropriate place to set forth the nature of the relationship between the Transmission Owner and Transmission Provider. In addition, the Commission is stating in this Final Rule that it will give an independent transmission provider such as an RTO or ISO the flexibility to propose different rules in its compliance filing.
- 364. The Commission denies American Transmission's request to include a provision in the Final Rule LGIA for the Transmission Provider to review and approve the Interconnection Customer's budget if an Interconnection Customer assumes the responsibility to construct the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades. The Interconnection Customer is likely to act in its best interests to keep the costs down because it initially funds the construction costs. In addition, allowing a Transmission Provider unfettered discretion to review the budget would encourage anticompetitive behavior.
- \*67 365. With regard to Dynegy's concern regarding subcontractors, Article 26.1 provides that nothing in the LGIA prevents a Party from using the services of any subcontractor to perform its obligations under the LGIA and that it is up to the Party to ensure that the subcontractor complies with the LGIA. In addition, the hiring Party remains primarily liable to the other Party for the performance of the subcontractor. Thus, if the subcontractor fails to meet the Interconnection Customer's obligations under the LGIA or to the Transmission Provider, the Interconnection Customer is obligated to remedy any deficiencies. Accordingly, the Commission is removing the words "including selection of subcontractors" from Article 5.1 to ensure consistency between that article and Article 26.1.
- 366. **Article 5.2 Power System Stabilizers** (In the Final Rule LGIA: Article 5.4) Proposed LGIA Article 5.2 would have required the Interconnection Customer to install, operate and maintain power system stabilizers, if required by the Interconnection System Impact Study. The Transmission Provider would establish minimal acceptable settings subject to the design and operating limitations of the Generating Facility.

#### **Comments**

367. Several commenters, including Cal ISO, Dairyland Power, Dominion Resources, and NSTAR, argue that the Transmission Provider's ability to require the installation of a power system stabilizer should not be limited to when required by the Interconnection System Impact Study because the Generating Facility may become a source of power system oscillations on the Transmission System many years after operations commence. Dominion Resources contends that a Transmission Provider should be able to require an Interconnection Customer to install a power system stabilizer any time it determines through its operating experience that a power system stabilizer is needed.

368. Cal ISO argues that the requirement to install a power system stabilizer should not be based on the "Interconnection System Impact Study," but should be based on the "guidelines and procedures of the Applicable Reliability Council." NERC points out that the Transmission System reliability criteria and use of power system stabilizers vary from one region to another, depending on the electrical characteristics of the system. NERC states that, as a result, it is important that the system operator be notified if a power system stabilizer is inoperable or removed from service.

### **Commission Conclusion**

369. The Commission agrees with Cal ISO that an Interconnection Customer should be required to install a power system stabilizer in accordance with the standards of the Applicable Reliability Council. This also addresses Dominion Resources' concern that installation of a power system stabilizer on a Generating Facility may be needed at a later time; such a requirement should be covered in the guidelines of the Applicable Reliability Council. If the Applicable Reliability Council guidelines do not cover such matters, a Transmission Provider may justify its reasons for wishing to require a power system stabilizer despite the lack of such a requirement in the Applicable Reliability Council guidelines when it makes its compliance filing.

\*68 370. The Commission will adopt NERC's recommended language requiring notification when power system stabilizers are removed or are not available for automatic operation.

371. This article is designated Article 5.4 in the Final Rule LGIA.

372. **Article 5.8.1 - Generator Specifications** (In the Final Rule LGIA: Article 5.10.1) - Proposed LGIA Article 5.8.1 would have required that the Interconnection Customer submit the final specifications for the Interconnection Customer's Interconnection Facilities, including System Protection Facilities, to the Transmission Provider for review at least 90 Calendar Days prior to the Initial Synchronization Date. It proposed to require the Transmission Provider to provide comments to the Interconnection Customer within 30 Calendar Days of the Interconnection Customer's submission.

#### **Comments**

373. Cleco and NYTO assert that the Interconnection Customer should have to submit initial specifications for the Interconnection Customer's Interconnection Facilities to the Transmission Provider at least 180 Calendar Days prior to the Initial Synchronization Date with the understanding that the initial specifications are subject to change. Such initial specifications would give them an opportunity to perform the planning required for the new facilities and upgrade.

- 374. The Commission agrees with Cleco and NYTO and adopts their proposal in the Final Rule.
- 375. This article is designated Article 5.10.1 in the Final Rule LGIA.

376. **Article 5.8.2 - Transmission Provider's Review** (In the Final Rule LGIA: Article 5.10.2) - Proposed LGIA Article 5.8.2 would have required that the Interconnection Customer to modify the Interconnection Customer's Interconnection Facilities as may be reasonably required by the Transmission Provider to ensure that they are compatible with the telemetry communications and safety requirements of the Transmission Provider.

#### **Comments**

377. NERC requests that the word "reasonably" be removed from the article and recommends referring to Good Utility Practice.

### **Commission Conclusion**

378. The Final Rule revises this article to refer to Good Utility Practice, as requested by NERC, but it does not eliminate the term "reasonably." The Interconnection Customer's Interconnection Facilities are installed at the expense of the Interconnection Customer, but must be reviewed and meet the specifications and requirements established by the Transmission Provider. The term "reasonably" helps to ensure that the Transmission Provider does not require the installation of equipment beyond what is necessary for compatibility and reliability, or beyond the standards the Transmission Provider would apply to its own Interconnection Facilities.

379. This article is designated Article 5.10.2 in the Final Rule LGIA.

380. **Article 5.8.3 - Interconnection Customer Interconnection Facilities Construction** (In the Final Rule LGIA: Article 5.10.3) - Proposed LGIA Article 5.8.3 would have required the Interconnection Customer to provide to the Transmission Provider certain "as built" drawings, information, and documents pertaining to the construction of the Interconnection Customer's Interconnection Facilities.

# **Comments**

\*69 381. NERC proposes that the Interconnection Customer also provide the Transmission Provider specifications for the excitation system, automatic voltage regulator, generator control and protection settings, transformer tap settings, and communications.

### **Commission Conclusion**

- 382. The Commission adopts NERC's proposal and revises Proposed LGIA Article 5.8.3 to make clear that the list of information to be provided is not exhaustive.
- 383. This article is designated Article 5.10.3 in the Final Rule LGIA.
- 384. Article 5.11 Lands of Other Property Owners (In the Final Rule LGIA: Article 5.13) Article 5.11 proposed that Transmission Providers would be required to use Reasonable Efforts, including use of its eminent domain authority if necessary, to facilitate the interconnection of Generating Facilities. The Interconnection Customer would be required to pay any expenses related to obtaining rights of use, rights of way, easements, or eminent domain costs that the Transmission Provider might incur, up to the fair market value of the land or "such other price as required by the applicable inter-affiliate transaction requirements."

# **Comments**

385. EPSA and several Interconnection Customers, including Calpine, El Paso, and Reliant Energy, request that the Transmission Provider or Transmission Owner be required to use its eminent domain authority to facilitate the exercise of the Parties' rights and obligations under the LGIA to the extent it is permitted to do so. Numerous Transmission Provider

commenters express concern that the eminent domain provisions of the NOPR are too broad, placing the Transmission Provider in an untenable situation. Specifically, several argue that the Commission's proposal conflicts with state limitations on their eminent domain authority. <sup>73</sup> Cleco, for example, states that in Louisiana, a utility cannot legally request eminent domain on behalf of another entity. National Grid and the Construction Issues Coalition argue that many states require that eminent domain authority be used only "to further a public need" - something that is lacking in the NOPR. Cinergy proposes deleting the entire eminent domain provision, arguing that it imposes an inappropriate burden on the Transmission Provider and reiterates that it conflicts with existing state laws. Similarly, El Paso requests that the use of eminent domain be at the sole discretion of the Transmission Provider or Transmission Owner, citing the numerous factors that must be considered in such an undertaking.

386. Duke Energy proposes that the Commission require a Transmission Provider to use eminent domain only when it reasonably determines that (1) other alternatives are not available and (2) use of eminent domain is permissible under state law. Duke Energy also asserts that the Transmission Provider should provide a written explanation of why other alternatives are appropriate or why the use of eminent domain would not be permitted under state law.

\*70 387. National Grid argues that the Commission should eliminate the eminent domain provision, citing the long delays and heavy litigation that often accompany the seizure of property. National Grid, the Construction Issues Coalition, and others argue that regulation of eminent domain differs from state to state, making the type of national contract clause envisaged by the Commission impossible.

388. PJMTO also opposes the eminent domain provision, arguing that eminent domain is an unpopular last resort and one that is rarely exercised even by a Transmission Provider or Transmission Owner on its own behalf. Instead, it proposes requiring that a Transmission Provider or Transmission Owner, upon receipt of a reasonable request, to assist an Interconnection Customer in acquiring land rights using efforts similar to those it typically undertakes on its own behalf.

389. PJMTO also argues for eliminating the cap on land value, noting that individual state laws already contain mechanisms for valuing property. The Commission may lack authority to require a price cap on property sold by an Affiliate of a Transmission Provider, according to National Grid and the Construction Issues Coalition.

390. Salt River Project also opposes the eminent domain language and instead proposes that the Commission work with federal land holding agencies to streamline the procurement of land rights. SoCal Edison adds that it does not believe the Commission has the authority to impose an eminent domain requirement. Instead, it proposes requiring Transmission Providers to exercise good faith efforts in using whatever eminent domain authority state law may allow on an Interconnection Customer's behalf.

- 391. We agree that a mandatory eminent domain requirement can be difficult for a Transmission Provider or Transmission Owner. The Final Rule requires that a Transmission Provider or Transmission Owner use efforts similar to those it typically undertakes on its own behalf (or on behalf of an Affiliate) to secure land rights for the Interconnection Customer. We are also clarifying that the Transmission Provider or Transmission Owner's efforts must also comply with state law.
- 392. If the Transmission Provider is an independent entity, the Transmission Owner, the Transmission Provider, and the Interconnection Customer may all sign the LGIA. This allows a Transmission Owner and a Transmission Provider to jointly undertake efforts to secure land rights for the Interconnection Customer.
- 393. Regarding the cap on land value, while the Commission remains concerned that Affiliates of a Transmission Provider or Transmission Owner might request above-market compensation for land necessary to facilitate the interconnection, the Commission also recognizes that the valuation of property is a matter of state law. Therefore, we eliminate this cap in the Final Rule.

394. This article is designated Article 5.13 in the Final Rule LGIA.

\*71 395. Article 5.12 - Early Construction of Base Case Facilities - Proposed LGIA Article 5.12 would have required that, at the Interconnection Customer's request, the Transmission Provider must construct, using Reasonable Efforts to accommodate the Interconnection Customer's In-Service Date, all or any portion of Network Upgrades reflected in the Base Case of the Interconnection Customer's Facilities Study that are necessary to accommodate the Interconnection Customer's In-Service Date. Construction of the Network Facilities would be required even if the Network Facilities are shared with other interconnecting generators that would not be completed in time to meet the Generating Facility's In-Service Date.

#### **Comments**

396. MidAmerican contends that this article is inconsistent with Section 12.3 of the NOPR LGIP (Construction Sequencing), which requires that the Transmission Provider use Reasonable Efforts to accommodate the Generating Facility's In-Service Date. Accordingly, it proposes that Article 5.12 be revised.

397. Cleco argues that the Party requesting early construction should pay all Network Upgrade costs associated with the early construction. FP&L argues that to avoid the need to continuously restudy and revise Network Upgrades, the LGIA should require the timely construction of Network Upgrades relied upon by lower-queued Interconnection Customers.

398. Entergy, Dairyland Power, and others state that the Final Rule should address which Interconnection Customer finances Network Upgrades in the event of a delay by the higher-queued Interconnection Customer to whom the Network Upgrades are assigned. Cal ISO states that language regarding milestones should be inserted between proposed LGIA Articles 5.12 and Article 5.13.

# **Commission Conclusion**

399. In response to the concerns of Entergy and others, the Commission notes that a lower-queued Interconnection Customer always has the right under this article to accelerate its construction schedule by completing all required Network Upgrades on schedule despite any delays by higher-queued Interconnection Customers. This would require the lower-queued Interconnection Customer to fund those Network Upgrades at least initially; however, in the absence of participant funding, it would be reimbursed over time through credits, with interest. Article 5.12 does not need to be changed to allow this.

400. Regarding "best" versus "reasonable" efforts, the Commission agrees with MidAmerican that there was an inconsistency between proposed LGIA Article 5.12 and proposed LGIP Section 12.3, which requires the Transmission Provider to use Reasonable Efforts to accommodate the Interconnection Customer's requested In-Service Date. Article 5.12 is the more stringent of the two because it requires the Transmission Provider to construct facilities necessary to accommodate the Interconnection Customer's In-Service Date. The Commission's intent is to expedite the interconnection of new generators in a manner that does not undermine the reliability of a Transmission Provider's Transmission System. However, there may be circumstances beyond the Transmission Provider's control that would prevent it from meeting the construction deadline. To address this concern and to ensure consistency between this article and LGIP Section 12.3, the Commission agrees with MidAmerican's comment that the term "Reasonable Efforts" is appropriate. This article, which is designated Article 5.15 in the Final Rule LGIA, uses that term.

\*72 401. An additional article regarding milestones is not needed. By the time the LGIA is executed, the Parties will have already established under Article 5.1 the milestones Cal ISO refers to.

402. **Article 5.13 - Suspension** (In the Final Rule LGIA: Article 5.16) - Proposed LGIA Article 5.13 would allow the Interconnection Customer, upon written notice to the Transmission Provider, to suspend work on Interconnection Facilities or Network Upgrades as long as the Interconnection Customer agrees to be responsible for all reasonable and necessary costs incurred by the Transmission Provider in suspending work. This article proposed that the LGIA be deemed terminated if the

Interconnection Customer has not requested the Transmission Provider to recommence work within three years from the date of the suspension request.

### **Comments**

403. Peabody supports allowing an Interconnection Customer to suspend work on the interconnection for up to three years because this offers the Interconnection Customer the flexibility that large-scale generation projects need to accommodate permitting and other delays. Other commenters, including BPA, Cinergy, and SoCal PPA, argue that a three year suspension period is unreasonably long. SoCal PPA further states that substantial changes to the Transmission System could occur during that time. Western believes that letting an Interconnection Customer contract with a Transmission Provider for an interconnection and then suspend operation for as long as three years could allow the Interconnection Customer to game the system. Consequently, Western and other commenters argue that the suspension period should be limited to six months, while Cinergy recommends limiting the suspension period to one year. NYTO believes the entire provision is unreasonable.

404. Cinergy requests that Article 5.13 make it clear that if an Interconnection Customer gives a Transmission Provider written notice of suspension of work, the Transmission Provider does not have to obtain written permission from the Interconnection Customer to cancel or suspend material, equipment and labor contracts associated with that work, and that the Commission clarify what is included in the definition of "suspension of work." Further, to prevent gaming the process, Cinergy proposes that an Interconnection Customer be allowed to provide written notice of suspension of work only once per Generating Facility.

405. Dominion Resources questions whether the responsibility for funding the cost of Network Upgrades would fall on the Interconnection Customer suspending or terminating construction or on other Interconnection Customers remaining in the queue. The Interconnection Customer actually using the Network Upgrades should be required to pay for them. Dominion Resources recognizes that this may shift costs from the Interconnection Customer requesting the suspension to Interconnection Customers further down the queue, which could mean that an Interconnection Customer will be subject to potential cost increases even after signing an LGIA. However, it views this as a more acceptable allocation of cost responsibility than requiring an Interconnection Customer that desires to suspend or terminate its project to bear the full cost of Network Upgrades it may never use. In order to avoid gaming of the interconnection queue, if the suspending Interconnection Customer later continues with its project, it should be required to reimburse any lower-queued Interconnection Customers for any Network Upgrade costs related to its suspension.

\*73 406. NERC and MidAmerican comment that there must be a requirement to leave the system in a safe and reliable condition, consistent with Good Utility Practice, if a project is suspended in a partially complete state.

407. The Midwest ISO requests that Article 5.13 make it clear that a suspending Interconnection Customer must provide notice to the Transmission Owner and to any independent Transmission Provider.

408. The Midwest ISO and Georgia Transmission request clarification that the Transmission Provider will be reimbursed for any expenses related to the suspension.

### **Commission Conclusion**

409. Many commenters express concern over the effect that a suspending Interconnection Customer might have on lower-queued Interconnection Customers. We agree with Dominion Resources that, in some cases, a subsequent (<u>i.e.</u>, lower queued) Interconnection Customer may be responsible for funding the costs of completing the Network Upgrades constructed for a higher-queued Interconnection Customer that suspends or terminates construction of such Network Upgrades. However, the Commission is not obligating in this Final Rule a subsequent (<u>i.e.</u>, lower queued) Interconnection Customer to pay for these costs regardless of whether that Interconnection Customer benefits from the facilities, since this would subject that Interconnection Customer to significant financial risk. Prices quoted for interconnection in the LGIA are estimates based on the results of

studies conducted during the LGIP phase of the interconnection process. If it is apparent to the Parties at the time they execute the LGIA that contingencies (such as other Interconnection Customers terminating their LGIAs) might affect the financial arrangements, the Parties should include such contingencies in their LGIA and address the effect of such contingencies on their financial obligations. If no such contingencies are accounted for in the executed LGIA, since the costs of Network Upgrades may influence an Interconnection Customer's decision whether it can enter into an Interconnection Agreement, we leave it to the subsequent Interconnection Customer and the Transmission Provider to revisit the negotiated terms of their executed Interconnection Agreement. We deny the requests to revise or delete Proposed LGIA Article 5.13 on these grounds. <sup>74</sup>

- 410. We also retain the three year period. The Commission agrees with Peabody that allowing the Interconnection Customer to have the Transmission Provider suspend work for up to three years allows generation projects the flexibility necessary to accommodate permitting and other delays that are particularly likely to affect large projects.
- 411. The Final Rule requires the Interconnection Customer to pay all reasonable costs that the Transmission Provider incurs in suspending work on its Interconnection Facilities, as well as costs that are reasonable and necessary to ensure the safety and integrity of the Transmission Provider's Transmission System during the suspension.
- \*74 412. We reject Cinergy's proposal that an Interconnection Customer be limited to one suspension period per Generating Facility. The LGIA is designed to be a standard agreement that will operate in any number of situations, and to limit arbitrarily each Generating Facility to only one suspension period, regardless of circumstances, is unreasonable.
- 413. We adopt NERC's proposal that Article 5.13 require a suspending Interconnection Customer to leave the system in a safe and reliable condition in accordance with Good Utility Practice and the Transmission Provider's safety and reliability criteria.
- 414. In response to Cinergy's request for clarification of the term "suspension of work," the Commission clarifies that a Transmission Provider, upon receiving written notice of suspension from the Interconnection Customer, is authorized to cancel or suspend material, equipment and labor contracts associated with that work. If reliability could be compromised by stopping construction, the Transmission Provider must continue construction until it reaches a stage where it can safely discontinue work. Any costs associated with suspension (or of completing a discrete Network Upgrade) shall be deducted from the Interconnection Customer's security deposit.
- 415. With respect to the Midwest ISO's request to require an Interconnection Customer to notify both the Transmission Owner and the Transmission Provider, we clarify that if both Parties are signatories to the LGIA, the Interconnection Customer is required to notify both the Transmission Owner and the Transmission Provider.
- 416. This article is designated Article 5.16 in the Final Rule LGIA.
- 417. **Article 5.14- Taxes** Proposed LGIA Article 5.14 addressed the allocation of responsibilities that would apply with respect to the tax treatment of an Interconnection Customer's payments or property transfers to the Transmission Provider for the installation of the Transmission Provider's Interconnection Facilities and Network Upgrades.
- 418. Internal Revenue Service policy, as expressed in IRS Notice 2001-82 and IRS Notice 88-129, delineates the standards under which an Interconnection Customer's payments to build interconnections facilities will not create a current tax liability for a Transmission Provider. The "safe harbor" provisions described in these notices generally prevent the transaction from being considered a taxable transfer. If the IRS changes its policy, or if the transaction no longer qualifies for safe harbor protection and tax liability results, under the provisions in Article 5.14 the Interconnection Customer would indemnify the Transmission Provider for any tax liability that may arise from the payments to build the Transmission Provider's Interconnection Facilities and Network Upgrades.

- 419. Several entities argue that the IRS safe harbor does not eliminate all risk of these payments being treated as taxable income to the Transmission Provider because the IRS may revisit its policies in a manner that establishes tax liability for interconnections, including the credits provided against transmission service in exchange for the reimbursement of Network Upgrades. These commenters argue that Article 5.14 should account for these risks.
- \*75 420. Some commenters, including Duke, EPSA, NYTO, and PG&E, argue that the Commission should adopt Article 5.16.5 of the Consensus LGIA, which ensures that a Transmission Owner is made whole when a contribution from an Interconnection Customer is non-taxable when made, but the IRS later imposes tax liability. NYTO further suggests that the two revisions to Consensus LGIA Article 5.16.5 that were proposed by the Transmission Owners should be retained. These provisions would ensure that the Transmission Owner would be reimbursed for taxes imposed more than ten years after the date the Interconnections Facilities are placed in service and allow for security for such potential tax liability.

# **Commission Conclusion**

- 421. The Commission finds that Article 5.14 as proposed appropriately addresses the risk that the contracting Parties face because of the uncertainties regarding IRS policy, because it requires the Interconnection Customer to indemnify the Transmission Provider in the event that the IRS changes or clarifies its policy.
- 422. The Commission concludes that a discussion of subsequent taxable events is appropriate for the Final Rule LGIA. <sup>76</sup> The two additions NYTO requests are unnecessary because Final Rule LGIA Article 5.17.3 addresses limitation of indemnification and the ability of the Transmission Provider to require security from the Interconnection Customer.
- 423. **Article 5.14.1 Interconnection Customer Payments Not Taxable** (In the Final Rule LGIA: Article 5.17.1) Proposed LGIA Article 5.14.1 would have provided that, consistent with IRS Notice 2001-82 and IRS Notice 88-129 (discussing the IRS safe harbor provisions), all payments made by the Interconnection Customer to the Transmission Provider for the installation of Transmission Provider's Interconnection Facilities and Network Upgrades are non-taxable, either as contributions to capital, or as advances.

#### **Comments**

- 424. Peabody endorses this proposed provision. It argues that it is in the best interest of Interconnection Customers, Transmission Providers and customers to take advantage of the tax exemption for payments that Interconnection Customers make to Transmission Providers for Network Upgrades made pursuant to an LGIA.
- 425. Progress Energy argues that an Interconnection Customer's right to terminate the LGIA on 30 Calendar Days' written notice may jeopardize the safe harbor treatment of Interconnection Customer contributions because the IRS safe harbor provisions apply only to interconnection agreements with a minimum term of ten years.

- 426. In response to Progress Energy, the mere existence of the 30 day termination provision does not mean that the Interconnection Agreement conflicts with the IRS minimum term requirement of ten years. Nevertheless, if either Party in fact terminates the LGIA before ten years have passed, the IRS may then conclude that the Interconnection Customer's payments are indeed taxable. Accordingly, the Parties should consider these possible tax consequences when deciding whether to terminate an LGIA within ten years.
- \*76 427. This article is designated Article 5.17.1 in the Final Rule LGIA.

428. **Article 5.14.2 - Representations and Covenants** (In the Final Rule LGIA: Article 5.17.2) - Proposed LGIA Article 5.14.2 set forth the representations and covenants that would be agreed to by the Parties to conform to the requirements of the IRS safe harbor provisions set forth in the relevant IRS Notices.

#### **Comments**

429. FirstEnergy argues that in order for the Interconnection Customer's payments to the Transmission Provider to be deemed non-taxable under the IRS safe harbor provisions, ownership of the electricity generated at the Generating Facility must pass to another entity prior to the transmission of the electricity on the Transmission System. FirstEnergy asks the Commission to clarify the representations and proposed covenants in proposed LGIA Article 5.14.2 to refer to the Point of Interconnection or Point of Change of Ownership.

# **Commission Conclusion**

- 430. We do not intend to interpret the IRS safe harbor provisions, and so we leave it to the Parties to ensure that their conduct, including the point at which the ownership of electric energy produced by the Generating Facility changes hands, conform to IRS policy.
- 431. This article is designated Article 5.17.2 in the Final Rule LGIA.
- 432. Article 5.14.3 Indemnification for Taxes Imposed Upon Transmission Provider Proposed LGIA Article 5.14.3 would have required that the Interconnection Customer indemnify (hold harmless) the Transmission Provider from income taxes imposed against the Transmission Provider as a result of payments or property transfers made by Interconnection Customer to the Transmission Provider under the LGIA that is, if the IRS safe harbor provisions do not keep the Transmission Provider from having to pay income taxes. The Transmission Provider would not include a gross-up <sup>77</sup> for income taxes unless either it has made a good faith determination that the payment or transfers should be recorded as income subject to taxation, or any Governmental Authority directs Transmission Provider to treat the payment or transfers as subject to taxation. As an alternative to the gross-up, the Transmission Provider would be able to require the Interconnection Customer to provide security in a form reasonably acceptable to the Transmission Provider and in an amount equal to the Interconnection Customer's estimated tax liability.

- 433. MidAmerican supports Article 5.14.3 and recommends that the Transmission Owner be added to this provision by changing Transmission Provider to Transmission Provider or Transmission Owner.
- 434. LADWP argues that although Section 5 of the Commission's OATT provides that the transmission customer must indemnify the Transmission Provider that owns facilities financed by tax-exempt debt, it is not clear whether that provision would apply to an Interconnection Customer. LADWP asks the Commission to clarify that an Interconnection Customer is liable for the cost of any adverse tax consequences visited on the public power Transmission Owner because of the interconnection.
- \*77 435. SoCal PPA believes that the Interconnection Customer's obligation to reimburse the Transmission Provider for taxes should cover <u>ad valorem</u> property taxes and other taxes assessed against the Transmission Provider.
- 436. NE Utilities seeks an alternative method for a Transmission Provider to recover tax liability for which it is not reimbursed due to circumstances beyond its control for example, if the security instrument provided by the Interconnection Customer does not cover the full tax liability or if the Interconnection Customer defaults on its obligation to indemnify the Transmission Provider. It argues that in these situations, the Commission should authorize the Transmission Provider to recover the remaining balance from customers.

- 437. TXU says that the Commission should provide comprehensive protection for a Transmission Provider if the IRS decides that Interconnection Customer payments are taxable. A letter of credit, as provided for in proposed LGIA Article 5.14.3, would provide some security for the Transmission Provider, but may limit the process of contesting IRS positions and may prove otherwise difficult to administer. Without elaborating, TXU requests that a more comprehensive security device be required until definitive guidance is received from the IRS.
- 438. SoCal Edison states that if a Transmission Provider or Transmission Owner is unable to recover from a generator any income tax incurred as a result of an interconnection arrangement, the Commission should provide Transmission Providers and Transmission Owners with a regulatory backstop that would guarantee the recovery of these income taxes in transmission rates. It adds that to the extent that a Transmission Provider or Transmission Owner is unable to include income taxes in transmission rates because of other regulatory restrictions (such as a rate freeze or the requirement to have state commission approval for such rates), the Transmission Provider or Transmission Owner should have discretion in determining the appropriate form and level of security required from the generator at the time the IA becomes effective, and a right to offset any tax liability against any transmission credit owed. Further, SoCal Edison says Article 5.14 must state that any future payment shall include interest and penalties, as well as any other costs imposed by the IRS.
- 439. Progress Energy advocates that Article 5.14.3 include certain requirements regarding the Interconnection Customer-provided financial guaranty, such as requiring that the guaranty be issued by a financial entity acceptable to the Transmission Provider and that it be non-revocable for the term of the LGIA.
- 440. Dynegy proposes that the Commission make the security obligation mutual. The Final Rule should state that, when the Transmission Provider requires the Interconnection Customer to pay a tax gross-up because the Transmission Provider has determined in good faith that the payments or property transfers made to Transmission Provider should be reported as income subject to taxation, the Transmission Provider must post security for the amount of the gross-up, plus interest. This will protect the Interconnection Customer from becoming an unsecured creditor in the event of a Transmission Provider insolvency before the issuance of a private letter ruling that could result in the refund of the tax gross-up payment and interest to the Interconnection Customer.
- \*78 441. Calpine argues that the security requirement should bear a reasonable relationship to the risk to which a transmission owner is exposed. Instead of allowing the Transmission Provider to require an Interconnection Customer to meet a costly security requirement using funds that the Interconnections Customer could put to better use developing generation and infrastructure the Commission should authorize the Transmission Provider to recover in its rates any future tax liability. If the Commission is unwilling to expose ratepayers to this risk, it should modify the Final Rule to ensure that any residual security that the Interconnection Customer wold be obligated to post be reasonably related to the actual risk to which the Transmission Provider is exposed.
- 442. EPSA argues that an Interconnection Customer should not be required to pay the taxes of a Transmission Owner unless the Interconnection Customer is entitled to a refund if it is ultimately determined that the amounts paid for Interconnection Facilities and Network Upgrades are not subject to tax. If the Transmission Owner in an Affected System is not a Party to the Interconnection Customer's LGIA, the Interconnection Customer will have no means to enforce its right to a refund of any amounts it has previously paid in taxes. A Transmission Owner is able to insist on security indefinitely, to protect against the remote possibility of a change in circumstances that might become a subsequent taxable event, the balance reflected in the Consensus Tax Provisions would be upset.

#### **Commission Conclusion**

443. In response to MidAmerican's request that proposed LGIA Article 5.14.3, which is designated Article 5.17.3 in the Final Rule LGIA, specify that the Transmission Owner as well as the Transmission Provider is indemnified, the term "Transmission"

Provider" in the LGIA includes the Transmission Owner, where applicable. Accordingly, there is no need to revise this provision.

- 444. SoCal PPA raises tax issues beyond the scope of Article 5.17, since this article addresses only federal tax liability. The Commission rejects the proposal that ad valorem property taxes be included in the Interconnection Customer's obligation to reimburse the Transmission Provider for taxes, since these expenses are annual and are more analogous to operating expenses that are not covered under the LGIA.
- 445. The Commission rejects requests that the Transmission Provider may recover any outstanding federal tax liability balance from customers. A Transmission Provider is to use the security option in Article 5.17.3 to protect itself from the risk that an Interconnection Customer will not pay the potential tax liability, so there should not be any outstanding liability. This, along with the ability to require security or, where appropriate, a gross-up, should sufficiently protect the Transmission Provider from potential tax liability. Should the Transmission Provider be unable for some reason to recover the full cost of its tax liability, it may propose to recover such costs in its rates, but the Commission is not pre-authorizing the recovery of these costs generically.
- \*79 446. In response to SoCal Edison's request for a requirement that future payment include interest and penalties, as well as any other costs imposed by the IRS, this requirement is in Article 5.17.3.
- 447. The Commission rejects as unnecessary Progress Energy's request for greater specificity regarding the guaranty because Article 5.17.3 already gives the Transmission Provider the discretion to choose the security in a form "reasonably acceptable" to the Transmission Provider. Accordingly, the Transmission Provider has the discretion to require the Interconnection Customer to offer security that meets the criteria Progress Energy specifies.
- 448. The Commission agrees with Dynegy that the Interconnection Customer should receive security if a Transmission Provider determines that the payments or property transfers should be reported as income subject to taxation. It is reasonable to require the Transmission Provider to post security, since the gross-up puts the Interconnection Customer at risk in the event that it turns out that taxes do not have to be paid, but the Transmission Provider has become insolvent. Final Rule LGIA Article 5.17 gives the Interconnection Customer the option to request such security when the Transmission Provider has made an independent determination that taxes should be payable. <sup>78</sup>
- 449. Regarding EPSA's argument that an Interconnection Customer should not be required to pay a gross-up unless it is entitled to a refund if the amounts paid ultimately are not taxed, the Commission notes that the refund protection is already in Article 5.17.7. This protection, together with the ability to require security for a gross-up, should afford an Interconnection Customer sufficient protection against the risk of nonrecovery.
- 450. EPSA raises issues regarding tax liability and Network Upgrades on Affected Systems. Obligations regarding tax liability and related indemnification should be set forth in a separate agreement between the Interconnection Customer and the Affected System related to the Network Upgrade. <sup>79</sup>
- 451. Finally, in response to EPSA's argument that proposed LGIA Article 5.14.3 of the LGIA permits a Transmission Provider to insist on security indefinitely, the Final Rule has been revised to state that indemnification will terminate at the earlier of the expiration of the ten year testing period, as contemplated by the IRS safe harbor provisions, or the applicable statute of limitations, or the occurrence of a subsequent taxable event contemplated by this article and the payment of any related indemnification obligation. These are reasonable end points for the indemnification obligation because once the earlier of either of these events occurs, there is no further risk of new tax liability and, therefore, no further need for indemnification.
- 452. **Article 5.14.4 Tax Gross-Up Amount** (In the Final Rule LGIA: Article 5.17.4) Proposed LGIA Article 5.14.4 described how the Parties would calculate the Tax Gross-Up Amount.

#### **Comments**

\*80 453. FP&L argues that the tax gross-up methodology in proposed LGIA Article 5.14.4, when combined with the requirement that the Transmission Provider provide refunds in the form of transmission service credits for its full costs of Network Upgrades (including income taxes), will not allow the Transmission Provider to be made whole for the income tax payments for Network Upgrades. It states that Article 5.14.4 requires the Interconnection Customer to pay up front the net present value of the income taxes due on Network Upgrades, based on the assumption that the Transmission Provider will get income taxes back through the future stream of tax depreciation benefits. But if the Transmission Provider is also required to give back to the Interconnection Customer the net present value of income tax payments, plus interest, through refunds, then the Transmission Provider is paying the full cost of income taxes on assets that it is purchasing and it will not be made whole. FP&L further states that the Commission should authorize two alternatives for the tax gross-up methodology: (1) the Interconnection Customer pays the full amount of taxes up front, but then receives refunds for its tax payments; or (2) the Interconnection Customer pays a reduced amount for the taxes up front, which is the present value of the Transmission Provider's carrying costs, calculated at its current weighted average cost of capital, for its tax payment associated with the contribution in aid of construction until it receives the payment back over time through tax depreciation, but then does not receive refunds for the payment of taxes. Under either alternative, it is essential that the Interconnection Customer not receive interest from the Transmission Provider on tax payments actually made to the government because, if it does, the Transmission Provider will not be made whole.

454. Southern asks the Commission to modify this article so that the calculation of the tax gross-up for payments that entitle the Interconnection Customer to credits is not reduced by depreciation deductions available to the Transmission Provider. FirstEnergy says the method of calculating the Present Value Depreciation Amount, should be clarified by adding the phrase "used for Federal and state purposes" after "... Transmission Provider's anticipated tax deductions as...."

455. EPSA supports the tax gross-up calculation in Proposed LGIA Article 5.14.4. It argues that the calculation was drafted by tax professionals during the ANOPR process in an effort to ensure that the Transmission Provider is made whole. The drafting group determined that the most appropriate manner for calculating the tax gross-up is the methodology set forth in Ozark Gas Transmission Corp., 56 FERC ¶ 61,349 (1991). EPSA also states that this formula has been approved by the Commission and many existing interconnection agreements use the Ozark Gas methodology to compute tax gross-ups for both interconnection facilities and network upgrades, without regard to whether the Interconnection Customer will receive transmission credits. EPSA further argues that the calculation takes into account a Transmission Provider's federal and state tax rate and the present value of all tax depreciation deductions to which the Transmission Provider is entitled over the life of the Interconnection Facilities and Network Upgrades. Finally, EPSA argues that the tax benefits associated with depreciation are not returned to the Interconnection Customer as transmission credits, as some commenters contend. Although the Transmission Provider will return the gross tax costs to the Interconnection Customer in the form of Transmission Credits, the Transmission Provider still benefits from being able to deduct the cost of the Interconnection Facilities and Network Upgrades.

# **Commission Conclusion**

\*81 456. The Commission agrees with EPSA that Proposed LGIA Article 5.14.4 offers the appropriate methodology for ensuring that a Transmission Provider is fully compensated for tax consequences. FP&L and Southern have not sufficiently explained how the calculation fails to make the Parties whole, and we do not revise this article.

457. This article is designated Article 5.17.4 in the Final Rule LGIA.

458. **Article 5.14.5 - Private Letter Ruling or Change or Clarification of Law** (In the Final Rule LGIA: Article 5.17.5) - Proposed LGIA Article 5.14.5 would have required that, at the Interconnection Customer's request and expense, a Transmission Provider file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid or to be paid by the Interconnection Customer to the Transmission Provider under the LGIA would be subject to federal income taxation.

The point of obtaining such a ruling is to get a definitive answer up front as to whether taxes will be due. If a private letter ruling concludes that such sums are not taxable, the Interconnection Customer's obligations would be reduced accordingly.

#### **Comments**

- 459. Commenters criticize the proposed relationships between the Interconnection Customer and the Transmission Provider in seeking a private letter ruling. El Paso argues that the Transmission Provider should have sole discretion to decide how to minimize its taxes, including whether to seek a private letter ruling or to contest a tax determination. While the Interconnection Customer must indemnify the Transmission Provider for tax liability, El Paso argues that this does not justify allowing the Interconnection Customer to require the Transmission Provider to dedicate its taxpayer status, time, and resources to seeking a private letter ruling or contesting a tax determination. This inappropriately places the Interconnection Customer in the position of deciding how the Transmission Provider will meet its obligations to the Interconnection Customer. In addition, even if the Interconnection Customer pays filing and legal fees associated with a private letter ruling or contest, this does not compensate the Transmission Provider for its internal costs of prosecuting such proceedings.
- 460. Dynegy generally supports this provision but contends that it should be revised because it (1) fails to recognize that the Interconnection Customer is the Party at risk of paying a tax gross-up that turns out not to have actually been required by the tax laws, and (2) unduly restricts the Interconnection Customer's ability to make the arguments it wants made in pursuing a private letter ruling. For instance, Dynegy says, Article 5.14.5 allows the Interconnection Customer to prepare only the "initial draft" of the private letter ruling request, and Article 5.16.6 provides for only one level of judicial review for appeals of adverse rulings. Such restrictions should be removed because it is the Interconnection Customer, not the Transmission Provider, that is paying the gross-up and funding the efforts to obtain a private letter ruling.
- \*82 461. Salt River Project notes that this provision would require a Transmission Provider to file a private letter ruling, at an Interconnection Customer's request and expense, but establishes that the Interconnection Customer would prepare the initial draft of the letter. This will give rise to disclosure and confidentiality problems and is a bad business practice.
- 462. FP&L proposes, without elaboration, that the Commission modify proposed LGIA Article 5.14.5 to permit the Transmission Provider to require a jointly filed request for a private letter ruling.
- 463. FirstEnergy asks the Commission to clarify that the last sentence of this article refers to the need to maintain a parental guarantee or letter of credit as required by proposed LGIA Article 5.14.3, and not the Interconnection Customer's indemnification obligations under proposed LGIA Article 5.14 generally.
- 464. NYTO argues, without elaboration, that a provision is needed to ensure that a Transmission Owner can ask the Interconnection Customer to provide financial security to backstop its potential tax liability where the Transmission Owner has not asked for a gross-up payment from the Interconnection Customer pending any ruling from the IRS.

- 465. The Commission rejects comments that seek to deny the Interconnection Customer the right to ask the Transmission Provider, at the Interconnection Customer's expense, to seek a private letter ruling from the IRS. The Interconnection Customer would otherwise be without recourse if it disagrees with the Transmission Provider's conclusion regarding either tax liability (and gross-up) or the need for security, and it is the Interconnection Customer that pays the taxes.
- 466. In response to Dynegy, we will not grant the Interconnection Customer greater latitude with respect to the Transmission Provider's request for a private letter ruling because the proposed provision already offers a fair balance between the interests of the Parties. While the Interconnection Customer funds the request for a private letter ruling, permitting it to submit an "initial

draft" of the private letter ruling request, and to insist on a single appeal, allows the Interconnection Customer to have adequate participation in the effort to secure an IRS determination.

- 467. The Commission disagrees with Salt River Project's argument that allowing the Interconnection Customer to prepare the initial draft of the request for a private letter ruling from the IRS gives rise to disclosure and confidentiality problems. The Commission leaves it to the Parties to work within the confidentiality and other provisions of the LGIA to determine the most appropriate means for allowing the Interconnection Customer to draft the request.
- 468. FP&L offers no explanation for why the Transmission Provider should be permitted to require a jointly filed request for a private letter ruling. As a result, we reject FP&L's request.
- 469. The Commission agrees with FirstEnergy that the last sentence of Proposed LGIA Article 5.14.5 should be revised. This sentence refers to the Interconnection Customer's obligations if a private letter ruling concludes that the transfers or sums paid to the Transmission Provider are not subject to federal income taxation. In this event, the Interconnection Customer's obligations with respect to the guaranty or gross-up allowed under Final Rule LGIA Article 5.17.3 will be reduced or eliminated. The private letter ruling would not eliminate the Interconnection Customer's obligation to indemnify the Transmission Provider in the event that the IRS changes its ruling or policy or a subsequent taxable event occurs.
- \*83 470. As for NYTO's argument that the Transmission Provider should be able to ask the Interconnection Customer to provide financial security when the Transmission Provider has foregone the gross-up, such authority is already in Final Rule LGIA Article 5.17.3. Under this article, the Transmission Provider may secure a guaranty from the Interconnection Customer in an amount equal to the Interconnection Customer's estimated tax liability. Since the article does not specify the timing of such a request, the request may be made at any time the Transmission Provider believes that it is appropriate.
- 471. This article is designated Article 5.17.5 in the Final Rule LGIA.
- 472. **Article 5.14.6 Contests** Proposed LGIA Article 5.14.6 described the obligations that would apply if any Governmental Authority determines that the Transmission Provider's receipt of payments or property is income subject to taxation. At the Interconnection Customer's sole expense, the Transmission Provider would appeal or oppose such a determination. Proposed LGIA Article 5.14.6 also described the procedures for settling the contested ruling.

### **Comments**

- 473. Southern proposes clarifying that the Interconnection Customer's obligation for the settlement amount is calculated on a basis that is fully grossed-up for taxes.
- 474. NYTO argues that the Transmission Owner's obligation to contest a determination by a Governmental Authority should be subject to the Interconnection Customer providing an opinion of tax counsel that there is high likelihood of success.

# **Commission Conclusion**

475. The Commission rejects the commenters' requests. The Transmission Provider may determine if the settlement amount is appropriate under Article 5.14.6, which is designated Article 5.17.7 in the Final Rule, and, therefore, has the opportunity to ensure that the amount is calculated in an acceptable manner. The Commission will not require that the Interconnection Customer tender a tax counsel opinion. Under Article 5.17.7, the Interconnection Customer must pay all of the costs of an appeal of the ruling. The Commission believes that the prospect of paying for an appeal with a low likelihood of success should be a sufficient incentive not to pursue a weak case.

476. **Article 5.14.7 - Refund** (In the Final Rule LGIA: Article 5.17.8) - Proposed LGIA Article 5.14.7 described the conditions under which a refund would be payable to the Interconnection Customer for any payments made related to income tax liability and the formula for calculating the refund.

# **Comments**

477. The Florida PSC recommends that the indemnification treatment in the LGIA be subject to review by state commissions on a case-by-case basis since there are local consequences. In some instances, indemnification alone is insufficient and letters of credit, parental involvement or other forms of guarantees may be required to protect retail customers adequately from becoming the default responsible Party. The Transmission Provider should be able to petition the state commission for a more stringent indemnification standard.

### **Commission Conclusion**

\*84 478. The Commission does not grant Florida PSC's request. When the Commission, under the authority of sections 201, 205 and 206 of the Federal Power Act <sup>80</sup> sets a rate, term or condition for such transmission, a state may not exercise its jurisdiction over a retail rate to review the reasonableness of the rate, term or condition set by the Commission. <sup>81</sup>

479. This article is designated Article 5.17.8 in the Final Rule LGIA.

480. **Article 5.14.8 - Taxes Other Than Income Taxes** (In the Final Rule LGIA: Article 5.17.9) - Proposed LGIA Article 5.14.8 described the Parties' obligations if taxes other than federal or state income taxes, and for which the Interconnection Provider may be required to reimburse the Transmission Provider under the terms of the LGIA, are imposed. At the Interconnection Customer's expense, the Transmission Provider would appeal or oppose such a determination. Proposed LGIA Article 5.14.8 also described the procedures for settling the contested ruling.

#### **Comments**

481. FP&L asks the Commission to clarify Article 5.14.8 to require the Interconnection Customer to pay tax costs, other than income tax, related to interconnection payments.

#### **Commission Conclusion**

- 482. The Commission notes that Article 5.14 does not limit recovery to state or federal income taxes related to interconnection payments. This provision by itself does not create additional tax liability beyond income taxes. Because FP&L offered no justification for why additional tax protection is necessary, the Commission rejects its request.
- 483. This article is designated Article 5.17.9 in the Final Rule LGIA.
- 484. **Article 5.15 Tax Status** (In the Final Rule LGIA: Article 5.18) Proposed LGIA Article 5.15 provided that each Party cooperate with the other to maintain the other Party's tax status. It also proposed that the LGIA would not be intended to adversely affect any Transmission Provider's tax exempt status with respect to the issuance of bonds.

### **Comments**

485. NYTO proposes modifying the LGIA to be consistent with the tax-exempt bond provisions of the Transmission Owner's (or the ISO's) OATT. Thus, the LGIA would provide that the Transmission Owner is not obligated to take any action, and the Interconnection Customer is prohibited from taking any action, that would adversely affect the tax-exempt status of the Transmission Owner's (or the ISO's) local furnishing bonds.

486. Several commenters, including LADWP and TANC, are concerned about the effect that providing Interconnection Service will have on the tax-exempt status of their bond funding. TANC asks the Commission to provide flexibility for municipal utilities that adopt the Tariff additions. NRECA-APPA is concerned that contributions by an Interconnection Customer for construction of interconnection facilities and Network Upgrades may result in loss of its tax-exempt status. A tax-exempt cooperative must ensure that at least 85 percent of its income comes from members.

\*85 487. LPPC urges the Commission to give public power utilities the option to: (1) refuse to provide an interconnection if doing so would jeopardize the tax-exempt status of the public power utility's financing; or (2) proceed with the interconnection with an indemnification provision that would require Interconnection Customers to reimburse public power entities if any aspect of compliance with the Final Rule causes the utility to lose the tax-exempt status of its bonds.

### **Commission Conclusion**

488. The Commission concludes that the tax status of the Parties is sufficiently protected by Proposed LGIA Article 5.15.

489. As described more fully in the reciprocity discussion in this preamble, public power and other nonjurisdictional entities with "safe harbor" tariffs may add the Final Rule LGIP and Final Rule LGIA to their safe harbor tariffs if they wish to continue to have safe harbor protection. <sup>82</sup> The Commission limits reciprocity compliance to those services a nonjurisdictional entity is capable of providing on its system. <sup>83</sup> The Commission will consider the restrictions on nonjurisdictional and jurisdictional entities' conduct that would endanger the tax exempt status of their bond funding during compliance or upon submission of amended safe harbor tariffs, and we will act to ensure that they retain their tax-exempt status. Accordingly, the Commission need not address further here the argument raised by LPPC.

490. This article is designated Article 5.18 in the Final Rule LGIA.

491. **Article 6 - Testing and Inspection** - Proposed LGIA Article 6 provided that, prior to the Commercial Operation of the Generating Facility, the Transmission Provider shall test the Transmission Provider Interconnection Facilities and Network Upgrades, and the Interconnection Customer shall test the Generating Facility and the Interconnection Customer's Interconnection Facilities to ensure their safe and reliable operation. The Interconnection Customer would bear the cost of these tests and any modifications. After the Commercial Operation Date, each Party shall conduct routine inspection and testing of its own facilities, at its own expense, in accordance with Good Utility Practice.

#### **Comments**

492. Entergy generally supports the testing and inspection provisions, but urges that Article 6.1 provide the Parties with additional scheduling flexibility if testing reveals the need for modifications to the Generating Facility. Entergy therefore proposes that the Parties' schedules for completing their respective obligations to construct and install facilities shall be extended to the extent reasonably necessary to complete any necessary modifications to the Generating Facility.

493. Arkansas Coops propose that Article 6.1 of the NOPR LGIA be modified to prohibit a Transmission Provider from preventing an Interconnection Customer sale of test energy to an entity other than the Control Area operator.

### **Commission Conclusion**

\*86 494. The Commission does not believe that a change to the LGIA is required in order to satisfy Entergy's concern. The LGIA is premised on the idea that the Interconnection Customer and Transmission Provider will coordinate the interconnection of the Interconnection Customer's Interconnection Facilities on an ongoing basis. If the testing reveals a problem with the

Interconnection Facilities or Network Upgrades, the LGIA contemplates that the Parties will work together to modify the schedule.

- 495. In response to Arkansas Coops, the Interconnection Customer may sell its energy to anyone; the LGIA does not need to address this matter, as it is not an interconnection matter.
- 496. **Article 7 Metering** Proposed LGIA Article 7 would have required that, unless otherwise agreed to by the Parties, the Transmission Provider shall install, own, operate, and maintain Metering Equipment at the Point of Interconnection, with the Interconnection Customer bearing all reasonable documented costs.
- 497. **Article 7.2 Check Meters** Proposed LGIA Article 7.2 provided that the Interconnection Customer, at its own expense, may install one or more meters on its side of the Point of Interconnection to check the accuracy of Transmission Provider's meters.
- 498. **Article 7.3 Standards** Proposed LGIA Article 7.3 provided that if Article 7 conflicts with the manuals, standards or guidelines of the Applicable Reliability Council, the latter shall control.
- 499. **Article 7.4 Testing of Metering Equipment** Proposed LGIA Article 7.4 provided that if at any time Metering Equipment fails to register or is found to be inaccurate by more than one percent, the Transmission Provider shall correct all measurements made by the inaccurate meter.
- 500. **Article 7.5 Metering Data** Proposed LGIA Article 7.5 provided that the official measurement of the amount of energy delivered from the Generating Facility to the Point of Interconnection is the metered data, which would be telemetered to one or more locations designated by the Transmission Provider and one or more locations designated by the Interconnection Customer.

- 501. Cal ISO and SoCal Edison argue that, in California, it is the Cal ISO Tariff that governs metering provisions. They further argue that many provisions of proposed LGIA Article 7 appear to be at odds with Cal ISO's Tariff and WECC requirements. For example, Cal ISO points out that proposed Article 7.1 appears to require metering only at the Point of Interconnection which would mean "net metering," whereas WECC requires Cal ISO to meter a generator's gross output.
- 502. SoCal Edison and WEPCO argue that the Transmission Provider should not be required to own the meters because owning meters carries with it some liability associated with inaccurate meter readings.
- 503. Dynegy comments that meters should be installed at an agreed-upon location rather than at the Point of Interconnection, and metering information should be provided in analog and digital form to no more than two locations specified by the Transmission Provider. It also proposes that check meter measurements be used when the primary meter is inaccurate, and that the Final Rule specify in more detail the cost responsibility of the Transmission Provider if it does not properly maintain the metering equipment.
- \*87 504. Baker & McKenzie and Dynegy argue that proposed LGIA Article 7.2 incorrectly references Article 7.3 and should refer instead to Article 7.4. Several commenters, including Baker & McKenzie, the Bureau of Reclamation, Dynegy, and Monongahela Power, propose that language should be added to Article 7.4 to use check meters to correct the measurements read by failed or inaccurate Metering Equipment. Baker & McKenzie proposes several editorial changes to clarify Article 7.4.
- 505. FirstEnergy argues that the one percent metering accuracy is very difficult to achieve and its current interconnection agreement as well as the industry standard allows for a two percent metering error. It asserts that the provision should be changed to allow for a metering error of two percent. Monongahela Power argues that the allowed metering error should be 1.5 percent.

506. Several commenters including EEI, FirstEnergy, and Southern argue that the last sentence of proposed LGIA Article 7.5 incorrectly states that "metering data [is] provided <u>by</u> the Interconnection Customer" because the metering data is being provided <u>by</u> the Transmission Provider <u>to</u> the Interconnection Customer.

#### **Commission Conclusion**

507. Cal ISO's concern with regard to metering being allowed only at the Point of Interconnection is misplaced. Proposed LGIA Article 7.1, which provides that "[u]nless otherwise agreed by the Parties, Transmission Provider shall install Metering Equipment at the Point of Interconnection," clearly allows Metering Equipment to be placed at an agreed upon location different from the Point of Interconnection. However, in response to Cal ISO's and SoCal Edison's concern that their metering provisions are governed by WECC requirements, we are adding the following language to Article 7.1: "Each Party shall comply with the Applicable Reliability Council requirements." The Commission does not expect that Applicable Reliability Council requirements will conflict with our provisions in Final Rule LGIA Article 7. Accordingly, we find the following language to be unneeded and are deleting it from Article 7.3 (Standards): "To the extent this Article 7 conflicts with the manuals, standards, or guidelines of the Applicable Reliability Council regarding interchange metering and transactions, the manuals, standards and guidelines of such Applicable Reliability Council shall control."

508. In response to SoCal Edison and WEPCO, we are not revising proposed LGIA Article 7.1 because the Final Rule contains the phrase "[u]nless otherwise agreed by the Parties" which allows any Party to own the meters. In response to Dynegy and Baker & McKenzie we are changing the reference in Final Rule LGIA Article 7.2 to Article 7.4. We are also adding language in Final Rule LGIA Article 7.4 for the use of check meters to correct the measurements read by failed or inaccurate Metering Equipment. In response to FirstEnergy and Monongahela Power's argument, the Commission adopts a metering error of two percent because, as pointed out by FirstEnergy, two percent is the industry standard. Finally, we are correcting the error in the last sentence of proposed LGIA Article 7.5 noted by EEI, FirstEnergy and Southern.

- \*88 509. Article 8 Communication Proposed LGIA Article 8 described the operating communications and dedicated data circuits between the Parties that would be necessary and the cost and maintenance responsibility for such equipment.
- 510. **Article 8.1 Interconnection Customer Obligations** Proposed LGIA Article 8.1 would have required the Interconnection Customer to maintain satisfactory operating communications with the Transmission Provider's Transmission System dispatcher or designated representatives.

- 511. NERC and Western recommend that a Transmission Provider be permitted to use a voice communications system that does not rely on the public telephone system.
- 512. Dairyland Power proposes that maintenance be performed by the Transmission Provider, in an agreed upon manner, at the Interconnection Customer's expense.
- 513. Cleco and FirstEnergy propose that the Interconnection Customer be responsible for the cost of maintaining any communications and computer equipment belonging to either Party, as well as the hardware and software necessary for the Transmission Provider to interface properly with the Interconnection Customer's system.
- 514. Progress Energy requests that the first sentence of proposed LGIA Article 8.2 be rewritten to read: "Prior to the Initial Synchronization Date of the [Generating] Facility, a remote terminal unit, or equivalent data collection and transfer equipment acceptable to both Parties shall be installed...."

515. The Bureau of Reclamation believes that cyber-security and data security issues should be addressed in the body of the LGIA, and not in an Appendix.

### **Commission Conclusion**

- 516. The Commission concurs with the recommendations of NERC, Western and Progress Energy, and revises Proposed LGIA Articles 8.1 and 8.2 to allow greater flexibility.
- 517. In response to the Bureau of Reclamation, the Commission notes that the Appendices are as binding as provisions within the body of the LGIA.
- 518. Articles 8.1 and 8.2 require that the Interconnection Customer transmit the data to a point specified by the Transmission Provider. Once the data has reached that point, it becomes the responsibility of the Transmission Provider to maintain its own hardware and software equipment. In response to Dairyland Power, the Commission notes that the Parties may enter into an agreement regarding which Party actually performs the data system maintenance, but the Interconnection Customer is ultimately responsible for paying for that maintenance.
- 519. **Article 9 Operations** Proposed LGIA Article 9 would have required the Interconnection Customer and Transmission Provider to operate their facilities in a safe and reliable manner. It also proposed reactive power requirements and provided that the Interconnection Customer will be compensated for capital expenses incurred based on the use of the Interconnection Facilities by the Transmission Provider, all third party users, and the Interconnection Customer.
- \*89 520. Article 9.1 General Proposed LGIA Article 9.1 would have required the Parties to comply with LGIA Appendix G (Interconnection Guidelines). It would also require that each Party provide to the other Parties all information that may be required to comply with Applicable Laws and Regulations.

# **Comments**

- 521. Southern, Lakeland, and FirstEnergy state that Article 9.1 should refer to Applicable Reliability Council requirements instead of Appendix G Interconnection Guidelines, which is blank. FirstEnergy states that each Party should be required to comply with the requirements of any RTO or ISO and any procedures agreed to by the Joint Operating Committee.
- 522. Exelon requests that proposed LGIA Article 9.1 be modified to include the following language: "To the extent interconnection requirements are inconsistent with ISO/RTO rules, the ISO/RTO rules shall govern."

# **Commission Conclusion**

- 523. In the Final Rule, Article 9.1 refers to Applicable Reliability Council requirements. The Commission is deleting Appendix G (Interconnection Guidelines). With respect to FirstEnergy's request that Parties be required to comply with any procedures agreed to by the Joint Operating Committee, the Commission does not believe that any language changes are required. We clarify that the Parties are expected to comply with the procedures established by the Joint Operating Committee. We also clarify that the RTO or ISO rules, once approved by the Commission, shall govern the LGIA.
- 524. **Article 9.2 Control Area Notification** Proposed LGIA Article 9.2 would have required the Interconnection Customer to notify the Transmission Provider in writing of the location of its Control Area at least three months before the Generating Facility's Initial Synchronization Date. The proposed article also provided that the Interconnection Customer has the right to change the Control Area after the Initial Synchronization Date.

- 525. Some commenters, including PG&E and Cal ISO, believe that the Generating Facility must be the Control Area to which it is electrically connected.
- 526. MidAmerican believes that the Interconnection Customer must provide the metering and communications necessary to be a part of a Control Area other than the Transmission Provider's Control Area. Cleco proposes that since switching Control Areas is labor-intensive for the employees of both Control Areas, the Interconnection Customer should be required to remain in a Control Area for at least 12 months before switching.
- 527. NERC asks that proposed LGIA Article 9.2 be clarified to ensure that the host Control Area (the Control Area to which the Interconnection Customer is physically connected, regardless of whether the Generating Facility is electrically telemetered to another Control Area through a dynamic transfer) can enforce an Interconnection Customer's power factor, voltage control, and other similar obligations. Others commenters, including WEPCO, MidAmerican, Avista, National Grid, Southern, express concerns that a separate agreement and control equipment modification should be required, and that if the Interconnection Customer designates a different Control Area, it should be required to follow the rules for all applicable Control Areas.
- \*90 528. Duke Energy asks what the consequence would be if an Interconnection Customer fails to notify a Transmission Provider of its Control Area three months prior to its Commercial Operating Date. The Maine PSC requests that Article 9.2 permit waiver of Control Area notification in certain situations.

### **Commission Conclusion**

- 529. In response to Cal ISO, PGE, and Cleco, the Commission does not prohibit dynamic scheduling of a Generating Facility physically connected in one Control Area but scheduled into another. Nor does it place restrictions on changing Control Areas and how long an Interconnection Customer must remain in a Control Area. Moreover, in Order No. 888 the Commission did not require that Transmission Providers offer dynamic scheduling. <sup>84</sup> However, we also agree with the concerns expressed by NERC and other commenters that the process of changing Control Areas and the attendant implementation brings about requirements for coordination, control equipment modification, and agreement on operational details. In such cases, the Commission confirms that the Transmission Provider's OATT shall apply.
- 530. We also confirm that the Interconnection Customer must notify the Transmission Provider at least three months before the Initial Synchronization Date of the Control Area in which it will be located. Failure of an Interconnection Customer to make the appropriate Control Area designation would be treated as a Breach of the Final Rule LGIA, subject to opportunity to cure. Similarly, while an Interconnection Customer could request that the Transmission Provider waive the three month notice requirement, we decline to make that a provision of the Final Rule LGIA.
- 531. **Article 9.3 Transmission Provider Obligations** Proposed LGIA Article 9.3 would have required the Transmission Provider to operate and maintain its Transmission System in a safe and reliable manner and in accordance with the LGIA. It also proposed that the Interconnection Customer would not be obligated to follow the Transmission Provider's instructions if those instructions would undermine the safe and reliable operation of the Generating Facility.

- 532. NERC proposes deleting the proposed language allowing an Interconnection Customer to not follow the Transmission Provider's instructions if doing so would cause material damage to the Generating Facility. NERC is concerned that the language appears to grant the Interconnection Customer a blanket right not to follow operating instructions of the Transmission Provider.
- 533. NYTO proposes revising Article 9.3 of the NOPR LGIA to remove any incentive for the Interconnection Customer to "create" circumstances (e.g., emergencies) that would warrant noncompliance.

534. Southern asserts that it is inappropriate to impose broad obligations on a Transmission Provider's Transmission Systems in the LGIA. The LGIA should govern only the interconnection of an Interconnection Customer and the Interconnection Facilities necessary to achieve the interconnection, not the entire Transmission System.

\*91 535. Dynegy states that proposed LGIA Article 9.3 fails to consider the economic effect of operating instructions on the Interconnection Customer, which could be financially devastating, and that the article should make clear that the Transmission Provider must compensate the Interconnection Customer for responding to such operating instructions

# **Commission Conclusion**

536. We agree with NERC's concern that the proposed language appears to grant the Interconnection Customer a blanket right not to follow the operating instructions of the Transmission Provider during normal operating conditions and accordingly delete the proposed language in the Final Rule. We expect a Transmission Providers to follow NERC procedures and to take every precaution not to cause any material adverse impact on the safe and reliable operation of the Generating Facility. It is essential that the Interconnection Customer follow all orders given by the Transmission Provider, unless they would result in impairment to public health or safety, since otherwise the Transmission Provider would be unable to effectively manage its Transmission System. Final Rule LGIA Article 13.6 (Interconnection Customer Authority) allows Interconnection Customers to take "actions or inactions" necessary to "preserve the reliability of the Interconnection Customer's Generating Facility" during an Emergency Condition.

- 537. In response to NYTO's comments, all Parties are obligated to follow Good Utility Practice and to abide by their obligations under the LGIA. If a Party were to manufacture an Emergency Condition, it would be a violation of the LGIA, as well as a serious Breach of NERC and other reliability rules.
- 538. Southern's concerns are misplaced. Proposed LGIA Article 9.3 simply stated that the Transmission Provider shall maintain its system in a safe manner and that the Interconnection Customer is required to follow the instructions of the Transmission Provider under normal circumstances.
- 539. Dynegy's comment also appears to be misplaced. Proposed LGIA Article 9.3 dealt with the obligations of the Transmission Provider, not the obligations of the Interconnection Customer. Assuming that Dynegy's comment applies to Article 9.4 instead, we clarify that a Party is not obligated to follow a Transmission Provider's instructions that would cause harm to its Generating Facility, unless public health and safety would be threatened by noncompliance.
- 540. **Article 9.6.1 Power Factor Design Criteria** Proposed LGIA Article 9.6.1 would have required the Generating Facility to be designed so that at the continuous rated power output, its power factor would be within a range of 0.97 leading to 0.95 lagging, unless the Transmission Provider has established different requirements applicable to all Interconnection Customers in the Control Area on a comparable basis.

# **Comments**

541. NERC proposes that the Commission require power factor capabilities to be "within a range required by Good Utility Practice," which incorporates NERC standards by reference. It cites its own Planning Standard, which allows a generator to be within the range of 0.95 leading to 0.90 lagging and argues that such a range provides more responsive reactive absorption and supply than the range proposed in Article 9.6.1. That Planning Standard also requires that if the Generating Facility does not meet the requirements, the Interconnection Customer must make alternate arrangements for supplying dynamic reactive power

to meet the area's reactive power requirements. However, NERC concedes that a power factor requirement of 0.95 leading to 0.95 lagging is a common practice in some NERC regions.

### **Commission Conclusion**

\*92 542. We adopt the power factor requirement of 0.95 leading to 0.95 lagging because it is a common practice in some NERC regions. If a Transmission Provider wants to adopt a different power factor requirement, Final Rule LGIA Article 9.6.1 permits it to do so as long as the power factor requirement applies to all generators on a comparable basis.

543. **Article 9.6.3 - Payment for Reactive Power** - Proposed LGIA Article 9.6.3 would have provided that the Transmission Provider pay the Interconnection Customer for reactive power that the Generating Facility provides or absorbs. Such payment would be in accordance with the Interconnection Customer's rate schedule unless service is subject to a Commission-approved RTO or ISO rate schedule. If no rate schedule is in effect, the Transmission Provider would compensate the Interconnection Customer in an amount that would be due the Interconnection Customer had the rate schedule been in effect when the service commenced; provided, however, that the rate schedule must be filed with the Commission within 60 Calendar Days of the commencement of service.

#### **Comments**

544. El Paso and others maintain that the Interconnection Customer should not be compensated for reactive power provided or absorbed within the power factor range established in Article 9.6.1 (Power Factor Design Criteria) since it is only meeting its obligation to do so. MidAmerican, Cleco, El Paso, Nevada Power, PG&E, and Western state that the Interconnection Customer should be compensated for the reactive power it provides or absorbs when the Transmission Provider asks the Interconnection Customer to operate its Generating Facility outside the established power factor range. Cleco and Nevada Power also contend that if the Transmission Provider pays for reactive power, so should the Interconnection Customer, when it does not meet the Transmission Provider's voltage schedule that can be met by the established power factor range.

545. MidAmerican and Cleco argue that reactive power should be paid for only if the Interconnection Customer has filed a rate schedule with the Commission prior to the commencement of service. Duke argues that the last sentence of the NOPR LGIA Article 9.6.3 that provides for filing of a rate schedule within 60 Calendar Days of having provided reactive service without a rate schedule should be moved to Article 11.6 (Interconnection Customer Compensation) to cover a similar situation during an Emergency Condition. Cal ISO believes that the procurement of reactive power should be left to another proceeding (such as a Regional Market Design proceeding), and NYISO states that this issue is already being dealt with in its Market Administration and Control Area Services Tariff.

## **Commission Conclusion**

546. We agree that the Interconnection Customer should not be compensated for reactive power when operating its Generating Facility within the established power factor range, since it is only meeting its obligation. Proposed Article 9.6.3 required payment for reactive power to an Interconnection Customer only when the Transmission Provider requests the Interconnection Customer to operate its Generating Facility outside the range established in Article 9.6.1 (Power Factor Design Criteria). In response to Cleco and Nevada Power, we agree that the Interconnection Customer should be penalized or otherwise compensate the Transmission Provider if the Interconnection Customer does not meet the Transmission Provider's voltage schedule requirements, so long as the voltage schedule requirements can be met by the established power factor range. The Commission is not including a standard penalty or compensation provision here, but will entertain reasonable requests to do so on compliance. We agree with Duke and move the last sentence of Article 9.6.3 to 11.6.

\*93 547. With respect to the argument that payment for reactive power should be required only if the Interconnection Customer has a rate schedule on file when service commences, we note that the Commission's Regulations allow an applicant to file a rate schedule within 60 days of the commencement of service. 86

548. An RTO or ISO, at the time its compliance filing is made, may propose variations from this policy, as discussed below. <sup>87</sup> An RTO or ISO has different operating characteristics depending on its size and location and is less likely to act in a discriminatory manner than a Transmission Provider that is also a market participant. An RTO or ISO will have greater flexibility to customize its LGIP and LGIA to respond to regional needs.

549. **Article 9.7.1.2 - Outage Schedule** - Proposed LGIA Article 9.7.1.2 would have a Transmission Provider post transmission facility outages on the Open Access Same-Time Information System (OASIS) and require an Interconnection Customer to schedule its maintenance on a rolling 24 month basis. It also stated that a Transmission Provider may ask the Interconnection Customer to reschedule its maintenance as necessary to maintain the reliability of the Transmission System; however, the Transmission Provider will compensate the Interconnection Customer for any costs of rescheduling such maintenance.

#### **Comments**

550. Several commenters argue that the Transmission Provider should not be required to compensate the Interconnection Customer for the costs of rescheduling maintenance when the purpose of rescheduling the maintenance is to ensure the reliability of the Transmission System. For example, Cal ISO claims that the compensation issue should be resolved by deferring to the RTO or ISO outage coordination provisions in its Tariff. Southern contends that the Interconnection Customer benefits from a reliable Transmission System and should therefore maintain the reliability of the Transmission System without any compensation for rescheduling its outages. Southern also argues that the provision seems to require the Transmission Provider to compensate the Interconnection Customer for rescheduling maintenance even if such rescheduling is required to interconnect another Interconnection Customer. If the provision is adopted, Southern requests clarification that the Interconnection Customer, not the Transmission Provider, is required to pay the costs that other Interconnection Customers incur to reschedule their maintenance. Southern also requests clarification that the reimbursed costs are limited to direct costs and will not include consequential or indirect costs (such as lost profits).

551. Dairyland Power, PSNM, and Western assert that an Interconnection Customer may try to game the outage scheduling process. It could revise its maintenance schedule to coincide with a maintenance project (by listing it on the Transmission Provider's OASIS) and thus create congestion or reliability conditions on the Transmission System for the purpose of receiving compensation from the Transmission Provider. PSNM further states that while curtailment and redispatch costs under the OATT generally are shared on a pro rata basis when transmission service is not available, this article anticipates that the Transmission Provider will compensate an Interconnection Customer for changes in the Interconnection Customer's maintenance plan, with no reciprocal compensation if the Interconnection Customer changes its own plans.

\*94 552. Western believes that requiring the Transmission Provider to compensate for "any costs" leaves too much to interpretation. The provision should be limited to actual costs incurred by the Interconnection Customer, such as remobilization costs, to prevent gaming. AEP believes that compensation should be provided on rare occasions when maintenance must be rescheduled for reliability purposes. Cleco believes that the payment to the Interconnection Customer should occur only if the Transmission Provider is initially allowed to approve the maintenance schedule proposed by the Interconnection Customer.

## **Commission Conclusion**

553. We agree that the proposed requirement to compensate Interconnection Customers for "any costs" incurred in rescheduling maintenance is overly broad. Compensation should be limited to the additional, direct costs that the Interconnection Customer incurs as a result of having to reschedule maintenance.

554. We also agree that this article, as proposed, could create an opportunity for gaming on the part of the Interconnection Customer, which might schedule its maintenance at a time when the Transmission Provider could be expected to ask it to reschedule. Therefore the proposed article is modified so that an Interconnection Customer will not receive compensation if it had modified its schedule of maintenance activities during the year before the date of the initially scheduled maintenance.

555. **Article 9.7.1.3 - Outage Restoration** - Proposed LGIA Article 9.7.1.3 would have provided that if an outage on a Party's Interconnection Facilities or Network Upgrades harms the other Party's facilities, the Party owning or controlling the facility that is out of service will use Reasonable Efforts to promptly restore it to a normal operating condition.

#### **Comments**

556. NERC proposes to require the first Party to provide the other Party information on the nature of the Emergency Condition, including an estimated time of restoration, and on any corrective actions required, as soon as practical, followed by a written explanation of the nature of the outage. The clarification is necessary because the outage may affect outage clearances on other equipment, calculation of transfer capabilities, system deratings, and so on.

### **Commission Conclusion**

557. We incorporate NERC's proposed change. NERC's proposal recognizes not only the importance of restoration after an outage, but the necessity of coordinated restoration and information-sharing to make all affected Parties aware of the restoration, the corrective actions taken, and the time the restoration occurred, so that all Parties may determine whether the interconnected system has been returned to a normal operating condition.

558. **Article 9.7.2 - Interruption of Service** (In the NOPR: Continuity of Service) - Proposed LGIA Article 9.7.2 would have provided that the Transmission Provider may require the Interconnection Customer to reduce or interrupt deliveries of electricity if such delivery of electricity would adversely affect the Transmission Provider's ability to perform activities that are necessary to safely and reliably operate and maintain the Transmission System. It also would require the Transmission Provider to schedule the reduction or interruption to either coincide with the scheduled outage of the Generating Facility or during periods of low demand.

# Comments

\*95 559. Several commenters, mostly Transmission Providers such as Exelon, MidAmerican, PG&E and Southern, argue that the last sentence of proposed LGIA Article 9.7.2.4 that requires the Transmission Provider to schedule the reduction or interruption to either coincide with the scheduled outage of the Generating Facility or during periods of low demand unreasonably limits the Transmission Provider when it can perform maintenance and repair work. PG&E asserts that the periods of low demand either occur at night or during winter, and those times are not suitable for performing maintenance and repair work because it may jeopardize the safety of maintenance personnel. MidAmerican argues that the impact on both the Transmission Provider and Interconnection Customer should be considered when scheduling maintenance and repair work on the Transmission System. MidAmerican offers this alternative last sentence of proposed LGIA Article 9.7.2.4: "Transmission Provider shall coordinate with the Interconnection Customer using Good Utility Practice to schedule the interruption or reduction during periods of least impact to the Interconnection Customer and the Transmission Provider."

560. Exelon argues that a separate provision should be added to require the Transmission Provider to notify the Interconnection Customer before the Transmission Provider undertakes any construction, repair or maintenance work on its Transmission System that may require the Interconnection Customer to reduce output from its Generating Facility.

561. In response to MidAmerican and PG&E's concern, we adopt MidAmerican's proposed language because it balances the interests of both the Transmission Provider and the Interconnection Customer. With regard to Exelon's argument, we note that Article 9.7.2.4 of the Final Rule LGIA provides that: "Except during the existence of an Emergency Condition, when the interruption or reduction can be scheduled without advance notification, Transmission Provider shall notify Interconnection Customer in advance regarding the timing of such scheduling and further notify Interconnection Customer of the expected duration."

562. **Article 9.7.3 - Under-Frequency and Over-Frequency Conditions** (In the NOPR: Under-Frequency Load Shed Event) - Proposed LGIA Article 9.7.3 stated that the Transmission System is designed to activate a load-shed program automatically in the event of an under-frequency system disturbance. It proposed that an Interconnection Customer shall implement an under-frequency relay set point for the Generating Facility to ensure "ride through" capability of the Transmission System, to the extent allowed by equipment limitations or warranties.

### **Comments**

563. NERC, MidAmerican, and SoCal Edison state that the scope of Article 9.7.3 should be expanded to include over-frequency conditions as well.

564. NERC, Florida RCC, and TECO Energy oppose relying on equipment limitations or warranties as an excuse for an Interconnection Customer to avoid following Applicable Reliability Council rules. They claim that in a limited number of instances where equipment limitations do exist, the Applicable Reliability Council's rules permit the Interconnection Customer to propose alternative load shedding procedures. They also express concern that should the Commission retain the language relating to equipment limitations or warranties, load shedding procedures may not be effective to prevent full collapse of an electrical "island," thereby threatening the reliability of the Transmission System.

\*96 565. NERC recommends that the Generating Facility's response to both under- and over-frequency conditions be studied and coordinated with the Transmission Provider's Transmission System in accordance with Good Utility Practice.

# **Commission Conclusion**

566. We agree with many commenters that their proposed changes would better protect reliability. Therefore, we revise Article 9.7.3 to refer to Applicable Reliability Council requirements and to include over-frequency conditions. Equipment limitations or warranties should not be an excuse for not following Applicable Reliability Council rules; in case of genuine equipment limitations, Applicable Reliability Council rules permit the Interconnection Customer to offer alternative proposals. As such, the Commission eliminates the phrase "equipment limitations or warranties" in the Final Rule. In addition, the Commission is adopting NERC's proposed language regarding studies to determine the Generating Facility's response to frequency deviations because of its importance in stabilizing the power system during an electrical disturbance.

567. **Article 9.7.4.1 - System Protection Facilities** (In the NOPR: Protection and System Quality) - Proposed LGIA Article 9.7.4.1 would have required that the Interconnection Customer, at its expense, install, operate and maintain System Protection Facilities.

#### **Comments**

568. NERC states that the title of proposed LGIA Article 9.7.4.1 should be changed from "Protection and System Quality" to "Protection Required by Study" because system quality issues are not addressed here.

569. The title of Final Rule LGIA Article 9.7.4.1 is changed to "System Protection Facilities." This change addresses the NERC comment to eliminate reference to "System Quality."

570. **Article 9.7.4.2** - Proposed LGIA Article 9.7.4.2 would have required that each Party's facility be designed to isolate any fault or abnormality that would negatively affect the other Party or third parties connected to the Transmission Provider's Transmission System.

#### **Comments**

571. NERC notes that the term "negatively affect" is too vague. It proposes that proposed LGIA Article 9.7.4.2 be revised to state that each Party's protection facilities will be designed and coordinated with other systems in accordance with Good Utility Practice.

#### **Commission Conclusion**

572. The Commission adopts NERC's proposed change.

573. **Article 9.7.5 - Requirements for Protection** - Proposed LGIA Article 9.7.5 would have required the Interconnection Customer, in compliance with Applicable Reliability Standards, to install, operate and maintain protective devices necessary to remove faults "promptly" and to protect the Generating Facility from other conditions, such as negative sequence currents and over- or under-frequency.

#### Comments

574. NERC comments that the term "promptly" is not useful when describing requirements for, or actions taken to preserve, system reliability. It also notes that the Generating Facility's fault protection must be coordinated with system protection. "Good Utility Practice" should replace "Applicable Reliability Standards," since Applicable Reliability Standards is a subset of Good Utility Practice.

#### **Commission Conclusion**

\*97 575. The Commission agrees NERC and adopts its proposals.

576. **Article 9.9 - Use of Transmission Provider's Interconnection Facilities by Third Parties** - Proposed LGIA Article 9.9 would have provided, among other things, that third parties may use the Transmission Provider's Interconnection Facilities if required by Applicable Laws and Regulations, or if the Parties agree.

# **Comments**

577. APS believes that it is inappropriate to prohibit the use of Interconnection Facilities for other functions such as the housing of fiber optic circuits.

# **Commission Conclusion**

578. Since proposed LGIA Article 9.9 specifically allows the Parties to agree to permit third party usage of the Interconnection Facilities, there is no need to revise it.

579. **Article 9.10 - Disturbance Analysis Data Exchange** (In the NOPR: Data Exchange) - Proposed LGIA Article 9.10 would have provided that the Parties cooperate with one another in the analysis of disturbances to either the Generating Facility or the Transmission Provider's Transmission System by the gathering and sharing of any information related to any disturbance.

#### **Comments**

580. NERC states that since this article is limited to data exchange for disturbance analysis, the title should be "Disturbance Analysis Data Exchange." NERC also recommends covering "and any disturbance information required by Good Utility Practice."

### **Commission Conclusion**

- 581. The Commission adopts NERC's proposals in the Final Rule.
- 582. **Article 10 Maintenance** Proposed LGIA Article 10 would have made the Interconnection Customer responsible for all reasonable expenses of owning, operating and maintaining Interconnection Customer and Transmission Provider Interconnection Facilities (except for operations and maintenance expenses associated with modifications necessary for providing service to a third party that pays for such expenses). No significant comments were submitted on this article. Accordingly, the Commission adopts in the Final Rule LGIA Article 10 as proposed.
- 583. **Article 11 Performance Obligation** Proposed LGIA Article 11 described the Transmission Provider's and the Interconnection Customer's obligations with respect to construction of Interconnection Facilities and Network Upgrades, security arrangements and deposits, refunds in the form of transmission credits with interest for amounts funded by the Interconnection Customer, and compensation to the Interconnection Customer for services the Transmission Provider requests.
- 584. Most of the issues in Proposed LGIA Article 11 relate to pricing. All pricing matters are discussed in Part II.C.1 (Interconnection Pricing Policy).
- 585. **Article 11.5 Financial Security Arrangements** Proposed LGIA Article 11.5 would have required the Interconnection Customer to provide the Transmission Provider with a form of security at least 90 Calendar Days before the procurement, installation, or construction of discrete Transmission Provider Interconnection Facilities or Network Upgrades begins. The security amount would have had to be sufficient to cover the costs of procuring, constructing, and installing the Transmission Provider's Interconnection Facilities or Network Upgrades, and it would have been reduced on a dollar-for-dollar basis as payments were made. Articles 11.5.1.1, 11.5.1.2 and 11.5.1.3 would have required that the issuer of the guarantee, letter of credit, surety bond or other form of security meet the creditworthiness requirements of, or be acceptable to, the Transmission Provider and that the security instrument contain specified provisions, such as a reasonable expiration date. <sup>89</sup>

# **Comments**

- \*98 586. Commenters identify three areas of concern with this provision. First, some commenters believe that 30 days is insufficient time for the Interconnection Customer to provide a reasonable form of security to the Transmission Provider. For example, Dairyland Power argues that 30 days is not enough time for delivery of the necessary equipment and materials. SoCal PPA maintains that the security should be provided 90 days in advance. Progress Energy argues that security should be provided when an interconnection agreement is executed, and FP&L requests that security should be provided within 30 days of either execution of the interconnection agreement or its acceptance by the Commission.
- 587. Exelon argues that the amount of the security should be allowed to increase (or decrease), based on any changes in the construction cost estimate. According to Progress Energy, the Interconnection Customer should offer security to cover the full cost of the Network Upgrades. EPSA contends that the Interconnection Customer should be allowed to provide security on a

rolling six month basis based on the Transmission Provider's cost exposure at each six month interval to ensure that the security costs paid by the Interconnection Customer are reasonable at any given time and are consistent with the Transmission Provider's obligations. In the alternative, EPSA supports the 30 day period. Duke Energy also supports the 30 day requirement.

588. NMA and Peabody state that while a Transmission Provider should not be placed at risk financially if an Interconnection Customer either terminates its interconnection agreement or Breaches its obligation to make monthly payments to the Transmission Provider, at no time will the Transmission Provider be exposed to the financial costs of all the amounts of Network Upgrades or additions as contemplated under the NOPR LGIA. Requiring an Interconnection Customer to guarantee the total cost of the Network Upgrades is unfair because it causes the Interconnection Customer seeking to interconnect a very large generator to incur significant interest costs that it will never be able to recover, and this does not represent the true financial exposure the Transmission Provider faces for Network Upgrades. Further, limiting the security requirement to an amount that reflects the Transmission Provider's cost exposure during a 120 day forward-looking period is more appropriate than requiring an Interconnection Customer with a very large generator to provide security for the total cost of the project. Calpine warns that unnecessary financial security would be a barrier to entry.

589. Several commenters, mostly Transmission Providers, believe that the Transmission Provider or Transmission Owner should determine the form of security to be provided by the Interconnection Customer, <sup>90</sup> since they bear the risk if an Interconnection Customer abandons a project. The Financial Security Issues Coalition argues that the specific reference to surety bonds should be deleted from proposed LGIA Article 11.5 because surety bonds are not in the OATT as an acceptable form of collateral. Also, to reduce bankruptcy and fraudulent conveyance issues, any proposed guaranty should be from a parent, and not merely an Affiliate, of the Interconnection Customer. Finally, any proposed guarantor should have a BBB+ bond rating or higher.

\*99 590. Sempra argues that proposed LGIA Article 11.5.1 should be revised to clarify that the decision whether to provide security is the option of the Interconnection Customer. The provision should require an Interconnection Customer to provide a substitute security if it suffers serious financial erosion and financial-ratings downgrades that could lead the Transmission Provider to require assurances of a guarantor's ability to perform its financial and performance obligations. Dominion Resources does not object to the NOPR provision, provided that a subsequent Interconnection Customer is responsible for the costs of completing Network Upgrades if a higher-queued Interconnection Customer chooses to suspend or terminate construction of the Interconnection Facilities.

591. Arkansas Coops argue that Article 11.5.1 should require the Transmission Provider to accept security from the National Rural Utilities Cooperative Finance Corporation (CFC), since this is critical for cooperatives that obtain financing from the CFR.

## **Commission Conclusion**

592. We note at the outset that Article 11.5 and Article 11.5.1 are substantially identical, and the inclusion of both provisions in the NOPR was redundant. We are therefore deleting Article 11.5 in the Final Rule, and renumbering the remaining articles accordingly. The discussion that follows, however, will refer to article numbers contained in the NOPR LGIA.

593. With respect to commenters' concern that the 30 day window for providing a reasonable form of security is too short, the NOPR stated that the form of security must be provided by the Interconnection Customer at least 30 Calendar Days in advance of the procurement, installation, or construction of Interconnection Facilities or Network Upgrade projects. Parties, therefore, remain free to agree to an earlier deadline for the security if they foresee circumstances such as a long lead time for delivery of equipment. We expect that an Interconnection Customer will honor a reasonable request for an earlier deadline for providing a reasonable form of security. And, we will not require that the security be available at an earlier time, or at some specified period after execution of an interconnection agreement, because the purpose of the security is to fund procurement and construction. Since it is uncertain when procurement and construction will begin, it is reasonable to make such activity the trigger for tendering the security.

594. We are not persuaded that providing security on a 120 day or six month rolling basis is superior to the approach proposed in the NOPR. We retain the article as proposed for the following reasons. First, the Final Rule LGIA provides for the reduction of the security amount on a dollar-for-dollar basis as payments are made; this protects the Interconnection Customer against providing too much security and ensures that the Transmission Provider is always adequately protected against its cost exposure. Second, commenters provide inadequate support for their claim that they would be unduly burdened if the article remained unchanged, or that a Transmission Provider and its other customers would suffer no financial harm if the Commission adopted a rolling 120 Calendar Days or six month security period. Third, retaining the proposed language will help to ensure that only a financially sound generation project will advance to the point where a Transmission Provider must make an irreversible financial commitment on its behalf. Fourth, the approach proposed by the commenters could expose a Transmission Provider and its other customers to financial risk if the Interconnection Customer defaults before the construction of new facilities and Network Upgrades have advanced to the point where those facilities can be put to productive use.

\*100 595. In response to Exelon's concern that the amount of security be permitted to increase as well as decrease, Final Rule Article 11.5 does not prohibit the Parties from increasing the total amount of security required under an executed LGIA. The prices quoted for interconnection in the LGIA are estimates based on the results of studies conducted during the LGIP phase of the interconnection process. As a result, the final cost of Network Upgrades may rise or fall and with it, the security required under the LGIA

596. We disagree with commenters' contention that the article requires the Interconnection Customer to guarantee the total cost of the Network Upgrades. Final Rule Article 11.5 requires the Interconnection Customer to provide security to the Transmission Provider for discrete portions of the Transmission Provider's Interconnection Facilities or Network Upgrades, not the total amount of the Network Upgrades. It also provides that the security amount is reduced on a dollar-for-dollar basis for payments made to the Transmission Provider, thereby protecting the Interconnection Customer from having to provide too much security.

597. With respect to commenters' arguments as to the form of security, the Final Rule states that the Interconnection Customer has the right to select a form of security that is acceptable to the Transmission Provider and that the Transmission Provider cannot unreasonably refuse to accept a particular form. As the Commission has noted in recent orders, allowing the Interconnection Customer to provide an "irrevocable letter of credit... or an alternative form of security proposed by the Transmission Customer and acceptable to the Transmission Provider and consistent with commercial practices" is not unreasonable, and no commenter has convinced us otherwise. <sup>91</sup> Granting the Transmission Provider absolute discretion on what forms of security to allow would provide too great an opportunity to erect hurdles to new generation, by allowing it to act in an unduly discriminatory or preferential manner. <sup>92</sup> Moreover, Final Rule Article 11.5 grants the Transmission Provider the discretion to reject security from a financial institution that is not reasonably acceptable. As a result, the Commission rejects comments that would grant the Transmission Provider greater discretion with respect to the Interconnection Customer's chosen security or eliminate forms of credit specified in the article.

598. In response to Sempra, Final Rule Article 11.5 clearly states that the Interconnection Customer "shall provide" security to the Transmission Provider. It is only the <u>form</u> of that security that is the Interconnection Customer's option, within the restrictions specified. We are not adding language to the provision to establish requirements if an Interconnection Customer receives a financial downgrade that make it difficult to secure a guaranty. The Interconnection Customer remains responsible for providing an acceptable form of guaranty under the existing terms of the article.

\*101 599. Regarding Dominion Resources' comment, this issue is addressed in our discussion of Article 5.13 (Suspension).

600. Regarding the Arkansas Coops' concern that a Transmission Provider would not accept security from the CFC, we would not consider such a rejection to be a reasonable decision on the part of the Transmission Provider under the existing terms of Article 11.5. Accordingly, we are not revising the provision.

601. **Article 12 - Invoice** - Proposed LGIA Article 12 set out a monthly invoice and billing dispute procedure. The Transmission Provider would have been required to provide an invoice for the final cost of construction of the Transmission Provider's Interconnection Facilities and Network Upgrades within six months, in sufficient detail to enable the Interconnection Customer to compare actual costs with estimates. No significant comments were submitted on this article. Accordingly, the Commission adopts in the Final Rule LGIA Article 12 as proposed.

602. **Article 13 - Emergencies** - Proposed LGIA Article 13 explained the Transmission Provider's and the Interconnection Customer's responsibilities when Emergency Conditions arise.

603. **Article 13.1 - Definition** - Proposed LGIA Article 13.1 would define Emergency Condition as a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property, or (2) that, in the case of the Transmission Provider making the claim, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the Transmission System, the Transmission Provider Interconnection Facilities, or the Transmission Systems of others to which the Transmission System is directly connected, or (3) that, in the case of the Interconnection Customer making the claim, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or its Interconnection Facilities. Any condition or situation that results from a lack of sufficient generating capacity to meet load requirements and that results solely from economic conditions would not, on its own, be an Emergency Condition.

#### **Comments**

604. PG&E and Cal ISO believe that lack of sufficient generation to meet load requirements that results solely from economic conditions can be a genuine Emergency Condition. PG&E states that when insufficient generation occurs, regardless of the reason, the Transmission Provider is still responsible for maintaining system stability to the extent possible. It believes that taking away the tools necessary in such an emergency could harm the Transmission System. Cal ISO and Salt River Project make a similar point; they consider lack of generation, for any reason, to be an Emergency Condition that can endanger reliability and, at a minimum, warrants an emergency notification such as those provided for under the Cal ISO's procedures. According to Cal ISO, without a declaration of an Emergency Condition, the Transmission Provider will not be able to invoke its obligation under Article 13.5 of the NOPR LGIA to take actions necessary to preserve reliability.

\*102 605. El Paso seeks to revise both the proposed definition of the term Emergency Conditions and NOPR LGIA Article 13 to include a definition of an abnormal condition and to provide the Transmission Provider and Interconnection Customer the discretion to prevent an Emergency Condition (by taking action or inaction) during an abnormal condition. <sup>93</sup> El Paso notes that such action or inaction would require prompt oral notification to the other Party as well as compensation for changes in real power output and reactive power production.

## **Commission Conclusion**

606. The Commission agrees with the comments concerning the potential harm to the Transmission Provider's Transmission System by reducing its flexibility to respond during Emergency Conditions. The Commission is removing from the Final Rule LGIA Article 13.1 definition of Emergency Condition the sentence that reads, "Any condition or situation that results from a lack of sufficient generating capacity to meet load requirements that results solely from economic conditions shall not, on its own, constitute an Emergency Condition." The Commission denies El Paso's request to add a definition of an abnormal condition and to provide the Transmission Provider and Interconnection Customer the discretion to take certain actions or inactions in the event of an Emergency Condition. The Commission would expect the Parties to treat any abnormal conditions appropriately, regardless of whether it is a defined term in the Final Rule.

607. **Article 13.5.1 - Transmission Provider Authority - General** - Proposed LGIA Article 13.5.1 provided that the Transmission Provider would be able to take whatever actions or inactions it deems necessary during an Emergency Condition to preserve the safety and reliability of the Transmission System or the Transmission Provider Interconnection Facilities.

### **Comments**

608. Dynegy contends that during an Emergency Condition, the Transmission Provider should compensate the Interconnection Customer for starting up or shutting down a Generating Facility or increasing or decreasing its real or reactive output.

### **Commission Conclusion**

- 609. Compensation during an Emergency Condition is appropriately addressed in Final Rule LGIA Article 11.6.1 (Generator Compensation for Actions During Emergency Conditions).
- 610. **Article 13.6 Interconnection Customer Authority** Proposed LGIA Article 13.6 would allow the Interconnection Customer to take actions or inactions necessary to protect the integrity of its Generating Facility or Interconnection Facilities during an Emergency Condition.

### **Comments**

611. NERC proposes that Article 13.6 be revised to read as follows: "Consistent with Good Utility Practice and the [LG]IA and [LG]IP, the Interconnection Customer may take actions or inactions with regard to the [Generating] Facility or the [Interconnection Customer's] Interconnection Facilities during an Emergency Condition in order to (1) preserve public health and safety, (2) preserve the reliability of the [Generating] Facility or the [Interconnection Customer's] Interconnection Facilities, (3) limit or prevent damage, and (4) expedite restoration of service." Central Maine requests that proposed LGIA Article 13.6 be revised to require that an Interconnection Customer exercise its rights in an Emergency Condition in accordance with Good Utility Practice.

# **Commission Conclusion**

- \*103 612. We adopt NERC's proposed language in Final Rule Article 13.6 because it provides greater specificity concerning the Interconnection Customer actions or inactions that may be taken during the course of an Emergency Condition.
- 613. **Article 14 Regulatory Requirements and Governing Law** Proposed LGIA Article 14 described the regulatory requirements and governing law for each Party's obligations under the LGIA.
- 614. Article 14.1 Regulatory Requirements & Article 14.2 Governing Law and Applicable Tariffs Article 14.1 of the NOPR LGIA proposed that each Party's obligations shall be subject to its receipt of any required approval or certificate from Governmental Authorities in a form and substance satisfactory to the applying Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities. Article 14.1 also stated that nothing in the LGIA shall require an Interconnection Customer to take any action that could result in its inability to obtain, or its loss of, status or exemption under the Federal Power Act or the Public Utility Holding Company Act of 1935, as amended. Article 14.2 of the NOPR LGIA provided that the LGIA is governed by the laws of the state where the Point of Interconnection is located, without regard to conflicts of state law principles, and that the LGIA is subject to all Applicable Laws and Regulations.

#### **Comments**

615. The Bureau of Reclamation states that it does not have investors or shareholders, is not subject to the Commission's jurisdiction under sections 205 or 206 of the Federal Power Act, and is not subject to the jurisdiction of state public utility

commissions. The Bureau of Reclamation has sovereign immunity except to the extent that immunity has been waived by Congress. It believes that proposed LGIA Article 14.2 does not reflect that, as a federal agency, it must comply with the Constitution of the United States and all applicable laws. It states that this includes statutory and regulatory limitations on its ability to submit disputes to arbitration. SoCal PPA requests that Parties have the option of selecting the laws of a state other than the state where the interconnection will occur as the governing law for the LGIA.

### **Commission Conclusion**

616. The Bureau of Reclamation and SoCal PPA argue that public power entities cannot adopt Article 14 without variation. We will not require these entities to adopt provisions that they are legally forbidden to adopt in order to have their reciprocity tariffs approved. As described more fully in the reciprocity discussion, <sup>94</sup> nonjurisdictional entities with safe harbor status for their tariffs may add the Final Rule LGIP and Final Rule LGIA if they wish to continue to have safe harbor protection, but only need to provide services they are "capable" of providing. <sup>95</sup> We will consider the legal restrictions on nonjurisdictional entities when we evaluate their reciprocity compliance filings.

\*104 617. Article 15 - Notices - Proposed LGIA Article 15 contained the addresses at which the Transmission Provider and Interconnection Customer will receive, among other things, notices, bills and payments. No significant comments were submitted on this article. Accordingly, the Commission adopts this article in the Final Rule as proposed.

618. **Article 16 - Force Majeure** - A Force Majeure clause excuses performance under a contract due to an event beyond a Party's control. Article 16 of the NOPR LGIA proposed to adopt the Force Majeure language of the OATT. It defined Force Majeure events as: "[A]ny act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm, or flood, explosion, breakage or accident to machinery or equipment, any curtailment order, regulation or restriction imposed by governmental military or lawfully established civilian authorities, or any other cause beyond a Party's control...." The NOPR provision would have required the Parties "to make all Reasonable Efforts" to comply with their obligations and resolve the Force Majeure condition.

## **Comments**

- 619. Several commenters ask that the Commission establish a list of non-Force Majeure events. <sup>96</sup> More specifically, some commenters believe that Article 16 should exclude economic hardship from the definition of Force Majeure, <sup>97</sup> while the Coalition for Contract Terms and PSEG comment that the Commission should not treat "removable or remediable causes" as Force Majeure.
- 620. Some commenters request that the Commission establish a formal notice requirement that Parties must follow when claiming Force Majeure. 98 NYTO asks the Commission to require the Party claiming Force Majeure to notify those affected of what steps the Party is taking to remedy the Force Majeure condition. Dominion Resources and Progress Energy request that the Commission clarify the obligations and responsibilities of each Party during a Force Majeure occurrence. Specifically, they ask the Commission to clarify how a Party invokes the Force Majeure provision.
- 621. A number of commenters ask the Commission to clarify that the Party claiming Force Majeure must return to complying with the LGIA as soon as the Force Majeure event ends and that the other Party's obligation to pay for services rendered is not suspended during the Force Majeure event. <sup>99</sup>
- 622. PacifiCorp argues that the Force Majeure clause should cover acts of negligence or intentional wrongdoing by someone other than the claimant, while MidAmerican requests the opposite. Cinergy comments that the NOPR does not define curtailment, and is concerned that this term might unnecessarily broaden the definition of Force Majeure.

# **Commission Conclusion**

623. We agree that the contracting Parties would benefit from greater specificity in the Force Majeure provision, so the Final Rule LGIA sets forth the procedural obligations and responsibilities of the Parties during a Force Majeure event. We adopt a requirement that the Party experiencing a Force Majeure event formally notify the other Party and that it keep the other Party informed about its attempt to remedy the situation. A Party shall exercise due diligence to remove the disability with reasonable dispatch, and it will resume its duties under the LGIA as soon as reasonably possible. For instance, a fire that triggers a Force Majeure claim may be put out within hours, but it may take the Party days or weeks to resume normal operation. The Party would not be in Default of its obligations during that time. The Final rule article also clarifies that the obligation to pay money when due is not suspended by reason of Force Majeure.

\*105 624. We agree that it would be useful to identify economic hardship as a non-Force Majeure event. Economic hardship is not considered an event outside the control of the Party. However, it is unnecessary to specify that a "removable or remediable" cause does not qualify as Force Majeure event. Final Rule Article 16 defines a Force Majeure event as one that is "beyond a Party's control."

625. NOPR Article 16.1 proposed to except from the list of Force Majeure events acts of "negligence or intentional wrongdoing." We clarify in the Final Rule LGIA that acts of negligence or intentional wrongdoing committed by an entity other than the Party claiming Force Majeure would qualify for Force Majeure protection. This is an event beyond a Party's reasonable control.

626. With respect to Cinergy's comments regarding use of the term "curtailment," we conclude that while the curtailments imposed by governmental military or lawfully established civilian authorities are considered Force Majeure events under Section 10.1 of the OATT, it is an inappropriate Force Majeure event in the Final Rule LGIA. Curtailments to transmission service should not serve as the cause for excusing performance under an interconnection contract. As a result, the Commission omits curtailment from the definition of Force Majeure in the Final Rule LGIA.

627. **Article 17 - Default** - Proposed LGIA Article 17 defined Default as the failure of either Party to perform any obligation in the time or manner provided in this LGIA. No Default would exist as a result of Force Majeure or an act or omission of the other Party. Article 17 also described notice and cure procedures: the defaulting Party would have 30 Calendar Days from receipt of a Default notice to cure the Default; or, if the Default cannot be cured within 30 Calendar Days, the defaulting Party must begin the cure within 30 Calendar Days and must complete the cure within 90 Calendar Days. NOPR Article 17.1.2 provided the non-defaulting Party with the right to terminate the LGIA and recover damages if a Default is not cured, or is not capable of being cured, within the time provided in Article 17.1.1.

## **Comments**

628. Calpine is concerned that not all Defaults are capable of being cured within 90 Calendar Days, especially if they involve the purchase, modification or installation of equipment. It therefore argues that it is sufficient to require that the cure begin in 30 Calendar Days, and that the defaulting Party "continuously and diligently complete such cure," as required under Article 17.1.1.

## **Commission Conclusion**

629. The Commission declines to adopt Calpine's proposed change. The non-defaulting Party needs to be protected from lengthy Defaults by having the right to terminate, even if the Default cannot be cured within 90 Calendar Days through diligent action by the defaulting Party. The LGIA does not prevent the Parties from agreeing to an extension of the time permitted to cure a Default. Calpine's proposal would provide the non-defaulting Party with too little protection.

\*106 630. Article 18 - Indemnity - Indemnification is defined as compensating another for a loss suffered due to a third party's act or Default. <sup>100</sup> In the NOPR, we proposed that the LGIA incorporate the indemnity provision currently found in

the OATT. Thus, the indemnification provision in NOPR LGIA Section 18.1 would indemnify the Transmission Provider and Interconnection Customer for legal costs due to claims by third persons arising from performance of the Transmission Provider's or Interconnection Customer's obligations under the LGIA on behalf of the other contracting Party, and would not explicitly allow indemnification for disputes arising over enforcement of this provision. The Commission sought comments on this approach and the relative merits of the alternative provisions in the Consensus LGIA and ERCOT interconnection agreement. The Consensus LGIA does not extend indemnity protection to cases of ordinary negligence or willful misconduct, and the ERCOT provision does not extend indemnity protection to cases of gross negligence or intentional wrongdoing. Additionally, the Consensus LGIA, unlike the ERCOT interconnection agreement, sets forth detailed procedures for pursuing an indemnity claim and makes the recovery of legal costs available as part of an indemnity claim.

### **Comments**

- 631. Commenters generally support the inclusion of an indemnification provision, but ask that the Final Rule cover other charges, such as attorneys' fees, and explain the process for invoking this protection. <sup>101</sup> Several commenters, including Duke Energy, Monongahela Power, PacifiCorp, and Sempra, point out a typographical error that would have excepted negligence or intentional wrongdoing by the indemnifying Party rather than the indemnified Party. Some commenters recommend extending the protection to ordinary negligence by the Transmission Provider, but denying protection for gross negligence. <sup>102</sup> NYTO and Cinergy request that the provision cover an Interconnection Customer's performance of construction activities. PSEG requests that the provision be revised to offer specific limitations on the damages provision and a provision limiting liability arising from an emergency. El Paso requests that the Final rule specifically indemnify the Transmission Provider from penalties incurred due to the actions or inactions of the Interconnection Customer.
- 632. PJMTO argues that the OATT provision does not contain enough specific provisions and inadequately constrains the potential financial risk to each Party. Specifically, it argues that the provision should limit damages and set forth the proper standard for assessing liability (<u>i.e.</u>, gross negligence and willful misconduct). It also expresses concern that lending institutions would shy away from investing in new generation without liability limits.
- 633. Southern proposes to require that each Party indemnify and hold the other Party harmless from any liability resulting from activities on the indemnifying Party's own side of the Point of Change of Ownership, except in cases of gross negligence or intentional misconduct. Each Party should also indemnify the other Party for failure to adhere to operating requirements and Breaches of the LGIA. SoCal PPA notes that it applies a more stringent "willful action" standard. It warns that if the Commission retains the proposed standard, a Transmission Owner will have to procure insurance to cover this exposure, for which the Interconnection Customer should pay.
- \*107 634. NYTO takes issue with the provision's bilateral effect, arguing that a Transmission Owner should not have to indemnify an Interconnection Customer, since the Interconnection Customer requests interconnection for its own benefit. Similarly, NYISO argues that the provision should protect the active Parties to an agreement, here the Transmission Owner or ISO, but not the Interconnection Customer.
- 635. Salt River Project notes that it is unclear whether the Commission intends to preempt the appropriate tribunal's consideration of whether liability should attach for injuries to third parties. <sup>103</sup> It also argues that compliance with an Interconnection Customer's request should not be required if it will result in violation of statutory restrictions, bond covenants, creditor agreements or private use restrictions.

### **Commission Conclusion**

636. We are amending the proposed indemnity standard to match the customary legal standard of conduct and better address the potential for liability. Because risk exposure can increase interconnection costs, we are revising the indemnity standard to provide protection for acts of ordinary negligence, but not for acts of gross negligence or intentional wrongdoing. Similarly,

commenters have convinced us that interconnection presents a greater risk of liability than exists for the provision of transmission service and that, therefore, the OATT indemnity provision is not suitable in the interconnection context. While several commenters request a dollar limit on liability, we conclude that the tightened standards serve as an acceptable limit on liability and that a monetary limitation on damages is not necessary to adequately protect the Parties.

- 637. Because construction of Interconnection Facilities may expose both a Transmission Provider and an Interconnection Customer to liability for acts taken on the other Party's behalf, we are retaining the bilateral nature of the provision. In response to the concern of some commenters, the indemnity provision of the Final Rule also describes the process for pursuing and securing indemnity from claims in more detail. Additionally, the Final Rule LGIA gives an indemnified Party the right to collect the legal costs of defending an indemnification claim if the indemnifying Party fails to adequately defend the claim on its own. We also adopt El Paso's proposal that indemnification be available because of action or inaction by the Interconnection Customer, and modify the provision accordingly.
- 638. In response to NYTO's request that the provision cover an Interconnection Customer's construction activities, the Final Rule provision covers construction activities as well as all other activities performed on behalf of the other Party. Where an Interconnection Customer constructs the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades under the Option to Build in Final Rule LGIA Article 5.1, a Transmission Provider will be protected by the indemnification clause that appears in that article. Indemnification applies to all work, regardless of the side of the Point of Interconnection on which the work occurs.
- \*108 639. With regard to cost allocation, we clarify that each Party is responsible for paying its own insurance. This is equitable and helps keep the costs of interconnection low, which should encourage the construction of new generation resources. Additionally, we are eliminating indemnification for gross negligence or intentional wrongdoing, which will also reduce the Parties' risk exposure and cost of insurance.
- 640. It is not our intent to preempt the "appropriate tribunal's" assignment of liability for injuries to third parties, as proposed by Salt River Project. The indemnification provision is a common contractual risk-sharing provision and does not strip any court or other tribunal of jurisdiction. To the extent that this provision would cause a specific Transmission Provider to violate statutory or other restrictions, the issue should be raised on compliance in a filing explaining the special circumstances.
- 641. **Article 19 Assignment** Proposed LGIA Article 19 provided the conditions for assigning the LGIA to another entity. It stated that any assignment under the LGIA shall not relieve a Party of its obligations, nor shall a Party's obligations be expanded.
- 642. **Article 19.1 Assignment** Article 19.1 of the NOPR LGIA stated that written consent ordinarily would be required to assign the LGIA, but assignment may be secured without consent if the assignee is an Affiliate that meets certain qualifications. Article 19 also provided that no consent would be required if an Interconnection Customer assigns the LGIA for collateral security purposes to aid in financing.

## **Comments**

643. The Bureau of Reclamation argues that there are limitations on its ability to comply with Article 19.1. It does not typically allow assignments without approval by both entities and assurance that assigns and successors are bound by the original terms of the interconnection agreement. It states that there are standard articles that it would be required to include that are not contained in the NOPR, such as "Officials Not to Benefit," "Use of Convict Labor," "Prompt Payment Provisions," and "Tort Claims."

#### **Commission Conclusion**

644. The Bureau of Reclamation's concerns are addressed in the reciprocity discussion at Article 14.1 (Regulatory Requirements) and Article 14.2 (Governing Law and Applicable Tariffs).

- 645. **Article 20 Severability** Article 20 of the NOPR LGIA explained that if a court or Governmental Authority determines that any provision of the LGIA is invalid, void, or unenforceable, such determination would not invalidate any other provision in the LGIA. No significant comments were submitted on this article. Accordingly, the Commission adopts this article in the Final Rule LGIA as proposed.
- 646. **Article 21 Comparability** Article 21 of the NOPR LGIA would have required that the Parties comply with all applicable comparability requirements and code of conduct laws, rules and regulations. No significant comments were submitted on this article. Accordingly, the Commission adopts this article in the Final Rule LGIA as proposed.
- \*109 647. Article 22 Confidentiality Article 22 of the NOPR LGIA described what constitutes Confidential Information and the protection proposed for such information when shared between Parties. It set forth proposed procedures for the release of Confidential Information and guidelines regarding how Confidential Information should be treated when it is subject to a request from the Commission as part of an investigation. The information of both Parties is protected by this article as long as the information is identified as Confidential Information in accordance with the article.

## **Comments**

- 648. Cal ISO argues that an RTO or ISO should have access to operational, performance and maintenance data.
- 649. The Bureau of Reclamation argues that it may not be able to conform to the proposed confidentiality provisions because it must adhere to the Freedom of Information Act (FOIA) <sup>104</sup> when addressing confidentiality. It further explains that FOIA requires federal agencies to release most documents in their possession upon request, except to the extent their contents meet certain exceptions. The Bureau of Reclamation also notes that Article 22 should be revised to reflect security concerns raised by the release of information.

- 650. In the Final Rule, the Commission adopts NOPR Article 22, with minor modifications, as described below.
- 651. In response to Cal ISO, the Final Rule allows an RTO or ISO to have access to certain data. Final Rule Article 22.1.11 permits a Transmission Provider to make available information "necessary to fulfill its obligations... as a transmission service provider or a Control Area operator including disclosing the Confidential Information to the RTO/ISO." A Transmission Provider that is obliged to disclose information to an RTO or ISO must notify the other Party in writing, assert confidentiality, and cooperate in seeking to protect the Confidential Information from public disclosure "by confidentiality agreement, protective order or other reasonable measures." Thus a Transmission Provider may make available any required operational, performance or maintenance data as long as it maintains the confidentiality of the requested Confidential Information.
- 652. Regarding the Bureau of Reclamation's argument about its obligations under FOIA, the Commission recognizes that Parties may be subject to statutory or regulatory information restrictions, some of which may address security concerns. If state or federal laws indeed conflict with the Final Rule's confidentiality and information sharing provisions, the Commission expects that public utilities will make conforming changes to these provisions in their compliance filings and explain the statutory basis for such changes. This also applies to non-public utilities that plan to amend their safe harbor tariffs with a conforming Final Rule LGIP and Final Rule LGIA.
- 653. The Commission is also making several minor changes to NOPR LGIA Article 22.1.10 that addresses disclosure to the Commission or its staff. A Party must provide requested information to the Commission or its staff, even when the Party otherwise would be required by the LGIA to maintain this information in confidence. The Party receiving the request must ask the Commission to treat this information as confidential and non-public, consistent with Section 388.112 of the Commission's

Regulations. <sup>105</sup> A Party must notify the other Party when it learns that the Commission has received a request that such information be made public pursuant to Section 388.112. Commission policy prohibits a contracting Party from revealing to a counter-Party that it has received a request for information from the Commission, when such request is made pursuant to an investigation or otherwise. <sup>106</sup> The Commission likewise prohibits a Party from notifying the other Party prior to the release of the Confidential Information to the Commission or its staff. <sup>107</sup>

- \*110 654. The Commission is also revising Article 22.1.10 in the Final Rule LGIA to clarify that the Party receiving the request from the Commission or its staff will not contact the other Party before releasing the Confidential Information. In addition, because requests for information may be made under the investigation rules in Section 1b.20 of the Commission's Regulations, the Final Rule article includes this reference.
- 655. **Article 23 Environmental Releases** Proposed LGIA Article 23 described the procedures that would be required for notifying the other Party of the release or remediation of Hazardous Substances. No significant comments were submitted on this article. Accordingly, the Commission adopts this article in the Final Rule as proposed.
- 656. **Article 24 Information Requirements** Proposed LGIA Article 24 described the proposed requirements for sharing information regarding the electrical characteristics of the Parties' respective facilities, including monthly status reports on construction and installation of the Transmission Provider's Interconnection Facilities and Network Upgrades.
- 657. **Article 24.4 Information Supplementation** Proposed LGIA Article 24.4 required the Parties, before the Commercial Operation Date of the Interconnection Customer's Generating Facility, to provide either updated test and other technical information or written confirmation that the new technical data and the originally submitted data are consistent. It also describes the types of voltage tests that would be conducted by the Interconnection Customer and the type of recordings it is required to provide to the Transmission Provider. It provides that when there are multiple units at a Generating Facility, the Interconnection Customer would be required to provide recordings for only one generating unit if the other units have identical design and response characteristics.

# **Comments**

658. NERC recommends that Article 24.4 be revised to require that tests conducted on the Generating Facility be consistent with Good Utility Practice. It also recommends requiring the Interconnection Customer to provide the Generating Facility's characteristics based on validated test recordings, as opposed to raw test data. It asks that the Commission not permit the test results for one generating unit to be allowed to represent the characteristics of all generating units, if there is more than one unit at the Generating Facility with the same design characteristics. NERC believes that it is necessary to verify modeling characteristics of each generating unit for system planning purposes and to verify the operational capabilities of each generating unit for operations purposes. NERC states that the electrical characteristics of each Generating Facility are unique.

- 659. We concur with NERC's position and adopts its recommended revisions.
- 660. **Article 25 Information Access and Audit Rights** Proposed LGIA Article 25 required that each Party make information available to the other Party necessary to verify costs for which the other Party is responsible under this LGIA and to carry out its obligations and responsibilities under the LGIA. No significant comments were submitted on this article. Accordingly, the Commission adopts this article in the Final Rule as proposed.
- \*111 661. Article 26 Subcontractors Proposed LGIA Article 26 provided that the Parties would be able to use subcontractors to perform obligations under the LGIA if the subcontractors comply with the applicable terms and conditions of the LGIA and each Party remains liable to the other for the subcontractor's performance. The hiring Party would retain all of

its obligations under this article. No significant comments were submitted on this article. Accordingly, the Commission adopts this article in the Final Rule as proposed.

- 662. **Article 27 Disputes** Proposed LGIA Article 27 explained the Dispute Resolution and arbitration procedures that would apply to the LGIA. No significant comments were submitted on this article. Accordingly, the Commission adopts this article in the Final Rule as proposed with one change to emphasize that Parties should consider using informal dispute resolution as well as more formal options.
- 663. Article 28 Representations, Warranties and Covenants Proposed LGIA Article 28 would have required that each Party be organized and qualified to do business in the relevant jurisdiction. Each Party would be required to have the authority to enter into this LGIA, and performance of its duties would not conflict with organizational or formation documents. No significant comments were submitted on this article. Accordingly, the Commission adopts this article in the Final Rule as proposed.
- 664. Article 29 Joint Operating Committee (in the NOPR: Operating Committee) Proposed LGIA Article 29 provided that the Transmission Provider shall set up: (1) an Operating Committee made up of a member from the Interconnection Customer and a member from the Transmission Provider, and (2) a Joint Operating Committee made up of members of all of its Operating Committees, in order to coordinate operating and technical considerations of Interconnection Service. The Operating Committee would meet when necessary, but not less than once each calendar year. The duties of the Operating Committee would include, among other things, establishing and maintaining control and operating procedures, data requirements and operating record requirements, reviewing outage forecasts, and coordinating outage schedules.

#### **Comments**

665. Avista and FirstEnergy oppose this requirement as unduly burdensome and unnecessary because it will impose additional costs on them. Moreover, some of the tasks envisioned for the Operating Committee are being performed either by NERC or an Applicable Reliability Council. For example, Avista argues that NERC is responsible for establishing standards for operating and control procedures for generators. Dynegy, on the other hand, would keep the Operating Committee and proposes some minor changes to the proposed language of this provision.

666. PJM and Cal ISO argue that ISOs should be exempt from this requirement because they already perform the tasks envisioned for Operating Committee in the normal course of their business.

- \*112 667. The Final Rule LGIA eliminates the requirement that the Transmission Provider constitute an Operating Committee for each Interconnection Customer. However, we are requiring a Joint Operating Committee because it provides Interconnection Customers and Transmission Providers a forum in which to discuss and coordinate operating and technical considerations of Interconnection Service. We are revising Final Rule LGIA to eliminate tasks that are already being performed by NERC, thereby responding to Avista's concern.
- 668. Finally, we agree with PJM and Cal ISO's proposal that the Final Rule article exempt an RTO or ISO from this requirement because an RTO or ISO performs Joint Operating Committee-type functions in their normal course of business.
- 669. **Article 30 Miscellaneous** Proposed LGIA Article 30 addressed matters such as rules of interpretation, a prohibition on third party beneficiaries, and the right to amend the LGIA by mutual agreement. No significant comments were submitted on this article. Accordingly, the Commission adopts this article in the Final Rule as proposed.

670. **Article 30.11 - Reservation of Rights** - Proposed Article 30.11 would have reserved to each Party their rights to unilaterally seek modification to the LGIA pursuant to sections 205 and 206 of the FPA, except as restricted by the other provisions of the executed LGIA.

#### **Comments**

671. Dynegy and Mirant note that this clause is redundant because another Reservation of Rights provision appears in Proposed Article 2.7.

### **Commission Conclusion**

- 672. The Commission deletes proposed Article 2.7, and modifies proposed Article 30.11 in this Final Rule. As proposed, Article 30.11 contains a redundancy. The Commission deletes the second paragraph of this Article, because it repeats the reservation of rights set forth in the first paragraph of the Article.
- 673. **Appendices** The NOPR LGIA contained appendices for Interconnection Facilities and Network Upgrades, time schedule, interconnection details, standard LGIA, security arrangement details, Commercial Operation Date, and interconnection guidelines. The Commission adopts these appendices in the Final Rule LGIA, with the exception of Appendix G (Interconnection Guidelines) since the Final Rule LGIA captures the provisions of that Appendix elsewhere.

# C. Other Significant Policy Issues

674. A number of issues such as interconnection pricing policy, permitted variations in the terms of the Final Rule for independent transmission entities, and legal issues such as consequential damages and liquidated damages transcend individual sections in the Final Rule LGIP or articles in the Final Rule LGIA. Accordingly, they are addressed in the individual discussions that follow.

# 1. Interconnection Pricing Policy

675. In the NOPR, the Commission proposed to adopt its existing interconnection pricing policy for a Transmission Provider that is not independent of market participants, and invited comments on whether it should depart from this policy for a Transmission Provider that is independent.

\*113 676. Since the NOPR was written to reflect the Commission's current pricing policy, NOPR LGIA Article 11 proposed that the Interconnection Customer be solely responsible for the costs of Interconnection Facilities, which are defined as all facilities and equipment between the Generating Facility and the Point of Interconnection with the Transmission System. Network Upgrades, which are defined as all facilities and equipment constructed at or beyond the Point of Interconnection for the purpose of accommodating the new Generating Facility, <sup>108</sup> would be funded initially by the Interconnection Customer unless the Transmission Provider elects to fund them. The Interconnection Customer would then be entitled to a cash equivalent refund (i.e., credit) equal to the total amount paid for the Network Upgrades, including any tax gross-up or other tax-related payments. The refund would be paid to the Interconnection Customer on a dollar-for-dollar basis, as credits against the Interconnection Customer's payments for transmission services, with the full amount to be refunded, with interest calculated in accordance with 18 CFR § 35.19a(a)(2)(ii), within five years of the date the Network Upgrades are placed in service, so long as the Transmission Provider continues to receive payments for transmission service with respect to the Generating Facility during this period. The NOPR proposed that the Interconnection Customer may assign its refund rights to any person.

677. Also, in the NOPR, the Commission asked for comments on appropriate interconnection pricing consistent with the use of the locational marginal pricing methodology. This method was proposed in the Standard Market Design proceeding that the Commission had previously announced. <sup>109</sup> The Commission noted that in a region that uses locational pricing, the

RTO or ISO usually assigns to the Interconnection Customer the cost of any new network facilities that would not be in its transmission expansion plan but for the interconnecting Generating Facility. The Interconnection Customer then typically receives transmission rights in return for the capacity that is created. The Commission explained that this pricing method has been allowed only in regions where the Transmission Provider is independent of market participants, because certain aspects of this method can be subjective. These subjective aspects include the determination of congestion prices, rules for deciding which Interconnection Customer in the queue should be responsible for which facilities, the cost of the facilities, and the assumptions underlying the power flow analysis needed for system impact and facilities studies. The Commission noted that a Transmission Provider that is not an independent entity would have the ability and the incentive to exploit this subjectivity to its own or its affiliates advantage if it is able to allocate the costs of Network Upgrades between the Interconnection Customer and other transmission customers, where the Transmission Provider may be the principal other customer. The Commission invited comments on whether it should accept an approach that departs from the current Commission policy of providing transmission credits, and stated its willingness to consider alternative proposals as long as the cost causation determinations are made on an objective and non-discriminatory basis by an independent entity such as an RTO.

\*114 678. The Commission has traditionally favored a "rolled-in" transmission pricing policy of the type that formed the basis for the pricing proposal in the Interconnection NOPR. However, such a policy may limit economic expansions that would remove congestion and allow customers to reach more distant power supplies. This may occur at least in part because state siting authorities may have little interest in siting a transmission facility that benefits mainly a particular Interconnection Customer or customers in another state if doing so would require the retail sales customers on the constructing public utility's system to pay for the new facilities.

679. The Standard Market Design NOPR proposed that a policy of participant funding, where those who benefit from a particular project pay for it, may help to solve this problem. The Commission then reiterated its concern that certain functions that the Transmission Provider must perform to implement participant funding can be subjective. Also in this docket, the Commission encouraged the formation of Regional State Committees, which would allow states to work together to identify beneficiaries of expansion projects and make recommendations on pricing proposals and cost recovery that may include rolling in, assignment to beneficiaries, or some combination of the two.

680. Finally, the Commission also addressed in the NOPR the question of the appropriate rate treatment for the cost of Interconnection Facilities that the Transmission Provider constructs for its own Generating Facilities. The Commission noted that, in Southern Company Services, Inc. (Southern), the company proposed to continue to treat the cost of Interconnection Facilities for its own Generating Facilities as part of the network while directly assigning the cost of the same type of facilities to its competitors' Generating Facilities. Southern raised the issue of how to ensure consistency between interconnection and transmission pricing. Recognizing the need to address this issue on a generic basis, the Commission made Southern subject to the outcome of this rulemaking. The Commission proposed in the NOPR to require all transmission rates to be designed in a manner that is consistent with whatever interconnection pricing policy is approved in the Final Rule. Thus, the Commission proposed that, to the extent its current interconnection pricing policy is adopted, each Transmission Provider must remove from its transmission rates the costs of all Interconnection Facilities, not just generator step-up transformers, constructed for the Transmission Provider's own Generating Facilities. The Commission proposed that the costs of these sole use facilities be directly assigned as generation-related costs. The Commission explained that this would be consistent with its current pricing of generator step-up transformers, and it would send a more accurate price signal by assigning the cost of Interconnection Facilities to the generation customers using them.

## **Comments**

\*115 681. A large number of commenters argue that the Commission's proposed crediting policy provides an undesirable subsidy to the Interconnection Customer and thereby creates incentives for the Interconnection Customer to make poor siting and investment decisions. Many commenters express concerns about the relationship between this policy and the Commission's Standard Market Design proposal, and several provide recommendations on how the two rules could be made compatible.

In addition, many commenters object to specific features of the proposed crediting policy. For example, several transmission owners cite problems (e.g., regulatory lag, retail rate freezes) related to their ability to recover in transmission rates the costs of interconnections, including the credits that they pay to an Interconnection Customer. Many commenters object to the five year "sunset" date for refunding all amounts paid by the Interconnection Customer. They are concerned that transmission customers could be left with the financial burden and no offsetting benefits if the Interconnection Customer's Generating Facility ceases to operate. Some commenters argue that the Interconnection Customer's receipt of credits should not be limited to those occasions when the Interconnection Customer takes transmission service with respect to the output of the Generating Facility. Others argue that the payment of interest on unpaid credits is not appropriate or that the rate prescribed is either too high or too low.

682. The following is a summary of the comments received, organized according to the issues addressed. After each issue summary, the Commission presents its conclusions for that issue. <sup>110</sup>

# Concerns about the Fairness and Efficiency of the Commission's Crediting Policy

683. Transmission Owners, such as Entergy, and others argue that the Commission's current crediting policy requires all transmission customers to subsidize the cost of facilities that would be unnecessary "but for" a particular Interconnection Customer's Generating Facility and that provide no benefits to the other transmission customers on the Transmission System. They also argue that this policy encourages inefficient siting decisions because the Interconnection Customer has no incentive to consider the full impact of its decision regarding where to locate its Generating Facility on the Transmission System. They claim that, when selecting a site, an Interconnection Customer will pay more attention to fuel supply and water availability than to its impact on the Transmission System.

684. The Alabama PSC argues that a pricing policy that spreads the costs of all interconnection-related facilities situated "at and beyond" the Point of Interconnection to all transmission customers results in a subsidy to the Interconnection Customer, causes inefficiencies in siting, and is inconsistent with longstanding cost causation principles. The Coalition for Pricing claims that the policy of assigning cost responsibility simply based on the physical location of the facilities (i.e., relative to the Point of Interconnection) is contrary to the Commission's "system-wide benefit test" and violates the Energy Policy Act of 1992. It argues that certain facilities installed at and beyond the Point of Interconnection may not provide a system-wide benefit and, as such, should be directly assigned to the Interconnection Customer. Entergy argues that grave consequences can be avoided through the interim use of the system-wide benefit test, and the assignment of costs to those who benefit, prior to the establishment of participant funded expansion regimes in RTOs.

\*116 685. PSEG notes that in PJM the cost of any Network Upgrades that would not be required "but for" the interconnection of a Generating Facility to the Transmission System is assigned to the Interconnection Customer, and the Interconnection Customer receives financial transmission rights associated with the Network Upgrades that it pays for. PJM and others argue that an established RTO or ISO should be allowed to continue to use this policy, as the NOPR proposes. PJM states that its experience under its interconnection rules confirms that such pricing promotes economic efficiency including efficient use of the Transmission System. However, KeySpan cautions that the "but for" test can become meaningless if a fictitious transmission planning study can be used to identify the Transmission System needs required to meet load growth. It states that the independence of the Transmission Provider completing the study is the key to this process.

686. The Maine PUC contends that the Commission's reasoning for refusing to socialize system expansion costs in the natural gas pipeline context applies with equal force in the generator interconnection context. It states that, just as subsidization of gas pipeline expansion costs could lead to non-optimal or unnecessary capacity expansion, so too will subsidization of Network Upgrades associated with new generation projects. The Maine PUC also states that, just as rolled-in pricing gives an existing gas pipeline an unfair economic advantage over potential new entrants, subsidization of Network Upgrades for Generating Facility interconnections could interfere with price signals for alternatives to traditional congestion solutions, such as load response from customers or merchant transmission.

687. Many other commenters, including state commissions, are especially concerned about an Interconnection Customer that intends to sell its output off-system or out of state. These commenters claim that the current policy requires transmission customers of the local Transmission Provider to subsidize the cost of Network Upgrades that would, in the latter case, provide them with no benefits. NRECA-APPA recommends that, without a commitment by the Interconnection Customer to serve power customers within the Transmission Provider's footprint, the Commission should require the Interconnection Customer to pay for the Network Upgrades. Some commenters, such as the Midwest ISO, further claim that the law in some states may not allow Network Upgrade costs to be rolled into the base rates of the local customers that are not the beneficiaries of the upgrades.

688. Other commenters, including EPSA, voice strong support for the crediting approach. EPSA states that the crediting mechanism works well at this time and should not be adjusted until the Commission has put in place a specific market design that would require such an adjustment. American Transmission and SoCal Edison also support the crediting approach. Indeed, American Transmission supports the crediting approach even if the Transmission Provider is an independent entity. American Transmission states that it discounts the argument advanced by critics of this policy that the Interconnection Customer must receive stronger price signals through direct assignment of the costs of Network Upgrades to bring about efficient location of new generation. It believes that requiring participant funding for Network Upgrades is akin to moving backward to the vertically integrated industry structure that existed prior to open access.

\*117 689. Cleco supports participant funding that would eliminate the need for the costs of Network Upgrades being refunded through transmission crediting. In the absence of such an approach, Cleco recommends that an Interconnection Customer should be credited for only half of the transmission service it has subscribed to for the first five years. Under Cleco's proposal, there would be no interest paid, and after five years no additional payment to the Interconnection Customer would be made. Western also recommends that the Commission adopt a method to recover the costs of the Network Upgrades from the benefitting entities. It believes that current transmission customers should be held harmless from the cost impact of Network Upgrades that is not mitigated by increased transmission usage and associated revenues.

690. The North Carolina Commission recommends that the Commission modify its proposed rule to explicitly adopt the "but for" pricing policy for interconnection and transmission service in those states that have not yet unbundled retail electric service or implemented retail competition.

691. Several commenters, including National Grid, propose that the pricing issue can be resolved by analogy to the process of cost allocation for public roads. According to this analogy, the Interconnection Customer will have virtually sole use of the leads to the substation, just like the homeowner has sole use of his or her driveway. Thus, the cost of Interconnection Facilities, which are for the sole use of the Interconnection Customer, should be the responsibility of the Interconnection Customer. Next, the substation facilities needed to connect the sole-use facilities of the Interconnection Customer to the general delivery system are shared-use facilities, much like a local street. National Grid states that the cost of such facilities could be allocated partially to load and partially to the new Interconnection Customer. It explains that Network Upgrades that are remote from the Generating Facility typically allow movement of aggregate generation to aggregate load. National Grid contends that the benefits and use of such Network Upgrades are spread much more broadly and, like the highway system, could be rolled in and allocated to aggregate load within the market, or throughout an RTO if one exists. Finally, it argues that it may be appropriate to maintain an incremental charge for market-to-market transactions, but only where Network Upgrades in one market are needed by another market.

692. Peabody asserts that the NOPR contains certain provisions that are unjust and unreasonable as applied to large-scale base-load generation projects, especially coal-based projects. It urges the Commission to modify its interconnection pricing policy in such cases to require the Transmission Provider to roll the costs of Network Upgrades into its transmission rate base without requiring the Interconnection Customer to fund the costs in advance.

\*118 693. For Transmission Providers that are not independent entities, the Commission will continue to apply its current interconnection pricing policy, with certain revisions that are discussed below.

694. The Commission recognizes that its policy of requiring refunds to be paid to an Interconnection Customer for the cost of Network Upgrades constructed on its behalf is a controversial one. However, the Commission instituted this policy to achieve a number of important goals. First, consistent with the Commission's long-held policy of prohibiting "and" pricing 111 for transmission service, the crediting policy ensures that the Interconnection Customer will not be charged twice for the use of the Transmission System. The Commission determined that it is appropriate for the Interconnection Customer to pay initially the full cost of Interconnection Facilities and Network Upgrades that would not be needed but for the interconnection, but once the Generating Facility commences operation and delivery service begins, it must receive transmission service credits for the cost of the Network Upgrades. This ensures that the Interconnection Customer will not ultimately have to pay both incremental costs and an average embedded cost rate for the use of the Transmission System. Second, the Commission's crediting policy helps to ensure that the Interconnection Customer's interconnection is treated comparably to the interconnections that a nonindependent Transmission Provider completes for its own Generating Facilities. The Transmission Provider has traditionally rolled into its transmission rates the cost of Network Upgrades required for its own interconnections, and the Commission's crediting policy ensures that Network Upgrades constructed for others are treated the same way. Finally, the policy is intended to enhance competition in bulk power markets by promoting the construction of new generation, particularly in areas where entry barriers due to unduly discriminatory transmission practices may still be significant. The policy is therefore consistent with the Commission's long-held view that competitive wholesale markets provide the best means by which to meet its statutory responsibility to assure adequate and reliable supplies of electric energy at just and reasonable prices. 112

695. While the Commission still finds these to be appropriate goals for an interconnection pricing policy, the commenters that object to the Commission's crediting policy make a number of valid points. Most importantly, as many point out, providing transmission service credits to an Interconnection Customer for the cost of Network Upgrades that would not be needed but for the interconnection of the new Generating Facility mutes somewhat the Interconnection Customer's incentive to make an efficient siting decision that takes new transmission costs into account, and it provides the Interconnection Customer with what many view as an improper subsidy, particularly when the Interconnection Customer chooses to sell its output off-system. In this regard, the Commission believes that, under the right circumstances, a well-designed and independently administered participant funding policy for Network Upgrades offers the potential to provide more efficient price signals and a more equitable allocation of costs than the crediting approach. The Commission notes that the transmission pricing policies that the Commission has permitted for an RTO or ISO with locational pricing, in which the Interconnection Customer bears the cost of all facilities and upgrades that would not be needed but for the interconnection of the new Generating Facility and receives valuable transmission rights in return, are acceptable forms of participant funding.

\*119 696. However, the Commission remains concerned that, when the Transmission Provider is not independent and has an interest in frustrating rival generators, the implementation of participant funding, including the "but for" pricing approach, creates opportunities for undue discrimination. As the Commission stated in the NOPR, a number of aspects of the "but for" approach are subjective, and a Transmission Provider that is not an independent entity has the ability and the incentive to exploit this subjectivity to its own advantage. For example, such a Transmission Provider has an incentive to find that a disproportionate share of the costs of expansions needed to serve its own power customers is attributable to competing Interconnection Customers. The Commission would find any policy that creates opportunities for such discriminatory behavior to be unacceptable. Furthermore, none of the commenters in this proceeding has convinced the Commission that, in the absence of independence, it is possible to implement a "but for" pricing approach that avoids this inherent subjectivity. Therefore, the Commission continues in this Final Rule its current policy, as modified below, of requiring a Transmission Provider that is not an independent entity to provide transmission credits for the cost of Network Upgrades needed for a Generating Facility interconnection.

697. The Commission notes, however, that the current pricing policy does not explicitly address instances where the Generating Facility interconnects with a Transmission Provider's jurisdictional distribution facility and, as a result, upgrades are needed on

the Distribution System to accommodate the interconnection. The Commission clarifies here that, if any such interconnection is jurisdictional, the cost of such upgrades must be directly assigned to the Interconnection Customer. This is because an upgrade to the Distribution System generally does not benefit all transmission customers. Distribution facilities typically deliver electricity to particular localities, and do not serve a bulk delivery service for the entire system as is the case for transmission facilities. Accordingly, it is not appropriate that all transmission customers share the cost of Distribution Upgrades.

698. For a Transmission Provider, such as an RTO or ISO, that is an independent entity, the Commission continues to allow flexibility regarding the interconnection pricing policy that each independent entity chooses to adopt, subject to Commission approval. We invite a Regional State Committee to establish criteria that an independent entity would use to determine which Transmission System upgrades, including those required for generator interconnections, should be participant funded and which should not.

699. The Commission will permit, for a period of transition to the start of RTO or ISO operations, not to exceed a year, participant funding to be used for Network Upgrades for generator interconnections as soon as an independent administrator has been approved by the Commission and the affected states. Allowing participant funding, i.e., direct assignment of the cost of Network Upgrades is reasonable, if an independent administrator performs transmission planning and related cost allocation, as a transitional approach that may be used in anticipation of an RTO or ISO assuming operational control of the regional transmission grid within a year. Based on the comments in this interconnection rulemaking, we find this approach to be appropriate here. Therefore, the Commission adopts this policy in this Final Rule.

\*120 700. However, the Commission wishes to emphasize that, by allowing an independent Transmission Provider to adopt a pricing policy, such as the "but for" approach, that differs from the crediting approach that the Commission is requiring for non-independent entities, the Commission is not abandoning the goals that the Commission has established for interconnection pricing, as described above. First, even though the "but for" approach allows the cost of certain Network Upgrades to be assigned to the Interconnection Customer, it is not "and" pricing if, for example, the Interconnection Customer is allowed to receive well-defined capacity rights that are created by the upgrades. For example, PJM, which uses locational pricing, gives Firm Transmission Rights (FTRs) and Capacity Interconnection Rights (CIRs) to the Interconnection Customer in exchange for a "but for" cost payment. These are rights that are created by the Network Upgrades for which the Interconnection Customer pays, and they are well-defined, long-term and tradeable. Moreover, the Commission concludes that, even if the Interconnection Customer (or its power sales customer) is also required to pay an embedded cost-based charge for transmission service, this is not "and" pricing. This is because the Interconnection Customer pays separate charges for separate services. It pays an access charge for transmission service that may involve an obligation to pay congestion charges, and in exchange for its "but for" payment, it receives these well-defined capacity rights, which provide some protection from having to actually pay the congestion charges.

701. Second, when the Transmission Provider is an independent entity, the Commission is much less concerned that all generation owners will not be treated comparably because independence ensures that the Transmission Provider has no incentive to treat Interconnection Customers differently.

702. Third, in this context, "but for" pricing is consistent with the Commission's policy of promoting competitive wholesale markets because it causes the Interconnection Customer to face the same marginal cost price signal that the it would face in an efficient, competitive market. This means that, in a competitive market environment, market forces could act freely to achieve the desirable level of entry of new generating capacity.

703. Finally, participant funding of transmission upgrades may provide the pricing framework needed to overcome the reluctance of incumbent Transmission Owners in many parts of the country to build transmission, with the result that badly needed transmission infrastructure could be put in place quickly.

# Interconnection Pricing and the Transition to Standard Market Design

704. Several commenters assert that certain proposed Standard Market Design policies, such as locational marginal pricing, congestion revenue rights, transmission expansion pricing, and transmission planning, could affect interconnection pricing, but that the full effect cannot be determined until the Standard Market Design Final Rule is issued. Nevertheless, many of these commenters propose that, until Standard Market Design is implemented, the Commission should continue to require the Interconnection Customer to pay for Network Upgrades in exchange for future transmission service credits. Duke Energy proposes that after Standard Market Design is implemented, the crediting policy could be replaced with one that provides the Interconnection Customer with financial transmission rights in exchange for funding Network Upgrades.

\*121 705. Exelon and Sithe recommend that, for the Transmission Provider that is not yet part of an RTO, and for an RTO that has not yet implemented LMP-based congestion pricing, the Commission continue its current policy of requiring the Transmission Provider to provide an Interconnection Customer that funds Network Upgrades with credits against future transmission service. As a transition plan, Exelon and Sithe recommend that an Interconnection Customer that is receiving credits when Standard Market Design is implemented be awarded financial transmission rights in an amount based on the Interconnection Customer's remaining credits as a proportion of its total credits. Some commenters, such as Cleco Power and Monongahela Power, emphasize that a Transmission Provider should not be required to provide both transmission credits and congestion rights to the same Interconnection Customer. Mirant believes that the two practices can coexist and that the Interconnection Customer should have the option to elect either transmission credits or the equivalent firm transmission rights as comparable compensation for Network Upgrades.

706. Other commenters believe that attempting to resolve pricing issues in this rulemaking presents significant problems. New York Transmission Owners declares that the "Commission's [Standard Market Design and LMP] policies and this NOPR are regulatory ships traveling in the night on a collision course, each completely unaware of the other's existence." They propose that the Commission limit the interconnection rulemaking to non-price issues. EPSA proposes that the Commission need not resolve in this proceeding what, if any, changes in the crediting mechanism might be necessary to implement Standard Market Design and the formation of RTOs. Calpine submits that the transmission credit policy should not be abandoned in the transition to Standard Market Design. It states that relying on recovery of the costs of Network Upgrades solely through assignment of FTRs under Standard Market Design would ignore the network access aspect of Standard Market Design and would not provide a practical means of recovering all costs of Network Upgrades. Although a change in policy may be appropriate after the Standard Market Design is in place, Calpine recommends that such a change not be made in this proceeding.

# **Commission Conclusion**

707. The timing and content of any Final Rule in the Standard Market Design proceeding will not be determined in this proceeding. In the meantime, it is important to include interconnection pricing rules in this Final Rule, based on the record of this proceeding.

# The Inability of a Transmission Owner to Recover the Costs of Network Upgrades

708. A number of Transmission Owners express concern that they may not be able to recover in a timely fashion the costs that they will incur under the proposed pricing policy. Monongahela Power states that a Transmission Owner faces three problems in this regard. First, it notes that a Transmission Owner faces the expense, delay, and uncertainty of a full transmission rate case before the Commission to roll in the costs of system upgrades associated with new generation projects. Second, it claims that even if the Commission grants full cost recovery, costs may be "trapped" by an inability to pass them through to the majority of customers due to a state retail rate freeze. Third, a Transmission Owner may face lost revenues associated with a new generating project once transmission service begins because of the requirement to provide a financial credit to the Interconnection Customer. Monongahela Power asks that the Commission permit a Transmission Owner to make a limited Section 205 filing for the immediate roll in of these costs, and that it work with the States to accommodate the flow-through of these costs to retail customers. At a minimum, both Monongahela Power and Dominion Resources ask that the Commission

provide for deferred accounting treatment with assurances of future cost recovery when the Transmission Owner must record a transmission revenue credit with no income to offset it.

#### **Commission Conclusion**

\*122 709. The Commission concludes that it is not necessary to provide for the Transmission Provider to make a limited Section 205 filing as proposed by Monongahela Power for the immediate roll in of the costs it will incur under the crediting policy. In the ordinary course of business, a public utility frequently incurs costs for which it has no immediate revenue offset, just as it routinely experiences revenue increases that are not accompanied by commensurate increases in costs. When a public utility believes that its revenues are not adequate, it is permitted by Section 205 of the FPA to make a rate filing. The commenters have provided no evidence to convince the Commission that the burden created by its crediting policy is so great that the Commission should change its regulations to permit a limited Section 205 transmission rate filing that addresses only credit-related cost increases, or deferred accounting treatment for transmission credits, as sought by Monongahela Power and Dominion Resources.

## Responsibility for Line Outage Costs Resulting from Interconnection

710. The NOPR did not address the allocation of costs that may be incurred when a transmission line must be taken off-line in order to complete an interconnection. In an order issued November 20, 2001, <sup>114</sup> however, the Commission stated that it would consider in this rulemaking the question of who should bear these costs.

711. Commenters express a variety of views on this issue. The Coalition for Pricing states that these costs should be a component of the costs paid by generators for interconnection service under the Final Rule IA. It asserts that any other policy would result in all transmission customers unfairly subsidizing Generating Facility interconnections. The Coalition for Pricing proposes that the Parties to individual interconnection agreements be allowed to agree on the specific line outage costs for which the Interconnection Customer should be responsible. The Coalition for Pricing argues that, since the Parties' agreement would necessarily be filed with the Commission, it would retain its regulatory control over line outage cost allocations. However, Reliant states that the Commission has had a policy of not requiring that the Interconnection Customer pay for outage-related costs, and argues that the Coalition for Pricing has provided no justification for departing from this policy. Reliant recommends rejecting the modifications that the Coalition for Pricing proposes.

712. AEP recommends that the Interconnection Customer be required to reimburse all affected generation owners for outage-related costs that they incur, whether or not such generation owners are affiliated with the Transmission Provider. AEP believes that this can be done in a manner that properly identifies the costs, minimizes the Transmission Provider's discretion, and allows for adequate regulatory scrutiny. It recommends a method of compensation that it claims avoids the exercise of discretion. That is, the Interconnection Customer should replace the energy that would otherwise have been generated by the affected Generating Facility. AEP states that if the Interconnection Customer is unwilling to replace the lost energy, it would be up to the affected generation owner to file with the Commission a proposal to recover its costs. Further, AEP believes that the Interconnection Customer, the existing generation owner and the Transmission Provider should be obligated to use Reasonable Efforts to minimize the impact of any outage.

\*123 713. ATC states that dividing the costs between the Interconnection Customer and the Transmission Provider may provide the most equitable results. It believes that a reasonable approach might be to allocate up to the full costs of the line outage to the Interconnection Customer so long as the timing is primarily under the Interconnection Customer's control. However, if the Transmission Provider has substantial influence over the timing and engineering aspects of the outage, ATC recommends that all or a large percentage of the new facility costs may be appropriate for rolling into transmission rates.

714. The Final Rule does not permit the Transmission Provider to allocate interconnection-related outage costs to the Interconnection Customer. The Commission recognizes that the Transmission Provider and the owners of other generators may incur costs as a result of having to take a transmission line out of service in order to complete an interconnection. Such costs may include generator shut-down and restart costs, redispatch and purchased power costs, lost opportunity costs on sales not made, costs of power to compensate for additional line losses, and possibly other costs. In prior orders, <sup>115</sup> the Commission has generally rejected, without prejudice, proposals by a Transmission Provider to allocate these costs to the Interconnection Customer. Among other things, the Commission has found that the proposals are vague, leave too much discretion to the Transmission Provider, and do not provide for adequate regulatory oversight by the Commission. For example, in NSTAR, the Commission stated that "determining how much cost responsibility to assign to an interconnecting generator, when other factors also may contribute to the need to redispatch contemporaneously, would be unacceptably arbitrary: for example, higher redispatch costs may be the result of a planned or unplanned outage, maintenance that requires a line to be taken out of service temporarily, or an unexpected shift in load." 116 Furthermore, while the Transmission Provider may be able to propose an objective method for determining its own outage-related costs, estimating the outage-related costs of unaffiliated generation owners could pose a significant problem. The Commission does not believe that AEP's proposal to have the Interconnection Customer replace the energy that would otherwise have been generated by the affected Generating Facility solves this problem in part because the value of the replacement energy may bear no relationship to the actual outage-related costs.

715. As the Commission concluded above, when the Transmission Provider asks the Interconnection Customer to reschedule a planned maintenance outage of the Generating Facility (per Article 9.7 - Outages, Interruptions, and Disconnection), the Interconnection Customer should be compensated for only the direct costs that the Interconnection Customer incurs. It should not be compensated, for example, for lost opportunity costs. One reason is that outages of transmission and generation facilities for maintenance and other purposes are a routine part of electric system operations and, in fairness, these costs also should be considered a normal part of doing business. Moreover, the determination of the appropriate level of costs to be allocated involves a process that is inevitably arbitrary and contentious, particularly when the determination is made by a Transmission Provider that is not an independent entity. Therefore, in the Final Rule we are codifying our policy of not allowing interconnection-related outage costs to be allocated to the Interconnection Customer.

# Issues Concerning the Five Year Refund Period and the Payment of Interest

\*124 716. Many commenters object to the proposal to require the Interconnection Customer to be reimbursed for the costs of Network Upgrades within a five year period. Several also object to the payment of interest on outstanding balances or to the formula for determining the rate of interest.

717. Duke Energy generally supports the provisions as proposed but, to be consistent with the Commission's policy of allowing the Transmission Provider to collect the higher of incremental or embedded costs for transmission service, it recommends elimination of the five year "sunset" provision in Section 11.4.1 of the NOPR LGIA. Cleco is concerned that a Transmission Provider may be liable for payment of refunds after a five year period has elapsed because the Interconnection Customer has not taken enough transmission service to be credited the full amount for upgrades originally paid for. Westconnect RTO submits that arbitrarily setting a five year term is unjustified and unreasonable. It proposes that a more appropriate approach would be to allow unused transmission credits to expire after a set term. However, Mirant argues that once the Network Upgrades are placed in service, every network customer receives some benefit from those facilities. Therefore, it sees no reason to limit the refund to the requirement in proposed LGIA Article 11.4.1 that the Transmission Provider continue to receive payment for transmission service from the Generating Facility.

718. Western states that if it has to return monies to an Interconnection Customer in less time than the service life of an upgrade, rates may have to be increased to ensure the timely repayment of other federal investments. It believes such a rate increase would be inequitable to existing customers. BPA states that the Interconnection Customer should not be entitled to a refund over an arbitrary five year period and argues that other customers should not have to bear the risk that the Interconnection Customer will cease taking transmission service. LADWP states that the five year requirement imposes an undue burden on

public power customers. It requests that, if the Commission's generation interconnection pricing policy is applied to a non-jurisdictional transmission owner, that owner should have the flexibility to provide such refunds over the same period that it would use to amortize such facilities if constructed for the benefit of its own customers. WEPCO states that the Commission should recognize that sometimes both the Interconnection Customer and the Transmission Provider may desire a payback period of less than five years. Accordingly, it recommends that the Commission revise Article 11.4.1 of the NOPR LGIA to provide for repayment at such earlier time as the Parties may agree.

719. Mirant argues that, at a minimum, the Commission should require that interest on any Network Upgrades be calculated using the Transmission Provider's most recent Commission-approved rate of return in the Transmission Provider's OATT. For a non-public utility that does not have a rate of return, Mirant proposes that the Commission use the rate of return set forth in the most recent Commission order as a proxy for such entity. Peabody recommends that the Commission modify the proposed LGIA to provide for a more flexible, incentive-based rate of interest for transmission credits. Also, if a Transmission Provider files for incentive pricing for transmission service, Peabody recommends that it be required to file simultaneously to amend the interest rate in LGIA Article 11.4.1 to match such incentive mechanism. Progress Energy disagrees with the requirement to pay an Interconnection Customer interest, arguing that the Transmission Provider cannot use the funds advanced by the Interconnection Customer for purposes other than constructing the Network Upgrades and that it should not be put in the position of being a bank for the Interconnection Customer. If interest must be paid, Progress Energy proposes using the Federal Fund Commercial Rate or a similar rate to ensure that the payment of interest is not a source of profit for the Interconnection Customer.

### **Commission Conclusion**

\*125 720. Regarding the specific rules for the payment of credits, the Commission clarifies that the Interconnection Customer is entitled to a full refund of the payments it makes toward the cost of Network Upgrades within five years after the Commercial Operation Date, as long as the Generating Facility remains in operation through the five year period. During the five year period, credits must be awarded on a dollar-for-dollar basis as payments are made for transmission services. However, the Commission is also permitting the payments to be made on any other basis that is mutually agreeable to the Interconnection Customer and the Transmission Provider. For example, if the Parties agree to a stream of uniform monthly payments designed to fully reimburse the Interconnection Customer over the five year period, that would be acceptable. In addition, as stated in Article 11.3 of the Final Rule LGIA, the Transmission Provider may elect to fund the Network Upgrades itself, with no advance payment by the Interconnection Customer, and thus no need for subsequent credits.

- 721. With regard to Cleco's concern about the Transmission Provider's liability at the end of the five year crediting period, the Commission clarifies that the Transmission Provider must make a lump-sum payment to the Interconnection Customer for any balance owed to the Interconnection Customer five years after the Interconnection Customer has begun commercial operation.
- 722. The Commission recognizes that the choice of the length of the repayment period is somewhat arbitrary. However, specifying five years as the maximum repayment period will promote the development of new generation by reducing the Interconnection Customer's risk, thereby facilitating project financing. Contrary to the views of LADWP and others, it would not be appropriate to extend repayment over a period that corresponds to the Transmission Provider's amortization period for similar facilities. As explained above, the Commission's policy for a non-independent Transmission Provider is to roll the costs of interconnection-related Network Upgrades into the Transmission Provider's transmission rate base. However, rather than require immediate roll-in, we have chosen a five year repayment period, in part to provide the Interconnection Customer with an incentive to make good faith requests for Network Upgrades.
- 723. With regard to the payment of interest on unpaid credits, the Commission adopts the policy proposed in the NOPR. The Commission continues to believe that the Interconnection Customer is entitled to a refund for all of the costs of the Network Upgrades for which it has paid, including a reasonable estimate of the carrying costs that it incurs in making the advance payments. The determination of an interest rate that accurately reflects this carrying cost cannot be reduced to a completely objective calculation. Interest calculated in accordance with 18 CFR § 35.19a(a)(2)(ii) provides a reasonable proxy for this

carrying cost, and because it offers an objective calculation, the Commission retains this provision in Article 11.4.1 of the Final Rule LGIA.

# **Rules Governing the Payment of Credits**

\*126 724. With regard to the payment of credits, Interconnection Customers generally are in favor of a flexible policy that allows credits to be paid under a wide range of circumstances, while Transmission Providers advocate a policy that places strict limits on when and how an Interconnection Customer may receive credits.

725. For example, Dynegy states that the Final Rule must ensure that the credits do not limit the Interconnection Customer to purchasing the delivery component of transmission service on the Transmission Provider's system with the Interconnection Customer's Generating Facility as the Point of Receipt. Instead, Dynegy believes that the credits should apply to transmission at any location on the Transmission Provider's system. Duke Energy believes that an Interconnection Customer's flexibility in obtaining refunds should be similar to the flexibility a Transmission Customer has to reassign transmission service under the OATT. Accordingly, it proposes to allow credits not only for the charges for transmitting power from the Generating Facility, but also for the charges for transmitting power from an Affiliated Generating Facility. Similarly, Peabody states that the Interconnection Customer should be allowed to receive credits for any transmission service that it purchases on the Transmission Provider's Transmission System. Both Calpine and EPSA offer modified language for Article 11 of the NOPR LGIA that would implement these recommendations. Cal Cogen and the Energy Producers and Users Coalition claims that a term-based credit mechanism (i.e., one where the credits are paid out according to a fixed schedule) is preferable to the NOPR's proposed transmission-based mechanism.

726. Edison Mission states that Articles 2 and 11 of the NOPR LGIA should be modified so that if an Interconnection Customer pays for Network Upgrades but the interconnection agreement is then terminated or the Generating Facility not constructed, the Interconnection Customer nonetheless receives payments for the upgrades it paid for, with the payments coming from other users of the Transmission System.

727. Other commenters propose limiting the availability of credits. Dominion Resources argues that, if Network Upgrades funded by the Interconnection Customer are not used for output from the Generating Facility, a refund for such upgrades is inappropriate. Similarly, the Coalition for Pricing claims that proposed LGIP Section 11.4.2 can be read to suggest that the Interconnection Customer has some right to transmission credits as transmission service is taken anywhere on the Transmission Provider's system. It asks the Commission to clarify that this is not the case. The Alabama PSC argues that providing transmission credits only when transmission service is taken from an Interconnection Customer's Generating Facility would prevent the socialization of upgrade costs that do not benefit the network.

728. Westconnect RTO and others argue that the Transmission Provider should credit the Interconnection Customer only for the "demand" or "return" component of the otherwise applicable transmission charges, and not apply the credit to such costs as operations and maintenance, administrative and general, taxes, line losses, etc. Also, Westconnect RTO and BPA oppose the proposal in Section 12.3 of the NOPR LGIP that the Interconnection Customer receive transmission credits for expediting costs associated with constructing Network Upgrades out of sequence. TAPS states that the Interconnection Customer should receive a credit against its network transmission service bill based on the capacity of the Generating Facility, not the energy output of the unit. It argues that an energy output-based method of calculating the credit unfairly penalizes network customers and sends the wrong price signal, discouraging the construction of peaking units and the designation of such units as Network Resources.

\*127 729. WEPCO states that the Commission must continue to mandate, as proposed in Article 11.4 of the NOPR LGIA, that rights to receive credits are fully assignable. It believes that this is crucial because in many instances the Interconnection Customer is not the transmission customer.

730. The Commission agrees with Dynegy and others that the Interconnection Customer should receive credits for transmission (delivery) service taken anywhere on the Transmission Provider's Transmission System and that credits should not be limited to service taken with respect to the Generating Facility at the point of receipt, as long as certain conditions are met. That is, as long as the Generating Facility has achieved commercial operation, continues to operate and there are unpaid credits outstanding, the Interconnection Customer should receive credits for all of the transmission charges that it pays, including charges for "through" transmission service. This is appropriate because it provides an additional vehicle by which the Transmission Provider can meet the requirement that the Interconnection Customer must receive a full refund of all amounts due within five years of the Commercial Operation Date. Accordingly, the Commission is removing from Article 11.4.1 of the Final Rule LGIA the following language: "so long as Transmission Provider continues to receive payments for transmission service with respect to the Generating Facility during such period."

731. Edison Mission asks that Articles 2 and 11 of the NOPR LGIA be modified to allow the Interconnection Customer to receive credits for Network Upgrades that it has paid for if the interconnection agreement is terminated or the Generating Facility is not constructed. The Commission disagrees. In order to achieve an appropriate balance between the Interconnection Customer's risks and incentives, the Commission believes that the Interconnection Customer should receive a refund of the costs of Network Upgrades only if the Generating Facility has achieved commercial operation. Allowing the Interconnection Customer to avoid any responsibility for the cost of Network Upgrades needed for a Generating Facility that is never completed would improperly shift all risk of cost recovery to the Transmission Provider and its other customers. In addition, it would greatly reduce the Interconnection Customer's incentives to make good faith requests for Network Upgrades. Therefore, the Commission concludes that the Transmission Provider must provide a refund to the Interconnection Customer only after commercial operation of the Generating Facility has been demonstrated. However, if the Generating Facility fails to achieve commercial operation, but it or another Generator Facility is later constructed and makes use of the Network Upgrades, the Interconnection Customer would at that time be entitled to a refund of the investment that it made in the Network Upgrades.

\*128 732. Westconnect RTO and others argue that the Transmission Provider should credit the Interconnection Customer only for the non-usage sensitive "demand" or "return" component of the applicable transmission charges, presumably on the basis that this is the component that relates most directly to the cost of the investment for which the Interconnection Customer is to receive credits. The Commission clarifies that the Transmission Provider may decline to award credits for those transmission charges that are designed to recover out-of-pocket costs, such as the cost of line losses, associated with the delivery of the Generating Facility's output. The Commission notes, however, that all amounts paid by the Interconnection Customer toward Network Upgrades must be refunded within five years of the Commercial Operation Date. Thus, any reduction in the level of credit payments will only increase the cost of interest and the magnitude of the final cash payment that may be required.

733. Westconnect RTO and BPA oppose the proposal in Section 12.3 of the NOPR LGIP that would provide the Interconnection Customer with a refund of the costs of expediting construction of Network Upgrades so that they can be placed in service out of sequence. The Commission is not changing this provision in the Final Rule LGIP. The sequence in which Network Upgrades would normally be constructed is based on the order in which requests are received. Although changing the order may increase or decrease the level of costs, the new level of costs is no less legitimate than the first. Thus, the Transmission Provider must refund to the Interconnection Customer the cost of constructing Network Upgrades regardless of the construction sequence.

734. In response to WEPCO's concern about the assignability of refund rights, the Commission confirms that Final Rule LGIA Article 11.4 provides that refund rights are fully assignable.

735. Finally, the Commission clarifies how the crediting policy will work when the Interconnection Customer elects to build and retain ownership of Stand-Alone Network Upgrades. In such case, the Interconnection Customer is not entitled to a refund of its investment in any facilities in which it elects to retain ownership. If the Interconnection Customer constructs Stand-Alone Network Upgrades, and chooses not to transfer ownership to the Transmission Provider, it will not receive a refund but may enter into a cost-based lease agreement with the Transmission Provider that places the upgrades under the Transmission

Provider's operation and control. The rates, terms and conditions of any such lease agreement are subject to the approval of the Commission.

# Responsibility for the Costs Incurred by Affected Systems

736. A number of commenters argue that the Final Rule should address directly the assignment of costs that may be incurred by Affected Systems when an Interconnection Customer obtains an interconnection. <sup>118</sup> Entergy contends that, even if the Final Rule LGIA could bind an Affected System, the Commission's current interconnection pricing policies fail to establish the allocation of the costs of Network Upgrades among the Interconnection Customer, the interconnecting Transmission Provider, and the Affected System. Dominion Resources recommends that Section 3.5 of the NOPR LGIP require the Interconnection Customer to be responsible for all costs incurred by the Transmission Provider in coordinating the interconnection request with the affected party, including all study costs. Reliant states that there is presently no mechanism that provides the Interconnection Customer with transmission credits for a contribution to the construction of Network Upgrades on third party systems. Reliant recommends that the Commission add to Section 3.5 of the NOPR LGIP language proposed by EPSA that addresses this omission. Mirant recommends that the Commission require the Transmission Provider to coordinate the provision of transmission credits associated with funding Network Upgrades on affected third party systems.

\*129 737. LADWP is concerned that the NOPR did not address how the Commission intends the financing and crediting to be implemented if the Interconnection Customer does not purchase transmission service on the Affected System.

#### **Commission Conclusion**

738. The NOPR LGIP and NOPR LGIA included no pricing provisions that specifically address situations where Network Upgrades must be constructed on Affected Systems to protect the reliability of those systems. However, the Commission concurs with the commenters that state that the NOPR LGIA should be modified to expressly allow for refunds to be provided to the Interconnection Customer when such Network Upgrades must be constructed and the Interconnection Customer is required to pay for them. Therefore, the Commission modifies Article 11.4 of the Final Rule LGIA to make it applicable to all jurisdictional Affected System Operators on whose systems Network Upgrades are constructed to accommodate the Interconnection Customer's Interconnection Request. This means that, prior to the Commercial Operation Date, an Affected System Operator may require the Interconnection Customer to pay for all Interconnection Facilities and Network Upgrades constructed to accommodate the Interconnection Customer's Interconnection Request. Then, upon commencement of commercial operation, any Affected System Operator that has received payments from the Interconnection Customer must begin to refund to the Interconnection Customer the costs of Network Upgrades that the Interconnection Customer has paid. Furthermore, refunds are to be provided without regard to whether the Interconnection Customer has contracted for delivery service on the Affected System Operator's Transmission System. If the Interconnection Customer has not contracted for delivery service, and in the absence of another mutually agreeable payment schedule, refunds shall be provided by means of a uniform stream of monthly payments designed to fully reimburse the Interconnection Customer, with interest, over a five year period commencing with the Generating Facility's Commercial Operation Date.

739. When the Interconnection Customer is required to pay for Network Upgrades on an Affected System, it must enter into an agreement with the Affected System Operator unless the payments are incorporated in the interconnection agreement that the Interconnection Customer signs with the Transmission Provider. Any agreement with an Affected System Operator must specify the terms governing payments to be made by the Interconnection Customer as well as the payment of refunds by the Affected System Operator. The Commission is revising proposed Article 11.4.1 to incorporate this new requirement.

# Policies Regarding Previously Approved Cost Allocations and Pricing Arrangements

740. A number of commenters express their views regarding the NOPR's proposal to require that all Transmission Providers remove from their transmission rates the costs of Interconnection Facilities constructed for the Transmission Provider's own

Generating Facilities, and to treat them as directly assigned, generation-related costs. Commenters also address the possible retroactive application of the pricing policy adopted in the Final Rule. Calpine and Mirant request that the Commission require that all Transmission Owners make compliance filings to remove the costs of Interconnection Facilities from existing transmission rates. The Arkansas PSC states that it does not object in principle to the proposal to remove such costs from transmission rates, but notes that this could shift additional costs onto the retail customers of regulated generation-owning utilities. It proposes that, if the cost-shifting burden is judged to be significant, a phase-in or modification may be appropriate. PSNM believes that the Commission's proposal to require all Transmission Providers to remove sole use facilities from their transmission rates currently in place resolves the lack of pricing comparability alleged by Interconnection Customers.

\*130 741. PJMTO generally agrees with the NOPR's proposal to assign to the generator the costs of Interconnection Facilities, but requests that the Commission clarify that, to the extent this policy alters existing practices, it will apply prospectively and only affect interconnections that post-date the Final Rule. PJMTO states that, historically, transmission providers have used a variety of approaches to assign cost responsibility for Interconnection Facilities, claiming that some have rolled these costs into transmission rates while others have directly assigned the costs to the Interconnection Customer. PJMTO urges the Commission not to undercut the business assumptions of existing project sponsors or to require the Transmission Provider to refile transmission rates to remove any non-network costs that have been rolled in, and invoice Interconnection Customers for such removed costs. Exelon and Sithe express similar views and state that, since Order No. 888, numerous vertically integrated utilities have spun off their Generation Facilities to non-affiliated third parties. Exelon and Sithe believe that those parties would likely claim that their interconnection arrangements have been effectively grandfathered and that no interconnection costs that may have been rolled into base transmission rates are now recoverable from them. Exelon and Sithe argue this could lead to costly and time-consuming litigation.

742. Calpine requests that the Commission find here that any policy that requires the Interconnection Customer to pay for Network Upgrades is unjust and unreasonable, and unless otherwise barred by explicit contract language, any Interconnection Customer should be permitted to have the facility cost allocation provisions of any existing agreement modified pursuant to Section 206 of the FPA to reflect the current interconnection pricing policies. However, Exelon and Sithe, using arguments similar to those above, recommend that any historical allocation of the costs of Network Upgrades that was agreed to by the parties and accepted by the Commission should not be disturbed now. Exelon and Sithe recommend that those costs be rolled into the transmission rate base only for new Interconnection Requests.

# **Commission Conclusion**

743. The Commission believes that, to ensure fully comparable treatment of all Generating Facilities, transmission rates should not include the costs of Interconnection Facilities. As stated in the NOPR, this policy is consistent with the Commission's current treatment of generation step-up transformers, appropriately assigns the costs of Interconnection Facilities to the generation customers using them, and ensures that the Transmission Provider's own Generating Facilities and those of its competitors are treated comparably.

744. However, the Commission is sympathetic to the concern of PJMTO and Exelon and Sithe that the Transmission Provider may have difficulty recovering the costs associated with Generating Facilities that it does not own, including those that it once owned but has since divested. Also, the Commission is concerned that the Transmission Provider may have difficulty identifying the interconnection-related costs of older Generating Facilities given that, historically, the Transmission Provider may have had no reason to segregate these costs from other transmission costs in its books of account. Therefore, the Commission is not adopting the NOPR's proposal to require the Transmission Provider to remove from its existing transmission rates the costs of all Interconnection Facilities constructed for its own Generating Facilities and to directly assign them as generation-related costs. Rather, the Commission here is imposing a more limited requirement. The Commission is requiring that the Transmission Provider remove from transmission rates only the costs of Interconnection Facilities constructed by the Transmission Provider after a date certain to interconnect Generating Facilities owned by the Transmission Provider on the effective date of this Final Rule. That date certain is March 15, 2000, the date on which the Commission issued its order in Tennessee clarifying

that interconnection is a separate component of transmission service, and that an Interconnection Customer may request interconnection separately from the delivery component of transmission service. That order effectively placed Transmission Providers on notice that the costs of Interconnection Facilities cannot be recovered in rates for transmission service. Thus, the Commission presumes that after March 15, 2000, any Interconnection Agreement signed by the Transmission Provider provides for the direct assignment of Interconnection Facility costs to the Interconnection Customer. The Commission also presumes that the Transmission Provider can identify the costs of any Interconnection Facilities constructed for its own Generating Facilities after March 15, 2000. In this Final Rule, the Commission is requiring the Transmission Provider, in its next filed transmission rate case, to remove such costs from transmission rates.

\*131 745. With regard to the Arkansas PSC's concern about the impact of any cost shifting that may result from the reallocation of Interconnection Facility costs, we do not believe that the impact will be so great as to warrant a phase-in. Because the requirement that we are adopting here applies only to costs incurred after March 15, 2000, we expect the cost impact, if any, to be small. Furthermore, any cost impact will not occur until the Transmission Provider's next filed rate case.

746. Finally, in response to Calpine, the Commission is not requiring in this Final Rule any changes to previously accepted interconnection agreements.

# **Miscellaneous Pricing Issues**

747. Dynegy argues that Article 4.6 of the NOPR LGIA should be clarified to include a more comprehensive listing of the possible services that the Interconnection Customer might be called upon to provide to the Transmission Provider under the express provisions of the LGIA. Dynegy submits that the Interconnection Customer would be required to have a Tariff on file with the Commission pursuant to Section 205 of the Federal Power Act for any service for which it seeks to charge the Transmission Provider. In the alternative, it recommends that the Commission clarify that this provision does not require the Interconnection Customer to forego the right to seek compensation for any services beyond the two listed.

748. ACEEE states that it agrees with the Commission's general proposal on pricing, but identifies pricing issues faced by the Interconnection Customer that it believes can pose major barriers to interconnection. It claims that excessive standby charges, backup power rates, and insurance requirements have frequently been used to try to block an Interconnection Customer from interconnecting a new Generating Facility and competing on a comparable basis. It states that the Commission and others must address these pricing issues if electricity markets are to be fully accessible.

## **Commission Conclusion**

749. In response to Dynegy, the Commission clarifies that, while Articles 4.6 and 11.6 of the Final Rule LGIA provide that the Transmission Provider must compensate the Interconnection Customer for certain specific services that the latter provides, no provision of the Final Rule LGIA limits the right of the Interconnection Customer to seek compensation for any other services that the Transmission Provider may from time to time request from the Interconnection Customer.

750. With regard to ACEEE's concerns about the rates for standby charges and backup power rates provided by the Transmission Provider to the Interconnection Customer, the rates for these services are a state jurisdictional retail rate issue. The Commission discusses insurance requirements in Part II.C.8.a of this Preamble.

# 2. Interconnection Products and Scope of Service

751. Scope of service, including in particular the definition and study requirements for the two Interconnection Service products proposed to be made available to Interconnection Customers, was perhaps the most heavily debated topic during the ANOPR phase of this proceeding. In addition, the controversial nature of this topic is reflected in the many pages that commenters devoted to it. These comments are addressed below.

#### **Definition of Interconnection Products**

\*132 752. The LGIA NOPR provided for two Interconnection Service products from which the Interconnection Customer would have to choose: Energy Resource Interconnection Service, which is a basic or minimal interconnection service, and Network Resource Interconnection Service, which is a more flexible and comprehensive interconnection service. <sup>119</sup> Neither is a transmission delivery service. Article 4 (Scope of Service) of the NOPR LGIA defines these products and sets forth specific Interconnection Study requirements for each. This article also describes the relationship between delivery service and the Interconnection Services, as well as the rights and responsibilities that each Interconnection Service entails. In addition, Section 3.2 of the NOPR LGIP sets forth the procedure that the Interconnection Customer must use to select an Interconnection Service.

753. As proposed, Energy Resource Interconnection Service would allow the Interconnection Customer to connect its Generating Facility to the Transmission System and be eligible to deliver its output using the existing firm or non-firm capacity of the Transmission System on an "as available" basis. In an area with a bid-based energy market (e.g., ISO New England, NYISO, or PJM), Energy Resource Interconnection Service would allow the Interconnection Customer to place a bid to sell into the market and the Generating Facility would be dispatched if the bid is accepted. In all other areas, no transmission delivery service would be assured, but the Interconnection Customer may obtain point-to-point transmission service or gain access to secondary network transmission service, pursuant to the Transmission Provider's Tariff. The Interconnection Studies to be performed for Energy Resource Interconnection Service would identify the Interconnection Facilities required as well as the Network Upgrades needed to allow the proposed Generating Facility to operate at full output. In addition, the Interconnection Studies would identify the maximum allowed output of the Generating Facility without Network Upgrades.

754. In contrast, Network Resource Interconnection Service would require the Transmission Provider to undertake the Interconnection Studies and Network Upgrades needed to integrate the Generating Facility into the Transmission System in a manner comparable to that in which the Transmission Provider integrates its own generators to serve native load customers. If the Transmission Provider is an RTO or ISO with market-based congestion management, it would have to integrate the Generating Facility in the same manner as all other Network Resources.

755. The Transmission Provider would study the Transmission System at peak load, under a variety of severely stressed conditions, to determine whether, with the Generating Facility at full output, the aggregate of generation in the local area can be delivered to the aggregate of load, consistent with the Transmission Provider's reliability criteria and procedures. Under this approach, the Transmission Provider would assume that some portion of the capacity of existing Network Resources is displaced by the output of the new Generating Facility.

\*133 756. Network Resource Interconnection Service provides for all of the Network Upgrades that would be needed to allow the Interconnection Customer to designate its Generating Facility as a Network Resource and obtain Network Integration Transmission Service. Thus, once an Interconnection Customer has obtained Network Resource Interconnection Service, any future transmission service request for delivery from the Generating Facility would not require additional studies or Network Upgrades. However, Network Resource Interconnection Service itself does not convey any delivery service and the Interconnection Customer would not be required to identify a specific buyer (or sink). If the Interconnection Customer wishes to obtain the delivery component of transmission service, it would have to do so pursuant to the Transmission Provider's Tariff.

757. Requests for long-term transmission service for deliveries outside the Transmission Provider's system may require additional Interconnection Studies and Network Upgrades. Network Resource Interconnection Service would allow the Generating Facility to be used to provide Ancillary Services and, should the Transmission System become congested, the Generating Facility would be subject to the same congestion management procedures that apply to all other Network Resources. Article 4.1.2.3 of the NOPR LGIA states that "[d]epending on how the cost allocation issue is resolved, the [Interconnection Customer] may be allocated congestion rights based on the construction of upgrades."

758. Proposed LGIA Article 4.3 also provides for generator balancing service arrangements and refers to other articles that address payment for certain services provided by the Interconnection Customer.

## **Comments**

759. Several commenters, primarily Transmission Providers, object to the proposed requirement that Interconnection Customers be allowed to request Network Resource Interconnection Service. NRECA-APPA and others argue that, contrary to the Commission's assertion, Network Resource Interconnection Service would convey transmission delivery rights to the Interconnection Customer in the form of a permanent right to the future use of the Transmission System's delivery capacity. APS contends that Network Resource Interconnection Service would provide delivery service rights that are greater than any available under Order No. 888, and claims that Network Resource Interconnection Service may require a Transmission Provider to expand transmission capacity beyond any foreseeable needs of network load and to hold that capacity indefinitely. LG&E Energy believes that Network Resource Interconnection Service could result in substantial overbuilding of the Transmission System as a result of the requirement that transmission be upgraded to accommodate any Interconnection Customer taking Network Resource Interconnection Service to serve any load on the system. However, TAPS is concerned that Network Resource Interconnection Service does not provide for the capacity expansions that may be needed to allow network customers to access their Network Resources without congestion. It claims that the NOPR's treatment of Network Resource designation and network service is inconsistent with the OATT Network Integration Transmission Service, which requires a demonstration of load-specific deliverability from designated Network Resources. TAPS states that Network Resource Interconnection Service lacks such a deliverability test and, as a result, would be a service under which the Network Resource designation is meaningless from a load serving entity's point of view. It claims that while Network Resource Interconnection Service would grant some rights to the Interconnection Customer, it leaves the load serving entity to bear all the risk of congestion between its Network Resources and its load.

\*134 760. PSNM notes that for an Interconnection Customer to secure delivery rights using Network Integration Transmission Service under the OATT, the Generating Facility must be designated as a Network Resource. The Interconnection Customer also must pay separately for point-to-point service when not providing service as a Network Resource. PSNM claims that the language in the NOPR LGIA would undo that requirement. Western objects to the fact that Network Resource Interconnection Service would impose no obligation on an Interconnection Customer to serve network load or to meet network operating obligations, such as providing Ancillary Services, and would not require an Interconnection Customer to participate in regional planning processes. Dairyland Power states that Article 4.1.2 of the NOPR LGIA seems to presuppose that Network Resource Interconnection Service may be used only in conjunction with Network Integration Transmission Service under the OATT, but the LGIA is not explicit. It asks the Commission to clarify the purpose of Network Resource Interconnection Service and how it may actually be used.

761. Central Maine claims that the exact products or services required to be offered are not clearly defined. Industrial Energy asserts that the acknowledgment of potential congestion in the Network Resource Interconnection Service description seems to contradict the further specifications in proposed LGIA Article 4.1.2.3, which appears to contemplate delivery from the Generating Facility within the Transmission Provider's Transmission System of any amount of capacity and/or energy up to the amount initially studied without additional studies or Network Upgrades. TANC recommends that the Commission replace the study provision requiring displacement of existing generation (NOPR LGIA Article 4.1.2.2) with appropriate technical guidelines and procedures for identifying resource displacement.

762. LG&E Energy claims that the proposal is inconsistent with the Commission's proposed approach to Standard Market Design. It notes that the market designs of certain ISOs permit customers to designate any resource as a Network Resource, but do not require the Transmission System to be upgraded to ensure physical delivery of all generation resources to all loads. Rather, according to LG&E Energy, the effect of transmission congestion is reflected in locational energy prices. Also, the Midwest ISO states that it is not clear how Network Resource Interconnection Service would evolve as Standard Market Design is implemented. It believes that Network Resource Interconnection Service is more appropriate for an Interconnection Customer

that wishes to designate its Generating Facility as a capacity resource in a market design where there is a capacity market. If there is not such a market, the Midwest ISO would support Energy Resource Interconnection Service alone as sufficient to provide for reliable interconnections, and allow for market-based mechanisms to support expansion of the Transmission System beyond minimum reliability needs. Both the Wisconsin PSC and American Wind Energy advise the Commission to defer consideration of Network Resource Interconnection Service until it can be evaluated in the context of Standard Market Design. Dairyland Power states that it is not clear how Network Resource Interconnection Service would fit with the new Network Access Service contemplated in the Commission's Standard Market Design rulemaking.

\*135 763. Some commenters argue that there should be only one interconnection product and that product should define a minimum level of service. For example, ISO New England believes that its Minimum Interconnection Standard has resulted in equal treatment of new and incumbent generation owners and has resulted in a substantial number of new generators being interconnected onto the bulk power Transmission System in New England. It also states that the Minimum Interconnection Standard allows every generator owner, new and incumbent alike, the opportunity to participate in all markets.

764. PG&E notes that, while Network Resource Interconnection Service requires the Transmission Provider to interconnect new plants in a manner comparable with that of other Network Resources, in California there are no Network Resources. PG&E asks the Commission to explain how this Interconnection Service would apply in areas where no network transmission service is available. Central Maine argues that the definition of products and services should be left to regional practices.

765. Xcel states that the description of Network Resource Interconnection Service appears to assume the Transmission Provider's system is the same as its Control Area. However, with the development of large transmission networks subject to an RTO's OATT, it may not be possible to actually deliver the capacity and energy of any individual generator to a network load on a huge regional network. The Midwest ISO recommends that, if Network Resource Interconnection Service is retained as part of the Final Rule, an Interconnection Customer within a large footprint RTO like the Midwest ISO should be allowed to select specific zones (or Control Areas) in which it would be eligible to be a designated Network Resource.

# **Commission Conclusion**

766. Article 4 of the NOPR LGIA did not adequately convey the Commission's intent, particularly with regard to the characteristics that distinguish the two proposed interconnection products and the rights and responsibilities that each entails. Many of the commenters' concerns can be addressed by improving the clarity and accuracy in the Final Rule provisions concerning scope of services and interconnection products. Therefore, as described below, the Commission modifies the text of proposed LGIA Article 4 and provides the following clarifications.

767. Both Energy Resource Interconnection Service and Network Resource Interconnection Service provide for the construction of Network Upgrades that would allow the Interconnection Customer to flow the output of its Generating Facility onto the Transmission Provider's Transmission System in a safe and reliable manner. However, contrary to the assertions of several commenters, neither Energy Resource Interconnection Service nor Network Resource Interconnection Service in and of itself conveys the <u>right</u> to do so. Moreover, neither type of Interconnection Service constitutes a reservation of transmission capacity. The Interconnection Customer, load or other market participant would have to request either point-to-point or Network Integration Transmission Service under the Transmission Provider's OATT in order to receive the delivery service that is a prerequisite to flowing power onto the system. When an Interconnection Customer that has chosen either Energy Resource Interconnection Service or Network Resource Interconnection Service later requests firm point-to-point delivery service, additional Network Upgrades may be required, depending on the availability of transmission capacity to deliver power to the delivery point.

\*136 768. Network Resource Interconnection Service is intended to provide the Interconnection Customer with an interconnection of sufficient quality to allow the Generating Facility to qualify as a designated Network Resource on the Transmission Provider's system without additional Network Upgrades. This means that Network Resource Interconnection

Service entitles the Generating Facility to be treated in the same manner as the Transmission Provider's own resources for purposes of assessing whether aggregate supply is sufficient to meet aggregate load within the Transmission Provider's Control Area, or other area customarily used for generation capacity planning. Thus, with Network Resource Interconnection Service, the Interconnection Customer would be eligible to obtain Network Service under the Transmission Provider's OATT, or network access service under the Tariff of an RTO or ISO, without the need for additional Network Upgrades.

769. However, contrary to the views of some commenters, Network Resource Interconnection Service does not necessarily provide the Interconnection Customer with the capability to physically deliver the output of its Generating Facility to any particular load on the system without incurring congestion costs. Depending on the location of the load for which the Generating Facility serves as a designated Network Resource, it may be required to participate in a redispatch procedure, or other non-discriminatory congestion management process, such as locational marginal pricing. Network Upgrades required under Network Resource Interconnection Service integrate the Generating Facility into the Transmission System in a manner that ensures that aggregate generation can meet aggregate load while satisfying regional reliability criteria and generation capacity planning requirements. However, these upgrades do not necessarily eliminate congestion.

770. In response to ISO New England and the Midwest ISO, the Commission is not limiting the Interconnection Customer's interconnection alternatives to a single option that meets only a minimum interconnection standard. In general, such a policy would not provide an interconnection that meets the standard that the Transmission Provider uses to interconnect its own generators. The Commission notes, however, that in regions where the Transmission System is operated by an independent entity, the Commission allows flexibility, as discussed in Part II.C.1 (Interconnection Pricing Policy). For example, an independent entity may determine, subject to Commission approval, that the designation of Network Resources is not necessary (which, PG&E points out, is the case in California).

771. The Commission recognizes that the Transmission Provider's Transmission System may not comprise a single Control Area, as several commenters point out. If the Transmission Provider operates more than one Control Area, it may limit the network service that is available to an Interconnection Customer taking Network Resource Interconnection Service to the Control Area where the Generating Facility is located. If the Interconnection Customer wishes to serve load in another Control Area, it must submit a separate request for transmission service to that other area, and it would be subject to the pricing provisions of the Transmission Provider's OATT for that service.

\*137 772. The Commission further clarifies that, if the Generating Facility of an Interconnection Customer taking Network Resource Interconnection Service is selected by a load as a designated Network Resource, it will be required to meet all network operating obligations that the OATT imposes upon Network Resources generally. If an Interconnection Customer's Generating Facility has not been designated as a Network Resource by any load, it cannot be required to provide Ancillary Services except to the extent such requirements extend to all generators that are similarly situated.

773. Finally, in response to Dairyland Power and others, the Commission notes that an RTO or ISO may propose in its tariff filing to modify the definition and scope of the available interconnection products to accommodate its market.

# **Pricing of Network Resource Interconnection Service**

774. Some commenters express concern over the application of the proposed interconnection pricing policy to Network Resource Interconnection Service. For example, Progress Energy and the Alabama PSC believe that an Interconnection Customer taking Network Resource Interconnection Service should pay a reservation charge for reserved but unused transmission capacity on the Transmission Provider's Transmission System. Progress Energy believes that such an approach would properly allocate the cost of the transmission capacity being reserved for the Interconnection Customer until a customer actually begins paying for transmission service for output from the Interconnection Customer's Generating Facility.

775. Entergy states that the requirement that a Transmission Provider offer Network Resource Interconnection Service should not be included in the Final Rule until the Commission has thoroughly analyzed the effects of providing such service. If this service is required, however, Entergy recommends that a Transmission Provider be compensated by any Interconnection Customer electing this service, as the service prevents a Transmission Provider from achieving the maximum use of its Transmission System due to the standing transmission reservation that it claims is granted to an Interconnection Customer under this service. The Coalition for Pricing recommends that the Interconnection Customer be required to commit to pay for Network Resource Interconnection Service for a specific term long enough to protect other customers from economic harm. It further recommends that, if the Interconnection Customer is not required to commit to a specific term of Network Resource Interconnection Service, it should at a minimum be required to pay some amount up front to cover ongoing expenses associated with the upgrades constructed if service is cancelled after a short time.

776. NRECA-APPA states that coupling Network Resource Interconnection Service with the Commission's current interconnection pricing policy will cause customers to bear much of the cost of Network Upgrades while having no right to use the resulting transmission delivery capability.

\*138 777. However, American Transmission opposes any special charges for Network Resource Interconnection Service and believes that commenters' criticisms that this service confers too great an advantage on the new Interconnection Customer are overstated. It believes the provision should be designed to put the independent generation owner on a competitive footing equal to that of incumbent owners. If the Commission is persuaded that the proposed policy provides an undue advantage to the new Interconnection Customer, the solution lies in adjusting the service description, not in imposing a surcharge.

#### **Commission Conclusion**

778. The Commission is not requiring the Interconnection Customer to pay a reservation fee for the delivery component of transmission service as a condition for receiving Network Resource Interconnection Service. As explained above, Network Resource Interconnection Service does not convey to the Interconnection Customer a reservation of transmission capacity or the right to begin taking firm or non-firm transmission service on the Transmission Provider's system. Rather, its purpose, as stated in proposed LGIA Article 4.1.2.1, is to provide the Network Upgrades needed to integrate the Interconnection Customer's Generating Facility into the Transmission System in a manner that is comparable to that in which the Transmission Provider integrates its own resources or other Network Resources. When the Interconnection Customer does take transmission service, it (or its power sales customer) will be required to pay appropriate rates, subject to the crediting provisions of Article 11.4 of the Final Rule LGIA. To charge the Interconnection Customer an additional reservation fee, as several commenters propose, would violate the Commission's prohibition against "and" pricing. Nevertheless, Network Resource Interconnection Service does not guarantee that the Interconnection Customer can physically deliver its output to any load. This means that, depending on the location of its power sales customer, the Interconnection Customer may be required to pay congestion or redispatch costs.

779. Finally, in response to NRECA-APPA, the Commission emphasizes that any capacity created by the Network Upgrades constructed on the Interconnection Customer's behalf is available for use by all customers on an equal basis. The Final Rule only requires that, once the Interconnection Customer has paid for the Network Upgrades needed to integrate its Generating Facility, it cannot be charged again for any additional upgrades that may be needed to continue to qualify as a Network Resource.

# Study Requirements for Network Resource Interconnection Service

780. Article 4.1.2.2 of the NOPR LGIA described the Interconnection Study procedures for Network Resource Interconnection Service. Among other things, they would require the Transmission Provider to study the Transmission System at peak load, under a variety of severely stressed conditions, to determine whether, with the Generating Facility at full output, the aggregate of generation in the local area can be delivered to the aggregate of load, consistent with the Transmission Provider's reliability criteria and procedures.

#### **Comments**

\*139 781. PG&E states that it does not understand the difference between the study requirements for Energy Resource Interconnection Service and Network Resource Interconnection Service. For Network Resource Interconnection Service, the NOPR LGIA says that the study must be done with the system at peak load and under a variety of severely stressed conditions, but PG&E claims that it is not clear that any lesser study would be necessary for Energy Resource Interconnection Service.

782. Cal ISO states that it is essential that all studies consider off-peak operating periods with the Generating Facility at full output. It argues that, during light load periods, the energy generated is not consumed locally and has to be transmitted over longer distances, possibly causing overloads that would not be revealed by studying only on-peak periods. Therefore, Cal ISO recommends replacing "at peak load, under a variety" with "at peak load and under a variety." NERC recommends several changes in NOPR LGIA Article 4.1.2.2, including replacing "at peak load, under a variety of severely stressed conditions" with "under a set of reasonably expected limiting conditions." It states that studying interconnection impacts only under conditions of system peak load and the Generating Facility's peak output may overlook the study of other conditions that could be unsafe. NERC asserts that use of the term "limiting conditions" provides the flexibility to incorporate studies that are necessary to ensure reliability.

#### **Commission Conclusion**

783. The study requirements for Energy Resource Interconnection Service and Network Resource Interconnection Service are set forth in Sections 3.2.1 and 3.2.2 of the Final Rule LGIP.

784. In response to PG&E, the principal difference between the study requirements for Energy Resource Interconnection Service and Network Resource Interconnection Service is that the study for Network Resource Interconnection Service identifies the Network Upgrades that are needed to allow the Generating Facility to contribute to meeting the overall capacity needs of the Control Area or planning region whereas the study for Energy Resource Interconnection Service does not. The study for Energy Resource Interconnection Service includes short circuit/fault duty, steady state (thermal and voltage) and stability analyses to identify the Network Upgrades needed to allow the output of the Generating Facility to be injected into the Transmission System using capacity on an "as available" basis. By contrast, the study for Network Resource Interconnection Service includes similar analyses but also assumes that the output of the Generating Facility may displace the output of certain other Network Resources on the Transmission System. The study then identifies the Network Upgrades that would be required to allow the Generating Facility to be counted toward system capacity needs in the same manner as the displaced resources. However, the Interconnection Customer may request that Optional Studies be performed, and Section 3.2 of the Final Rule LGIP allows the Interconnection Customer then to proceed with Network Resource Interconnection Service or to request a lower level of interconnection service whereby only certain upgrades will be completed.

\*140 785. With regard to the changes to Article 4.1.2.2 of the LGIA recommended by NERC and Cal ISO, we note that this provision is intended to serve two purposes. First, it establishes the standards for conducting necessary studies to provide the requested service while ensuring that the reliability of the system is maintained. Second, it deters a Transmission Provider from delaying an interconnection by imposing on competing Interconnection Customers, in the name of reliability, more stringent Interconnection Study requirements than it would require of its own interconnections or those of its Affiliates. Because NERC's and Cal ISO's proposals satisfy only the reliability purpose, the Commission does not adopt them. Our requirement that the interconnection be studied with the Transmission Provider's Transmission System at peak load, under a variety of severely stressed conditions, is comparable, we believe, to the study requirement that the Transmission Provider applies to its own generation. However, we are sympathetic to NERC's and Cal ISO's concerns. Therefore, the Commission would entertain a request, in a non-independent Transmission Provider's compliance filing required by this Final Rule, to adopt a different requirement (e.g., off-peak load in addition to peak load) if the non-independent Transmission Provider can demonstrate that the proposed requirement is consistent with or superior to the requirement of the Final Rule LGIP. At a minimum, the Transmission Provider must demonstrate that it consistently applies the proposed requirement in the studies it conducts for itself and its

Affiliates. As discussed below in Part II.C.5 (Variations from the Final Rule), we will allow an RTO or ISO to seek an "independent entity variation" from the Final Rule LGIP if it wants to adopt a different study requirement.

# Identification of Types of Interconnection Services to be Studied

786. According to Section 3.2 of the NOPR LGIP, when the Interconnection Customer submits its Interconnection Request, it would be required to identify the type of Interconnection Service it wants. However, an Interconnection Customer requesting Network Resource Interconnection Service would have the option of requesting that its Interconnection Request also be studied for the less comprehensive Energy Resource Interconnection Service up to the point when an Interconnection Facilities Study Agreement is executed.

#### **Comments**

787. Several commenters state that allowing the Interconnection Customer to request that its Interconnection Request be studied for both Network Resource Interconnection Service and Energy Resource Interconnection Service concurrently will unnecessarily tax the Transmission Provider's resources and increase the burden of performing the studies. Entergy and BPA believe that this option will unnecessarily delay the conduct of studies for third party interconnections unless the Interconnection Customer is required to select the particular service under which it will interconnect prior to the execution of an Interconnection System Impact Study Agreement. Entergy states that such a limitation would not unduly disadvantage the Interconnection Customer, but would further ensure that a Transmission Provider's limited transmission planning resources are used to perform studies for interconnections that are likely to be completed. NYTO believes that the additional study work required to conduct concurrent studies is not accounted for in the Interconnection Feasibility, System Impact or Facilities Study sections of the NOPR LGIP. It states that additional time would be required to conduct the concurrent studies if the Transmission Provider is required to offer this option. Also, Cal ISO asks whether two deposits will be required if an Interconnection Customer requests that the Interconnection Request be studied as both Network Resource Interconnection Service and Energy Resource Interconnection Service.

\*141 788. BPA observes that the NOPR LGIP included very strict timelines for completion of various studies and provided for no meaningful milestones or other means by which the Transmission Provider can ensure that only bonafide Interconnection Requests remain in the queue. It states that this places a Transmission Provider with a large number of Interconnection Requests in a very difficult position, and the more concurrent studies the Interconnection Customer can require the Transmission Provider to perform on a single request, the more difficult this position becomes. BPA believes that requiring concurrent studies is purely for the convenience of the Interconnection Customer, and that it is not unreasonable to require the Interconnection Customer to choose early in the process what kind of resource it intends to develop.

789. Georgia Transmission believes that it is appropriate to allow the Interconnection Customer to request concurrent studies throughout the Interconnection Feasibility Study stage, but allowing the parallel studies to continue beyond that point simply gives the Interconnection Customer more time to decide what type of Interconnection Service product to contract for, while greatly increasing the study burden on the Transmission Provider. Georgia Transmission claims that the Interconnection System Impact Study is a much more complex and involved study than the Interconnection Feasibility Study. Further, to accommodate the Interconnection Customer's desire to study multiple Interconnection Service products, Georgia Transmission claims that the Transmission Provider must conduct multiple studies not only for the first Interconnection Customer, but for all other Interconnection Customers proceeding through the interconnection process to reflect the multiple service characteristics of the first Interconnection Customer. If these other Interconnection Customers also request the Transmission Provider to concurrently study multiple service options, the Transmission Provider study burden "quickly snowballs out of control." At this stage of the Interconnection Study process, the cost of studying the multiple service options greatly outweighs the benefits to the Interconnection Customer.

790. TVA argues that allowing an Interconnection Customer to request that the Transmission Provider study both types of Interconnection Services may double the work of the Transmission Provider at each stage up to the Interconnection Facilities Study stage. It finds this troubling in light of the NOPR's proposed milestones frames and the possibility of the Transmission Provider having to pay liquidated damages for failure to meet the deadlines.

791. Interconnection Customers, however, express very different views. For example, Tenaska states that the choice between Network Resource Interconnection Service and Energy Resource Interconnection Service will be dictated by the Interconnection Customer's wholesale power customer. It argues that marketing efforts for new generation projects are not completed until late in the development process, making it impossible for the Interconnection Customer to know with certainty which service is requires. Tenaska asks that the Interconnection Customer be afforded maximum flexibility to choose between the two interconnection Services and recommends that, instead of making the Interconnection Customer choose prior to executing the Interconnection Facilities Study Agreement, the Final Rule LGIP should allow the Interconnection Customer to defer its choice until the execution of the interconnection agreement.

## **Commission Conclusion**

\*142 792. While conducting complex Interconnection Studies can be burdensome for the Transmission Provider, the Commission is not amending NOPR LGIP Section 3.2 to eliminate the Interconnection Customer's option to have its request studied as Energy Resource Interconnection Service as long as it has also requested to be studied as Network Resource Interconnection Service. This is a valuable option for the Interconnection Customer because it provides key information to support its investment decisions, and thus helps to meet the Commission's goal of encouraging the development of new generation.

793. The Commission also recognizes that the Interconnection System Impact Study is more complex than the Interconnection Feasibility Study. However, the Commission does not believe that it would be reasonable to require the Interconnection Customer to choose between the two services prior to executing the Interconnection System Impact Study Agreement, as several commenters propose. Once the Interconnection Customer has asked to be studied for Network Resource Interconnection Service, a service that is far more comprehensive than Energy Resource Interconnection Service, the incremental burden created by also having to conduct an Interconnection System Impact Study for the simpler Energy Resource Interconnection Service should not be great. It is for this reason that the Commission disagrees with Georgia Transmission's contention that having to study multiple options will have a significant snowball effect on the overall study burden. Moreover, the Transmission Provider will be fully compensated for all of the costs that it incurs in conducting a more expansive study. As for the risk that the Transmission Provider faces by allowing the Interconnection Customer to make this choice, such risk is mitigated by the fact that the Commission is not making the Transmission Provider subject to liquidated damages under the Final Rule LGIP. <sup>121</sup>

# Revisions to the Final Rule LGIP and Final Rule LGIA

794. In the Final Rule, the Commission is modifying various provisions of the NOPR LGIP and NOPR LGIA to provide greater clarity and to make other minor changes with respect to scope of service and interconnection products, as discussed above. In addition, the Commission is incorporating in the Final Rule LGIP certain provisions concerning product definitions and study requirements that were included in the NOPR LGIA but not the NOPR LGIP. These provisions are being added to the Final Rule LGIP because they directly relate to the process of obtaining an interconnection. They appear as new Sections 3.2.1 and 3.2.2 in the Final Rule LGIP.

## 3. "Distribution" Interconnections

795. We proposed in the NOPR <sup>122</sup> that we would assert authority to order interconnection when the Interconnection Customer wants to interconnect its Generating Facility with a jurisdictional transmission facility, or when it will make a wholesale sale of electric energy in interstate commerce using a public utility's "distribution" facilities.

#### **Comments**

\*143 796. Commenters objecting to the Commission's jurisdictional statement - chiefly Transmission Providers, public power providers, and state public utility commissions <sup>123</sup> - argue that "distribution" interconnection raises complex jurisdictional issues and that the Commission should leave this issue to the States, in part because they have experience regulating these kinds of interconnections. EEI notes that it is unclear if the Commission has authority over sales of power for resale using "distribution" facilities when the energy neither crosses state lines nor enters the interstate transmission system. The Public Power Council asks the Commission to recognize the jurisdiction of state commissions and local governing boards over the "distribution" systems of investor-owned and publicly owned utilities. SoCal Edison and PG&E ask the Commission to clarify that when a retail customer installs a generating facility that will never send energy over the Transmission System (i.e., the energy will be consumed on site), this is a retail service arrangement beyond Commission jurisdiction.

797. The North Carolina Commission argues that, because it has not restructured its electric industry, any generating facility in North Carolina not owned by a vertically integrated utility would be required to sell its output at wholesale (because it cannot sell directly to retail consumers). As a result, the NOPR effectively eliminates state jurisdiction over the interconnection of generators involved in programs such as net metering or green power, which rely on simpler and less expensive interconnection procedures and agreements than those proposed by the Commission. These interconnection decisions are best left to the States.

798. APS notes that the NOPR does not address how Transmission Providers will handle their responsibilities over transmission facilities jointly owned by jurisdictional and non-jurisdictional entities. This is a particular concern in the Western United States. APS warns that the failure to examine this issue in a separate NOPR will result in a patchwork of transmission terms and conditions that the Commission sought to avoid in Order No. 888. 124

799. EEI raises other objections, noting that Commission regulation of "distribution" interconnections may create new layers of regulatory costs that will not be recoverable in retail rates. It also warns that competing and possibly conflicting state and federal interconnection requirements may encourage forum-shopping by Interconnection Customers and create problems for "distribution" providers. To discourage this, National Grid proposes that an Interconnection Customer should state whether it will make sales for resale before the Scoping Meeting provided for in Section 3.3.4 of the proposed LGIP; this will determine how the Interconnection Studies will be performed. Once established, the designation could not be changed unilaterally by the Interconnection Customer.

\*144 800. NRECA-APPA argues that, because "distribution" systems do not operate like Transmission Systems, "distribution" interconnections will require provisions not in the NOPR LGIP and NOPR LGIA, including different Interconnection Study requirements. It argues that the physical differences and economic differences between interconnection at "distribution" and transmission levels - distribution is typically "low voltage" and transmission typically is "high voltage," and "distribution" providers may lack engineering personnel necessary to evaluate Interconnection Requests - would make a single rule completely inappropriate. WEPCO argues that the NOPR LGIP and NOPR LGIA are unworkable for interconnections to the "distribution" system because "distribution" companies serve load and "distribution" systems are not designed to accommodate large generation facilities seeking to move energy off the "distribution" system. Accordingly, the Commission should clarify that the principles underlying the Final Rule LGIP and Final Rule LGIA, i.e., nondiscriminatory access and comparable treatment, will be applicable to both "distribution" and transmission, but that the documents will apply only to transmission level interconnections. State-approved tariffs should govern "distribution"-level interconnections. Nevertheless, an Interconnection Customer interconnecting to a "distribution" system still would be entitled to petition the Commission if it encountered undue discrimination.

801. Consumers sees a useful analogy in the Commission's natural gas regulations. It argues that the Commission should consider adopting an approach like the blanket certificate program applied to natural gas pipelines for incidental jurisdictional uses of non-jurisdictional transportation facilities. The goal of the Commission's blanket certificate program <sup>125</sup> is to remove

restraints on the flow of gas between the interstate and the intrastate market. It allows entities that are otherwise state-jurisdictional to perform incidental Commission-jurisdictional activities without subjecting them, or their incidental interstate activities, to full Commission regulation.

802. NARUC states that it "supports the Commission's statement that the NOPR [LG]IA and [LG]IP 'will apply only when a generator interconnects to the Transmission Provider's transmission system or makes wholesale sales in interstate commerce at either the transmission or distribution voltage level," but argues that the States "are best situated to ensure the efficient, reliable and safe interconnection of small generators to local distribution systems and should continue to have that authority, as the NOPR recognizes." TAPS supports Commission jurisdiction over the interconnection of generators used for wholesale sales, whether the interconnection is made to transmission or "distribution," because such application is essential to prevent evasion of the intent of the NOPR to provide non-discriminatory interconnection service, and should encompass wholesale interconnections to the Distribution Systems of large jurisdictional utilities that have divested their transmission facilities to an independent transmission company or the like.

#### **Commission Conclusion**

\*145 803. At the outset, it is important to clarify several terms when discussing the question of jurisdiction. "Local distribution" is a legal term; under FPA Section 201(b)(1), the Commission lacks jurisdiction over local distribution facilities. Distribution" is an unfortunately vague term, but it is usually used to refer to lower-voltage lines that are not networked and that carry power in one direction. Some lower-voltage facilities are "local distribution" facilities not under our jurisdiction, but some are used for jurisdictional service such as carrying power to a wholesale power customer for resale and are included in a public utility's OATT (although in some instances, there is a separate OATT rate for using them, sometimes called a Wholesale Distribution Rate).

804. This Final Rule applies to interconnections to the facilities of a public utility's Transmission System that, at the time the interconnection is requested, may be used either to transmit electric energy in interstate commerce or to sell electric energy at wholesale in interstate commerce pursuant to a Commission-filed OATT. <sup>128</sup> In other words, the standard interconnection procedures and contract terms adopted in this Final Rule apply when an Interconnection Customer that plans to engage in a sale for resale in interstate commerce or to transmit electric energy in interstate commerce requests interconnection to facilities owned, controlled, or operated by the Transmission Provider or the Transmission Owner, or both, that are used to provide transmission service under an OATT that is on file at the Commission at the time the Interconnection Request is made. Therefore, the Final Rule applies to a request to interconnect to a public utility's 'distribution' facilities used for transmission in interstate commerce. It also applies to a request to interconnect to a public utility's "distribution" facilities used to transmit electric energy in interstate commerce on behalf of a wholesale purchaser pursuant to a Commission-filed OATT. But where the "distribution" facilities have a dual use, i.e., the facilities are used for both wholesale sales and retail sales, the Final Rule applies to interconnections to these facilities only for the purpose of making sales of electric energy for resale in interstate commerce.

805. In response to SoCal Edison and PG&E, we clarify that we are not asserting jurisdiction over a hook-up between a retail customer and a Transmission Provider when a retail customer installs a generator that will produce electric energy to be consumed only on site.

806. Regarding the arguments that the NOPR LGIP and NOPR LGIA are designed for interconnection to a transmission system and not a "distribution" system, we expect that the majority of interconnections to jurisdictional "distribution" or other jurisdictional low-voltage facilities will be made by generators no larger than 20 MW. These Small Generators will be interconnected using the standard procedures and agreement adopted in the Small Generator rulemaking. We are proposing rules in that proceeding to accommodate the interconnection of Small Generators, mostly to jurisdictional "distribution" (not "local distribution") and low-voltage facilities. However, in response to WEPCO's argument, we conclude that under some circumstances (e.g., interconnection to facilities below 69 kV) the Interconnection Studies in the Final Rule

LGIP may be inappropriate to analyze some Large Generator Interconnection Requests. In such a case, we will allow the Transmission Provider to use modified Interconnection Studies, subject to Commission approval. The Commission expects that interconnection requests of this kind will be rare and, as a result, we do not at this time incorporate a standard study specifically designed for interconnections to low-voltage or "distribution" facilities into the Final Rule LGIP. Accordingly, a Transmission Provider may use the studies it deems appropriate to properly study the Interconnection Request, subject to Commission approval. The Commission therefore requires that a Transmission Provider, upon receipt of a request for jurisdictional interconnection to a jurisdictional "distribution" or low-voltage facility, file with the Commission an amendment to the LGIP in its OATT that describes the Interconnection Studies applicable to such requests.

\*146 807. APS raises concerns regarding joint ownership of transmission by jurisdictional and non-jurisdictional entities. In Order No. 888, the Commission required each public utility that owns an interstate transmission facility jointly with a non-jurisdictional entity to offer service over its share of the joint facility, even if the joint ownership contract prohibits service to third parties. <sup>130</sup> Applying the same principle here, joint ownership does not affect the Commission's authority to regulate the public utility. Accordingly, the Final Rule LGIP and Final Rule LGIA would apply to Interconnection Service provided by the public utility on its portion of a jointly owned facility.

808. Regarding EEI's comment about the Commission's authority over an interconnection for the purpose of making sales of electric energy for resale using "distribution" facilities when the energy neither crosses state lines nor enters the interstate transmission system, this question is moot because the Commission is not here extending its jurisdiction to any facility that is not already under its jurisdiction, pursuant to a Commission-filed OATT at the time the interconnection request is made.

809. Finally, regarding EEI's objection that Commission regulation of "distribution" interconnections may create new layers of regulatory costs not recoverable in retail rates, our jurisdiction discussion above clarifies that because this Final Rule applies only where the Commission already has jurisdiction at the time interconnection is requested, this should not result in any new unrecoverable regulatory costs to a Transmission Provider.

### 4. Issues Relating to Qualifying Facilities

810. The NOPR did not address interconnection issues related to qualifying facilities (QFs) under the Public Utility Regulatory Policies Act of 1978 (PURPA). <sup>131</sup> Nevertheless, several commenters bring QF-related issues to our attention.

#### **Comments**

811. Cal Cogen and ELCON recommend that the Commission allow a QF to request interconnection under state authority when it either sells the majority of its output under a PURPA-based power sales agreement, or does not sell power to the wholesale market. If the QF primarily generates electricity for sale in wholesale markets under non-PURPA agreements, they argue, the Final Rule should apply. Cal Cogen argues that this approach is in keeping with the Commission's Regulations, which give the States the responsibility for QF interconnections, <sup>132</sup> and Commission precedent, which holds that an interconnection agreement in which an interconnected utility purchases a QF's total output falls under state authority. <sup>133</sup>

812. Similarly, SoCal Edison and PG&E request that the Commission clarify that the Final Rule LGIP and Final Rule LGIA will not apply to a QF selling to the interconnected utility or to on-site customers. Calpine requests that generating facilities currently interconnected to the Transmission System under non-FERC-jurisdictional arrangements, such as QFs, that subsequently become FERC-jurisdictional by terminating their QF status or deciding to sell power in the wholesale market, not be treated as "new" generating facilities or "new" Interconnection Customers under the interconnection procedures. While only the contractual arrangements have changed, the physical interconnection requirements remain unchanged, and as long as the Generating Facility's output will be substantially the same after conversion, no Interconnection Studies are necessary and the Interconnection Customer should not be placed in the Transmission Provider's interconnection queue with new Generation

Facilities. Rather, the Interconnection Customer should only have to execute the Commission-jurisdictional interconnection agreement to become effective upon termination of the state-jurisdictional agreement. Independent Producers, which makes a similar argument, notes that treating a newly jurisdictional former QF as a new interconnection would be discriminatory since this would essentially require that facilities be interconnected twice. If an existing QF is already in the "base case" used to determine impacts of new generators, and this same base case is used to analyze the interconnection of the existing QF, there will be no effect.

#### **Commission Conclusion**

\*147 813. The Commission's Regulations govern a QF's interconnection with most electric utilities in the United States, <sup>134</sup> including normally nonjurisdictional utilities. <sup>135</sup> When an electric utility is obligated to interconnect under Section 292.303 of the Commission's Regulations, that is, when it purchases the QF's total output, the relevant state authority exercises authority over the interconnection and the allocation of interconnection costs. <sup>136</sup> But when an electric utility interconnecting with a QF does not purchase all of the QF's output and instead transmits the QF power in interstate commerce, the Commission exercises jurisdiction over the rates, terms, and conditions affecting or related to such service, such as interconnections. <sup>137</sup>

814. Thus, the Commission has jurisdiction over a QF's interconnection to a Transmission System if the QF's owner sells any of the QF's output to an entity other than the electric utility directly interconnected to the QF. Because the presence of <u>any</u> output sold to a third party determines Commission jurisdiction, we reject Cal Cogen and ELCON's requests that we establish jurisdiction over QF interconnections based on the amount of energy sold to a third party. Accordingly, this Final Rule applies when the owner of the QF seeks interconnection to a Transmission System to sell any of the output of the QF to a third party. This jurisdiction applies to a new QF that plans to sell its output to a third party, and to an existing QF interconnected to a Transmission System that historically sold its total output to an interconnected utility or on-site customer and now plans to sell output to a third party. Nevertheless, consistent with the Commission's Regulations, states will continue to exercise authority over QF interconnections when the owner of the QF sells the output of the QF only to an interconnected utility or to on-site customers.

815. Finally, regarding a former QF interconnected to a Transmission System that sells electric energy at wholesale in interstate commerce, we conclude that the owner of the QF need not submit an Interconnection Request if it represents that the output of the generating facility will be substantially the same as before. A QF, under the Commission's Regulations, <sup>138</sup> must provide electric energy to its interconnecting utility much like the interconnecting utility's other Network Resources, since the utility must purchase the QF's power to displace its own generation. When the owner of a QF that was formerly interconnected to a Transmission System seeks to sell energy at wholesale and represents that the output of its generator will be substantially the same after conversion, it would be unreasonable for a Transmission Provider to require the former QF to join the interconnection queue.

# 5. Variations from the Final Rule

816. In the NOPR, we proposed to allow a Transmission Provider to justify variations from the non-price terms and conditions of the interconnection provisions of the Final Rule using the approach taken in Order No. 888. Order No. 888 allows two types of variations. First, public utilities may seek to use regional differences to justify proposed changes to certain specifically identified OATT provisions when the proposed alternative provision is "reasonable, generally accepted in the region, and consistently adhered to by the [T]ransmission [P]rovider." Second, public utilities may argue that proposed changes to any OATT provision are "consistent with or superior to" the terms of the OATT. In the NOPR, we also stated that if a legitimate need for regional variations in specific provisions in the Final Rule LGIP and Final Rule LGIA were identified, we would consider adopting specific provisions that permit regional variations.

# **Comments**

\*148 817. While a few commenters, including Cinergy, Dynegy, and SoCal Edison, support the proposed provision, others seek greater flexibility to propose changes based on regional differences for provisions other than those the Commission identified as specific eligible provisions. For example, several commenters argue that the Commission should allow variations for regional differences based on the reliability needs of a particular region, which may be unique because of system configuration or generation prevalent in the region. <sup>140</sup>

818. Several commenters, including APS, the Connecticut PUC, and WestConnect RTO, request that the Commission allow specific regional interconnection standards or reliability requirements to be treated as regional differences. The Florida RCC proposes that the Commission require that the Parties comply with any standards and guidelines of the Applicable Reliability Council. It offers several specific provisions that should be revised to account for the requirements established by the Florida RCC and other regional reliability councils.

819. MidAmerican argues that the Final Rule should recognize regional differences particular to the Midwest. As an example, it offers the high potential for wind farms in the Midwest, and the resulting need to study voltage flicker, harmonics, dynamic voltage stability, stray voltage, and small signal stability. According to MidAmerican, these additional study options, which were not expressly proposed in the NOPR, should be included in the Final Rule to recognize regional differences. Entergy requests that the Commission consider extending the dates for completing Interconnection Studies in a region when there is a large number of Interconnection Requests.

820. Dairyland Power requests that during the compliance phase of this rulemaking the Commission allow a Transmission Provider greater flexibility to make changes using a regional differences rationale. Monongahela Power argues that regional differences should be accommodated, but only on a case-by-case basis through application for exemption rather than through changes to the Final Rule. In this way, the Final Rule serves as a baseline national standard. In contrast, Mirant requests that the Commission restrict the availability of variations based on regional differences to large, established ISOs that can show that the variations are consistent with or superior to what appears in the Final Rule.

821. NYISO recommends that the Commission revise the definition of Good Utility Practice, which was proposed to include "practices, methods or acts generally accepted in a region," and which is used repeatedly in the NOPR LGIP and NOPR LGIA to describe the standards that will be applied to certain obligations. It urges that the definition should include among eligible regions those administered by an RTO or ISO.

## **Commission Conclusion**

822. We will apply a regional differences rationale to accommodate variations from the Final Rule during compliance, but with certain restrictions. We conclude that a non-independent transmission provider (such as a Transmission Provider that owns generators or has Affiliates that own generators) and an RTO or ISO should be treated differently because an independent RTO or ISO does not raise the same level of concern regarding undue discrimination. Accordingly, we will allow an RTO or ISO greater flexibility than that allowed under the regional differences rationale to propose variations from the Final Rule provisions, as further discussed below.

\*149 823. Although commenters generally did not identify provisions in the NOPR LGIP or NOPR LGIA that should be subject to variations based on "regional differences," when a commenter did provide specific provisions, the revisions were based on the reliability requirements of a given region. Because we intend to supplement rather than supplant the work that regional reliability groups already have undertaken regarding interconnection, we are permitting a Transmission Provider, on compliance, to offer variations based on existing regional reliability requirements. Accordingly, regional flexibility is included in the Final Rule definition of Good Utility Practice, which includes practices established by relevant reliability councils and local laws and regulations. We accommodate NYISO's proposal that the definition of Good Utility Practice be revised as

requested by instead defining it to include "acceptable practices, methods, or acts generally accepted in the region." Thus, this definition includes by implication the Commission-approved practices of those regions administered by an RTO or ISO.

824. Nevertheless, there may be Final Rule provisions that do not include reference to Good Utility Practice that may be subject to or affected by regional reliability restrictions. Rather than identify all such provisions in the Final Rule, as the Florida RCC proposes, we leave it to the Transmission Provider to justify variations based on regional requirements. With this approach, we are permitting public utilities the flexibility necessary to ensure that reliability needs are met. Because we seek greater standardization of interconnection terms and conditions, we are not permitting a non-independent Transmission Provider to use the regional differences justification in the absence of established regional reliability standards.

825. For other proposed deviations from the Final Rule LGIP and Final Rule LGIA not made in response to established regional reliability requirements, we are requiring non-independent transmission providers to justify variations in non-price terms and conditions of the Final Rule LGIP and Final Rule LGIA using the approach taken in Order No. 888, which allows them to propose variations on compliance that are "consistent with or superior to" the OATT.

826. To clarify, if on compliance a non-RTO or ISO Transmission Provider offers a variation from the Final Rule LGIP and Final Rule LGIA and the variation is in response to established (<u>i.e.</u>, approved by the Applicable Reliability Council) reliability requirements, then it may seek to justify its variation using the regional difference rationale. If the variation is for any other reason, the non-RTO or ISO Transmission Provider must present its justification for the variation using the "consistent with or superior to" rationale that the Commission applies to variations from the OATT in Order No. 888.

\*150 827. With respect to an RTO or ISO, at the time its compliance filing is made, as discussed above, we will allow it to seek "independent entity variations" from the Final Rule pricing and non-pricing provisions. This is a balanced approach that recognizes that an RTO or ISO has different operating characteristics depending on its size and location and is less likely to act in an unduly discriminatory manner than a Transmission Provider that is a market participant. The RTO or ISO shall therefore have greater flexibility to customize its interconnection procedures and agreements to fit regional needs.

## 6. Waiver Availability for Small Entities

828. In the NOPR, we did not address whether special provisions are needed for small Transmission Providers for whom providing Interconnection Services might be overly burdensome.

# **Comments**

829. Maine PSC asks the Commission to provide flexibility and waiver of the full requirements of the Final Rule LGIP and Final Rule LGIA for small transmission owners. Southwest Transmission requests that the current "small utility" exception for Order Nos. 888 and 889 should not only be retained, but it should be expanded to apply to cooperatives with total electric energy dispositions that exceed four million MWh annually and with outside sales that do not exceed one million MWh annually. SoCal Water District also asks for a waiver for utilities with annual sales of less than four million MWh.

### **Commission Conclusion**

830. We are sympathetic to the array of concerns raised by small Transmission Providers. Order Nos. 888 and 889 established guidelines for the granting of waivers to small entities, and this Final Rule adopts that approach and makes conforming changes to the regulatory text in Part 35 of the Commission's regulations. <sup>141</sup> We recognize, for example, that it might be a financial burden on a small Transmission Provider to perform Interconnection Studies or manage the construction of Interconnection Facilities in the same manner as a larger Transmission Provider. The small Transmission Provider may simply not have the staff or expertise to efficiently accommodate all Interconnection Requests.

831. Because the possible scenarios under which small entities may seek waivers from the Final Rule are diverse, they are not susceptible to resolution on a generic basis and we will require applications and fact-specific determinations in each instance. If the circumstances that give rise to the exemption change, the waiver may no longer be appropriate. In addition, we will apply the same standards to any entity seeking a waiver, including public utilities seeking waiver of some or all of the requirements of the Final Rule, as well as non-public utilities seeking waiver of the reciprocity provision. Each entity, however, will have to apply for this waiver and demonstrate that it qualifies for the waiver as required in Order No. 888.

# 7. OATT Reciprocity Requirements Applied to the Final Rule LGIP and Final Rule LGIA

\*151 832. In the NOPR, we proposed that the Final Rule LGIP and Final Rule LGIA be subject to the reciprocity provision of Order No. 888, as incorporated into the OATTs adopted by public utilities. <sup>142</sup> The reciprocity provision allows any public utility that provides open access transmission to a non-public utility to receive as a condition of service non-discriminatory access in return. <sup>143</sup> With the addition of the Final Rule LGIP and Final Rule LGIA to the OATT, in order to meet its reciprocity obligation, a non-public utility would have to provide Interconnection Service to the Transmission Provider and the Transmission Provider's Affiliates under the same terms and conditions under which it receives service.

## **Comments**

- 833. Several public power commenters, including Lakeland, LPPC, Nebraska PPD, NRECA-APPA, and the Public Power Council, request that the Commission clarify that it indeed intends to apply, without modification, the reciprocity policy as expressed in Order No. 888 to the Final Rule LGIP and Final Rule LGIA. Other commenters such as LADWP and LIPA warn that any attempt to expand the reciprocity policy to allow a generator unaffiliated with a Commission-jurisdictional Transmission Provider to require a non-public utility to comply with the reciprocity condition would be an impermissible extension of Commission jurisdiction.
- 834. Mirant argues that the Commission should add additional reciprocity language to every Transmission Provider's OATT that conditions the continued provision of transmission service on a non-public utility Interconnection Customer offering comparable Interconnection Service on its own transmission facilities.
- 835. Nebraska PPD objects to any reciprocity with respect to the Final Rule LGIP and Final Rule LGIA. In the alternative, it seeks clarification that the jurisdictional Transmission Provider may waive reciprocity. It also joins LPPC in requesting that only terms and conditions, and not the rate provisions, be subject to the reciprocity condition.
- 836. Pinnacle West argues that the Commission should state that the reciprocity requirement cannot be satisfied if a non-public utility fails to provide credits against transmission service bills for Network Upgrades. Otherwise, Pinnacle West continues, the non-public utilities would be engaging in prohibited "and" pricing that charges customers twice for transmission service. It states that Commission precedent has made clear that to satisfy reciprocity, a non-public utility must charge rates comparable to the rates it charges itself. <sup>144</sup>
- 837. TAPS explains that the reciprocity condition should impose an obligation to interconnect on a basis that is reasonable under the circumstances and comparable to the way the non-public utility treats its own interconnections. It supports the availability of a Commission waiver of the reciprocity requirement for small transmission owners.
- \*152 838. Certain public power entities, including the Bureau of Reclamation, LIPA, NYTO, Southwest Transmission, and TAPS, ask the Commission to consider the statutory or regulatory restrictions applicable to public power and other non-public utilities when the Commission evaluates their reciprocity compliance filings. They request that non-public utilities be afforded sufficient flexibility to include or modify certain provisions as required by law.

839. SoCal Edison expresses concern that an interconnection with a non-public utility may require Network Upgrades to a neighboring public utility's transmission facilities, and that the neighboring public utility would have no recourse should the owner of the generator and the non-public utility proceed with the interconnection without paying the neighboring public utility's upgrade costs. It proposes that the Commission, as part of the reciprocity provision, allow a jurisdictional utility to disconnect from its non-jurisdictional neighbor unless the neighbor ensures that the interconnecting generator mitigates the effects on the jurisdictional utility's system.

#### **Commission Conclusion**

840. Some commenters may have misunderstood our reciprocity statement in the NOPR as extending reciprocity rights to public utilities that do not own, control, or operate transmission either directly or through an Affiliate. The owners of many generators are public utilities that do not own, and are not affiliated with a public utility that owns, transmission. They are thus incapable of offering reciprocity service. We wish to make it clear that this Final Rule in no way alters the applicability of the reciprocity provision in the OATT and the reciprocity policy articulated in Order No. 888 and its progeny. The point of the reciprocity requirement is to permit a public utility that provides open access transmission service to require a non-public utility that owns, controls, or operates transmission facilities to have available reciprocal transmission service from that non-public utility. The concept of reciprocity is simply irrelevant if the non-public utility does not own, control, or operate transmission facilities, as is the case with many Interconnection Customers. Because the Final Rule LGIP and Final Rule LGIA are to become a part of the OATT, the reciprocity provision in the OATT applies to interconnection as well. EEI - Alliance of Energy Suppliers, MidAmerican, and Nevada Power, among others, filed comments supporting this approach.

841. Under the reciprocity provision in Section 6 of the OATT, if the public utility seeks transmission service from a non-public utility to which it provides open access transmission service, the non-public utility that owns, controls, or operates transmission facilities must provide comparable transmission service that it is capable of providing on its own system. Under the OATT, a public utility may refuse to provide open access transmission service to a non-public utility if the non-public utility refuses to reciprocate. A non-public utility may satisfy the reciprocity condition in one of three ways: first, it may provide service under a Tariff that has been approved by the Commission under the voluntary "safe harbor" provision. A non-public utility using this alternative submits a reciprocity Tariff to the Commission seeking a declaratory order that the proposed reciprocity Tariff to any public utility whose transmission service the non-public utility then must offer service under its reciprocity Tariff to any public utility whose transmission service the non-public utility seeks to use. Second, the non-public utility may provide service to a public utility under a bilateral agreement that satisfies its reciprocity obligation. Finally, the non-public utility may seek a waiver of the reciprocity condition from the public utility.

\*153 842. A non-public utility that has a "safe harbor" Tariff may add to its Tariff an interconnection agreement and interconnection procedures that substantially conform or are superior to the Final Rule LGIP and Final Rule LGIA if it wishes to continue to qualify for safe harbor treatment. A non-public utility that owns, controls, or operates transmission and that has not filed with the Commission a safe harbor Tariff and seeks transmission service from a public utility must either satisfy its reciprocity obligation under a bilateral agreement or seek a waiver of the OATT reciprocity condition from the public utility.

843. We do not require, as Pinnacle West proposes, that a non-public utility also provide transmission credits for Network Upgrade costs, to satisfy the Commission's reciprocity condition. With respect to a tariff filed under the "safe harbor" provision, our reciprocity policy requires that it contain rates comparable to the rates the non-public utility charges itself. <sup>146</sup> As for rates contained in a bilateral agreement, they are a fact-specific matter that will be subject to a case-by-case analysis. <sup>147</sup>

844. Regarding the applicability of the reciprocity requirement to public power and other nonjurisdictional entities, we shall limit reciprocity compliance to those services a nonjurisdictional entity is capable of providing on its system. <sup>148</sup> We likewise will consider the legal and regulatory restrictions on nonjurisdictional entities' contractual rights and tax-exempt status when we evaluate any "safe harbor" reciprocity filings.

845. Finally, since we did not propose to change the reciprocity condition articulated in the OATT in this Final Rule, SoCal Edison's concerns are more appropriately addressed in the discussion of effects on third party systems.

## 8. General Comments/Clarifications

### a. Insurance

846. In the NOPR, we omitted the insurance requirements originally filed in the ANOPR Consensus LGIA. Those insurance requirements would have set out the minimum coverage types and amounts that each Party to the LGIA must maintain. The NOPR did not propose insurance requirements because insurance requirements are not contained in the OATT.

#### **Comments**

847. Many commenters, primarily Transmission Providers, ask the Commission to reconsider its proposal to omit the insurance requirements. <sup>149</sup> They argue that insurance provisions are common in individually negotiated interconnection agreements and are important for managing risks and containing liability costs. The magnitude of the costs and potential liability at issue necessitate the inclusion of insurance provisions, they claim. Entergy explains that since the indemnification provision in NOPR LGIA Article 18 likely will be inadequate to make the Transmission Provider whole, insurance is necessary to ensure that damaged Parties are made whole for a disturbance caused by a Generating Facility.

848. Several commenters, including PSNM, Southern, and Tenaska, argue that the Commission should not follow the OATT on this issue because Interconnection Service is different from transmission service in that the operation of generators poses safety and operational risks. PJMTO and PSEG note that a generation project is unlikely to obtain financing without appropriate insurance provisions within the Final Rule LGIA.

\*154 849. Some commenters, including Avista, Dynegy, FP&L, and National Grid, argue that the Commission should restore the insurance provision that appeared in the ANOPR LGIA, which included mandatory insurance types and coverage amounts. Others, including Dominion Resources, NYTO, and Progress Energy, argue that while state laws and local business practices should dictate the actual amount of coverage, the Final Rule LGIA should describe the types of insurance coverage each Party must carry. Some commenters including EEI - Alliance of Energy Suppliers state that while it is infeasible on a generic basis to stipulate the appropriate levels of insurance for all facilities, the Interconnection Customer and Transmission Provider should be required to maintain certain minimum levels of insurance as agreed by the Parties.

### **Commission Conclusion**

850. We conclude that requiring certain minimum insurance in the Final Rule will benefit both the Transmission Provider and the Interconnection Customer and will help the Transmission Provider to avoid undue financial risk. Accordingly, we are restoring the insurance requirement in the Final Rule LGIA. The addition of this provision should help the Transmission Provider and the Interconnection Customer to manage the risks arising from Interconnection Service. The Final Rule requires that each Party, at its own expense, maintain certain minimum insurance coverages throughout the period of their interconnection agreement. These coverages include Employers' Liability and Workers' Compensation Insurance, Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance, and Excess Public Liability Insurance.

## **b.** Liquidated Damages

851. Two liquidated damages provisions appeared in the NOPR, one in Article 5.1 of the LGIA and the other in Section 13.5 of the LGIP.

852. The liquidated damages provision in the NOPR LGIA would be applicable if an Interconnection Customer chooses the option described in Article 5.1.B. Under this option, if a Transmission Provider fails to complete construction of the Interconnection Facilities by the In-Service Date or the Network Upgrades by the Commercial Operation Date, the Transmission Provider would pay the Interconnection Customer liquidated damages. Liquidated damages would be limited to 0.5 percent per Calendar Day of the actual aggregate costs of the Interconnection Facilities or Network Upgrades for which the Transmission Provider remains responsible, not to exceed 20 percent of such costs.

853. The liquidated damages provision in Section 13.5 in the NOPR LGIP would have the Transmission Provider pay liquidated damages if it fails to meet its obligations in the LGIP and does not remedy the failure within 15 Business Days. Liquidated damages would be one percent of the actual costs of the applicable study cost per Calendar Day, with a cap at 50 percent. Also, upon expiration of the remedy period, the Transmission Provider would refund any deposit amount for the applicable study that the Interconnection Customer had paid beyond the actual reasonably incurred study costs.

#### **Comments**

\*155 854. Many commenters make similar arguments about these provisions, and since the provisions serve different functions, there may be different responses to the same argument. Nevertheless, there are a few issues that the Commission will address collectively; namely, legal authority to allow liquidated damages, and the applicability of liquidated damages to public power organizations and RTOs.

# (1)Legal Authority to Require Liquidated Damages

855. Some commenters argue that liquidated damages are beyond the Commission's statutory authority inasmuch as they are penalties that are not fact-specific because they are not designed to remedy the actual damages experienced, <sup>150</sup> or are damages beyond the statutory authority of the Commission. <sup>151</sup> Others, including El Paso and WestConnect RTO, argue that liquidated damages are inconsistent with just and reasonable rates under the Federal Power Act. Southern questions whether the Commission has authority to require liquidated damage in private contracts. Idaho Power argues that the liquidated damages provisions violate the Federal Power Act by preventing a Transmission Provider from recovering costs prudently incurred in providing service to an Interconnection Customer. Maine PSC notes that the imposition of liquidated damages is at odds with the Commission's precedent on liability, which states that there should be no liability without fault and that liability should be unavoidable if caused by one's own gross negligence or intentional actions. <sup>152</sup> Other commenters, including Idaho Power and WestConnect RTO, argue that an Interconnection Customer should file a complaint if it believes that the rates, terms, and conditions of Interconnection Service are unjust or unreasonable.

# **Commission Conclusion**

856. We are deleting the liquidated damages provisions from the Final Rule LGIP and retaining them, with modifications, in the Final Rule LGIA.

857. Liquidated damages provisions are within our statutory authority because, although we do not assess or award damages, we have jurisdiction under Section 205 over agreements from which damages may arise. Liquidated damages can help manage risk within a jurisdictional agreement.

858. In response to the comments questioning the imposition of liquidated damages by regulatory fiat, we clarify that the Final Rule, like the NOPR, does not require liquidated damages. A Transmission Provider has the option to agree to a liquidated damages provision after agreeing to the dates for designing, procuring and constructing the Interconnection Facilities and Network Upgrades designated by the Interconnection Customer. <sup>153</sup> If the Parties are unable to agree on an acceptable schedule, they may negotiate terms and conditions - including revisions to the liquidated damages provision - under the Negotiated Option

in Article 5.1.4 of the Final Rule LGIA. So, rather than impose liquidated damages, the Final Rule LGIA provides liquidated damages as an option that may become a provision in the interconnection agreement signed by the Parties.

\*156 859. Because we are not including a liquidated damages provision in the Final Rule LGIP, we are not discussing that proposed provision here.

## (2) Applicability of Liquidated Damages to Public Power, Cooperatives, and RTOs

860. Georgia Transmission argues that liquidated damages are particularly burdensome for cooperatives because of their inability to recover these costs except directly from the cooperative customers. For similar reasons, liquidated damages may make it financially prohibitive for some public power providers to handle Interconnection Requests from third party Interconnection Customers. <sup>154</sup> Western warns that it cannot agree to a contractual provision that would result in open-ended financial exposure when funds have not been appropriated for this purpose.

861. Midwest ISO TO argues that the liquidated damages provisions will not work in the RTO context, especially when the RTO is non-profit, for several reasons: (1) a Transmission Owner in an RTO should not be subject to liquidated damages because it will not be in charge of the interconnection process - the RTO will be, (2) an RTO should not pay liquidated damages since the costs will end up being spread over all customers who will pay the Interconnection Customer for the RTO's failure to meet the schedule, and (3) in an RTO context, with a neutral, non-profit RTO, there should be much less of a need for liquidated damages.

862. Cal ISO argues that since a Transmission Owner, rather than an RTO or ISO, will undertake many of these functions, the RTO or ISO should not be a guarantor for the Transmission Owner. For the RTO's responsibilities, Cal ISO continues, an Interconnection Customer is afforded recourse via Section 210 of the Federal Power Act.

863. PSEG and PJMTO similarly argue that the Final Rule should treat liquidated damages as a last resort remedy that would not apply where either the Interconnection Customer has an effective alternative backstop to protect itself against discriminatory conduct by the Transmission Provider or Transmission Owner, or the interconnection process is under the control of an independent third party unaffiliated with any market participant.

864. The Midwest ISO also argues that if an RTO or the Transmission Owner must pay liquidated damages, the Commission should limit their exposure by imposing liability only in cases of gross negligence and should require a Party to pay liquidated damages only if its action or inaction alone caused the damages.

### **Commission Conclusion**

865. In response to commenters that question their ability to pay or recover liquidated damages, the Final Rule LGIA does not require that all executed interconnection agreements contain liquidated damages provision. As noted above in the discussion of proposed LGIA Article 5.1 (Options), a Transmission Provider may reject liquidated damages when the schedule proffered by the Interconnection Customer exposes it to too much risk.

\*157 866. Therefore, public power entities that have met a reciprocity obligation by filing a safe harbor Tariff will have the same opportunity to negotiate the liquidated damages provision as any other non-public power Transmission Provider. Entities with safe harbor tariffs that face unusual limitations, such as cooperatives financed by the Rural Utilities Service or federal power entities subject to contracting restrictions set by statute or regulation, may request waiver of the liquidated damages provision of the Final Rule LGIA when they comply with their reciprocity condition.

867. We agree with the Midwest ISO that liquidated damages may be unnecessary when an RTO or ISO administers the interconnection agreement and oversees the interconnection process. As noted above in Part II.C.5 (Variations from the Final Rule), we will permit RTOs and ISOs to use an independent entity variation standard to justify variations from the Final Rule

provisions. Accordingly, we will consider proposals to eliminate liquidated damages from the compliance filings of RTOs and ISOs.

## (3) General Comments on the LGIA Liquidated Damages Provision

868. Many commenters, most of them Transmission Providers, ask the Commission to either eliminate <sup>155</sup> or modify <sup>156</sup> the liquidated damage provision in the NOPR LGIA. They argue that liquidated damages are inappropriate because the Transmission Owner recognizes no profit from the interconnection and has no means of recouping such costs. <sup>157</sup>

869. PG&E argues that the Commission should eliminate the liquidated damage clause and instead provide a rapid method for addressing Interconnection Customer complaints. PacifiCorp contends that this is not an appropriate context for liquidated damages because the Parties are not negotiating the terms. The Louisiana PSC argues that liquidated damages should be unavailable without a demonstration that harm was caused and that the Transmission Provider caused the harm. While FP&L argues that liquidated damages should not apply unless a Transmission Provider can recover these costs in rates, including retail rates, the Louisiana PSC argues that liquidated damages should not be recoverable in transmission charges.

870. Some commenters contend that, if the Parties agree to liquidated damages and liquidated damages are recoverable, it should be the exclusive remedy for failure to complete construction on time. <sup>158</sup> SoCal Edison argues that operating dates must be agreed upon between the Transmission Provider and the Interconnection Customer in order for liquidated damages to apply. Southern contends that liquidated damages should be available only for facilities that are not completed on time. If a Transmission Provider is subject to liquidated damages for failure to complete Interconnection Facilities being built by another Interconnection Customer, Dominion Resources argues, the Interconnection Customer constructing the Interconnection Facilities should indemnify the Transmission Owner for any liquidated damages resulting from the Interconnection Customer's failure to meet the designated date.

\*158 871. Others commenters, including Georgia Transmission and NRECA-APPA, argue that, in lieu of liquidated damages, the Commission should include a Good Utility Practice and best efforts standard that holds the Transmission Provider liable for actual damages. Several commenters ask the Commission to adopt a provision that would protect a Transmission Provider from liquidated damages if it meets a certain standard, such as a best efforts or Reasonable Efforts standard. <sup>159</sup> Some commenters, including Cleco and FP&L, argue that liquidated damages should be availably only in cases of intentional wrongdoing or negligence.

872. Several Transmission Providers also argue alternatively that, if the liquidated damages provision remains in the Final Rule LGIA, it should be modified. Recommended modifications include not holding the Transmission Provider liable for Force Majeure events and circumstances beyond its control, such as permitting and regulatory delays, delays due to third parties, and delays due to the requesting Interconnection Customer or other Interconnection Customers. <sup>160</sup> Ameren argues that proposed LGIA Article 5.1.B(ii) might result in confusion, appeals, and litigation.

873. FP&L comments that the liquidated damages provision penalizes the Transmission Provider without a symmetrical opportunity for it to make a profit or recoup its costs and requests that the Transmission Provider have the opportunity to receive a financial benefit above its costs if a study is completed on time. Other commenters, including American Transmission, Cleco, MidAmerican, PG&E, and SoCal Edison, ask that the Commission make liquidated damages bilateral, thereby subjecting an Interconnection Customer to liquidated damages for missing its milestones. American Transmission further argues that an Interconnection Customer should be responsible for liquidated damages payable to the Transmission Provider at two levels of liability - a higher level when Generating Facilities lower in the queue are dependent on the Interconnection Customer's timely performance and a lower level when no third parties are harmed by the delay but the Transmission Provider deserves compensation.

- 874. Ameren argues that the NOPR LGIA does not address a situation in which multiple Interconnection Customers rely on the same Transmission Provider Interconnection Facilities and Network Upgrades. American Transmission proposes that total liability for a particular project should be the same regardless of the number of Interconnection Customers requesting the component. The Construction Issues Coalition recommends that the Commission modify proposed LGIA Article 5.1.B(ii) to specify a maximum of 20 percent of the project costs for all Interconnection Customers relying on the upgrade.
- 875. National Grid argues that the ERCOT LGIA provision, which has a compensatory approach, was better than the NOPR LGIA provision, which takes a punitive approach. The asymmetry between risk and reward may cause a Transmission Provider to avoid any obligation to perform Interconnection Services, says National Grid. Since a Transmission Provider can opt out of the liquidated damages provision in the interconnection agreement, an Interconnection Customer will likely be forced to find another builder.
- \*159 876. PG&E requests that the Commission adopt a 15 month period for completing the work, which was in the ERCOT liquidated damages provision.
- 877. Cal ISO argues that damages must track the entity performing the work. In cases where there is an RTO or ISO, the Transmission Owner should be liable, and the RTO or ISO should not be a guarantor for the Transmission Owner.
- 878. Western argues that it is inequitable to allow the Interconnection Customer to extend the In-Service Date without penalty (Article 5.5) without also giving the Transmission Provider this option. Also, the Transmission Provider should be allowed to provide justification for not meeting unreasonable deadlines.
- 879. The Construction Issues Coalition argues that proposed LGIA Article 5.1. B.1. a should be modified to allow a Transmission Provider or a Transmission Owner <u>not</u> to enter into an interconnection agreement that includes liquidated damages for any reason, not just because of unacceptable dates. Because the limits on liquidated damages recovery may not be appropriate for every Interconnection Customer, Mirant argues, the proposed LGIA liquidated damages provision should be optional and left to the election of the Interconnection Customer.
- 880. American Forest expresses concern that the liquidated damages cap could be used by the Transmission Provider to delay or deny completion of Interconnection Studies or construction of facilities or upgrades simply by paying liquidated damages. The Commission should clarify that the cap should not be used by the Transmission Provider to impede the development of new generation. It proposes either deleting the cap or adding language to specify that the cap does not apply if the Transmission Provider intentionally delays or denies service. Also, Cal ISO notes that the penalty of 0.5 percent of the upgrade cost in proposed LGIA Article 5.1.A(ii) for each day the Transmission Provider fails to meet an agreed upon deadline for completing any portion of the Transmission Provider Interconnection Facilities or Network Upgrades does not really work as an incentive because there may be no incentive to meet a deadline if the cost of the upgrade is small because the penalty would be so low.
- 881. Several commenters, including Duke Energy, EPSA, and NE Utilities, support the liquidated damages provision in the NOPR LGIA but none provide detailed arguments explaining their support.

### **Commission Conclusion**

882. As noted above, the proposed LGIA liquidated damages provision allows a Transmission Provider to refuse the Interconnection Customer's proffered construction schedule and perhaps even negotiate to revise the liquidated damages provision if the Parties end up negotiating over construction terms. <sup>161</sup> We are concerned that Transmission Providers will always negotiate to eliminate liquidated damages liability unless the provision is revised to further protect the Transmission Provider. For this reason, we are adopting the recommendations of several commenters to revise this provision.

\*160 883. In the Final Rule LGIA, liquidated damages would be recoverable if an Interconnection Customer chooses the Alternate Option in Final Rule LGIA Article 5.1.2. Under this option, if a Transmission Provider fails to complete the Interconnection Facility or the Network Upgrades by the dates designated by the Interconnection Customer and accepted by the Transmission Provider, the Transmission Provider would pay the Interconnection Customer liquidated damages. Liquidated damages would be limited to 0.5 percent per Calendar Day of the actual aggregate costs of the Interconnection Facilities or Network Upgrades for which the Transmission Provider remains responsible, and not to exceed 20 percent of the Transmission Provider's actual costs. They would not be recoverable under certain circumstances, such as when the Interconnection Customer is not ready to commence use of the Transmission Provider's Interconnection Facilities or Network Upgrades by the date specified (unless the Interconnection Customer was not ready due to delay on the part of the Transmission Provider) or if the delay is due to a cause beyond the reasonable control of the Transmission Provider.

884. Liquidated damages should not be payable if the delay is due to circumstances beyond the control of the Transmission Provider. As a result, liquidated damages will be available only due to the action or inaction of a Transmission Provider, and not when the delays are due to third parties or other circumstances beyond the Transmission Provider's control. For the purposes of this provision, the Transmission Provider's subcontractors will not be considered third parties, but delays due to the action or inaction of Interconnection Customers earlier in the queue will be considered delays due to third parties. This provision also will sufficiently protect a Transmission Provider that seeks to interconnect multiple Generating Facilities to the same interconnection, since liability to each of the Interconnection Customers for liquidated damages may be avoidable as long as the delay is not attributable to the Transmission Provider or its subcontractors. This will also counterbalance the Interconnection Customer's ability to adjust the schedule under Final Rule Article 5.7, since the Transmission Provider can avoid liability for the acts of third parties. Finally, because liquidated damages liability will not have to be paid unless the Transmission Provider is at fault, we conclude that these damages will not be considered just and reasonable costs of service and will not be recoverable in transmission rates.

885. Finally, if the Parties agree to liquidated damages and liquidated damages are payable, this will be the exclusive remedy for failure to complete construction on time. We are not making the liquidated damages provision bilateral, however, because the Final Rule LGIA provides a Transmission Provider the necessary protection from liquidated damages liability, as well as the ability to negotiate provisions of the interconnection agreement to better match its chosen level of risk.

# \*161 (4)General Comments on the LGIP Liquidated Damages Provision

886. Many commenters, most of them Transmission Providers, ask the Commission to either eliminate <sup>162</sup> or modify <sup>163</sup> the liquidated damages provision in the LGIP.

887. Those opposed to the liquidated damages provision in the LGIP argue, among other things, that liquidated damages are inappropriate because the Transmission Owner recognizes no profit and has no means for recouping costs. <sup>164</sup> Entergy notes that liquidated damages are improper because the Commission traditionally rejected these payments in favor of the payments of identifiable and direct costs incurred. PacifiCorp contends that this is not an appropriate context for liquidated damages because the Parties are not bargaining on the terms. Southern complains that the liquidated damages are improper because the LGIP provides for an uncontrolled and lengthy process due to the many opportunities for the Interconnection Customer to change data and Generating Facility configuration.

888. The NYISO and PSNM argue that instead of liquidated damages, the Commission should use the OATT Section 19.4 study requirement, which requires due diligence to perform within a specified time period. Under this approach, if a Transmission Provider is unable to meet the deadline, it must notify the customer and provide an estimate of the additional time needed and explain why more time is necessary.

889. Among those commenters requesting modification, several Transmission Providers propose that liquidated damages be made bilateral, thereby subjecting Interconnection Customers to liquidated damages for failure to meet deadlines. <sup>165</sup> American

Transmission argues that there should be separate levels of liability facing the Interconnection Customer depending on third party harm caused by the Interconnection Customer's delay. Some commenters, including National Grid and NE Utilities, recommend a reciprocal financial incentive to earn for superior performance to offset the risk of liquidated damages.

- 890. Several Transmission Providers, including AEP, Ameren, Idaho Power, LG&E Energy, and NE Utilities, recommend modifying the proposed LGIP to exempt the Transmission Provider from circumstances beyond its control, such as the action or inaction of third parties, the failure of the Interconnection Customer to provide all relevant data, failure of a third party contracted by the Interconnection Customer to provide timely studies, or permitting or other state regulatory prerequisites.
- 891. The Salt River Project contends that a Transmission Provider should be able to avoid liquidated damages in the LGIP as it can in the LGIA. NSTAR recommends that the LGIP adopt NEPOOL language that allows the Parties to agree upon a schedule with deadlines if money damages are at stake for non-completion.
- 892. Several commenters, including Dominion Resources, FP&L, and Progress Energy, argue that the liquidated damages provision should be revised so that it does not apply unless the failure to meet a deadline results from negligence or intentional wrongdoing by the Transmission Provider.
- \*162 893. Duke Energy asks the Commission to clarify that the Reasonable Efforts standard also applies to restudies, and that liquidated damages apply only to the study obligations under the LGIP, and not all of the LGIP obligations. NE Utilities recommends that, to avoid overlap and ambiguity, the first sentence of proposed LGIP Section 13.5 should be revised to apply to "study-related" obligations.
- 894. American Transmission argues that the 50 percent cap on liquidated damages in the LGIP is excessive and it should be reduced to 25 percent.
- 895. American Forest proposes either deleting the cap or adding language to specify that the cap does not apply if the Transmission Provider intentionally delays or denies service.
- 896. Mirant argues that the liquidated damages provision in the LGIP should provide for liquidated damages of one percent per day starting on the date the Transmission Provider misses a deadline for completing the study, but after 30 days, the Transmission Provider should pay the Interconnection Customer liquidated damages equal to the remaining difference between the study cost and the amount already paid in liquidated damages. Also, the Transmission Provider should refund with interest any deposit amount in excess of the actual reasonably incurred study costs immediately upon expiration of the 15 day remedy period. These modifications provide a better incentive for Transmission Provider compliance.
- 897. Some commenters, including Calpine, EPSA, and KeySpan, argue in favor of the incentive that this proposed liquidated damages provision provides.

## **Commission Conclusion**

- 898. We are eliminating liquidated damages from the Final Rule LGIP. While we understand the value of providing an incentive to complete Interconnection Studies, we are concerned that the availability of such a provision may undermine the Transmission Provider's ability to economically administer its study process.
- 899. Moreover, we question whether liquidated damages are appropriate during the study phase, since at that time it will be unclear whether a prospective Interconnection Customer intends to pursue its Interconnection Request. Because at this stage the prospective Interconnection Customer does not face a substantial risk of damages, we are not standardizing liquidated damages for Transmission Providers during the study phase (<u>i.e.</u>, in the Final Rule LGIP). Rather, we are requiring that a Transmission Provider use due diligence to perform within a specified time period. This approach, which has been applied to facilities

studies in OATT Section 19.4, gives the Transmission Provider a deadline, and requires that the Interconnection Customer be kept apprised in writing of any difficulties encountered in meeting the deadline. In order to ensure that a Transmission Provider complies with its obligations, we urge the Interconnection Customer to bring any disputes to the Commission's Dispute Resolution Service, or if necessary, pursue claims of unduly discriminatory treatment under Section 206 of the Federal Power Act.

## c. Consequential Damages

\*163 900. Consequential damages are losses that flow indirectly - rather than directly and immediately - from an injurious act. <sup>166</sup> In the NOPR, the Commission chose to maintain consistency with the OATT, and the NOPR LGIA did not limit liability for losses or costs for consequential damages. Instead, it relied on the statement in Order No. 888-A that Transmission Providers and customers can rely on any statutes or other laws to protect Parties from consequential or indirect damages. <sup>167</sup> The NOPR also stated that the OATT protects a Transmission Provider from consequential damages and indirect damages claims by third parties though indemnification except in cases of negligence or intentional wrongdoing by the Transmission Provider. The Commission sought comments on this approach and the relative merits of the alternative provisions in the consensus and ERCOT interconnection agreements.

#### **Comments**

- 901. Many commenters, mostly Transmission Providers, recommend that the Final Rule LGIA limit exposure to consequential damages, such as incidental, exemplary or indirect damages, lost profits, and other business interruption damages. <sup>168</sup> Without a provision limiting exposure, the Mississippi PSC explains, a Transmission Provider will be unable to contractually protect itself from these claims. The risk of exposure will impose significant additional costs, which will then be charged to all transmission customers. In this way, clauses that exclude liability for consequential damages reduce rates.
- 902. APS explains that, because statutes for liability vary from state to state, the LGIA must recognize these differences, and dictating specific terms should be avoided. FP&L notes that, contrary to the Commission's reliance on state statutes, not all states provide consequential damages protection. As an example, FP&L points to Florida, which allows exclusion of consequential damages, but the provision must be included in a contract. Progress Energy warns that a reliance on statutes or other laws dealing with consequential damages, as the Commission proposed in the NOPR, will only invite future disagreements and litigation.
- 903. Some commenters, including Duke Energy and Dynegy, request that, if language limiting liability for consequential damages is not inserted, the Commission should, at a minimum, provide Parties the option of mutually agreeing to include a limitation on liability, consistent with existing Commission policy.
- 904. Westconnect RTO notes that if liquidated damages are not available under the option in proposed LGIA Article 5.1B(i) (b), an Interconnection Customer may still sue the Transmission Provider for failing to meet the In-Service Date if there is no limitation of liability clause. It notes that without a clause limiting liability for consequential damages, an Interconnection Customer may still be able to secure damages akin to liquidated damages, even if the Parties do not expressly agree to liquidated damages in their executed interconnection agreement.
- \*164 905. Central Maine takes issue with the NOPR position that a Transmission Provider is protected from consequential and indirect damage liability to third parties through indemnification. A Transmission Provider's obligation to indemnify the Interconnection Customer for third party claims against the Interconnection Customer may be viewed as a payment of consequential damages by the Transmission Provider.

### **Commission Conclusion**

906. There are several factors that convince us that a provision limiting consequential damages should be added to the Final Rule LGIA. First, by standardizing the liability protection, rather than leaving the issue to state law, it should offer greater certainty to Transmission Providers and Interconnection Customers alike. Contrary to APS's argument, it is precisely because state liability statutes vary that we are prescribing a specific liability provision. Second, liability limitation provisions protect against excessive utility rates by capping damage awards. <sup>169</sup> Finally, a goal of this rulemaking is to reduce litigation arising from interconnection, and an express provision in the LGIA limiting liability will have this effect. For these reasons, we are including a provision limiting consequential damages. Final Rule LGIA Article 18.2 protects either Party from liability for any special, indirect, incidental, consequential, or punitive damages, including profit or revenue. The Parties remain liable for any liquidated damages payable, and any damages for which a Party may be liable to the other Party under another agreement.

## d. Two vs. Three Party Agreements

907. In the NOPR, the Commission proposed that, along with the Interconnection Customer, the Transmission Provider, and, to the extent necessary, the Transmission Owner, must become signatories to the interconnection agreement. The intent was to require the Transmission Provider to sign the agreement, and if the Transmission Owner is a separate entity, to require it to sign as well. We reasoned that the Transmission Provider should sign the agreement because the Interconnection Service would be provided under the Transmission Provider's OATT. However, we noted that no one disputes that the Transmission Owner must also enter into an agreement with the Interconnection Customer, and it would be inefficient to require the Interconnection Customer to enter into separate agreements with the Transmission Owner and the Transmission Provider.

#### **Comments**

908. Interconnection Customers, such as Calpine, Dairyland Power, and PSEG, generally prefer a three party agreement because it facilitates "one-stop shopping." RTOs, ISOs, and some Transmission Owners, including Cal ISO, PJM, and PG&E believe that, when the Transmission Provider is not the Transmission Owner, the former's responsibilities can be fully addressed in the Tariff and it need not be a Party to the interconnection agreement. They argue that the main purpose of the agreement is to establish a property-based relationship between the Interconnection Customer and the Transmission Owner. Also, PJM states that the NOPR LGIA is not structured to accommodate its use as a three party agreement, and should be changed to clearly define the roles of Transmission Owners and Transmission Providers.

# **Commission Conclusion**

\*165 909. We are replacing the proposed words "to the extent necessary" with the words "if the Transmission Owner is not the Transmission Provider" in the Final Rule provision. Thus, both must sign the interconnection agreement when the Transmission Owner is not also the Transmission Provider. We believe that this better defines the relationship among the Parties in one document, protects the Interconnection Customer and, therefore, facilitates the development of new generation resources. In an RTO or ISO where the Transmission Provider is not the Transmission Owner, the RTO or ISO's compliance filing may propose a modified interconnection agreement that provides different respective rights and obligations in the region. In other cases, we do not believe that the three party agreement should create an undue burden for either entity.

# **D.** Compliance Issues

#### 1. Amendments to Transmission Providers' OATTs

910. The Commission is requiring all public utilities that own, control, or operate interstate transmission facilities to adopt the Final Rule LGIP and Final Rule LGIA as an amendment to their OATTs within 60 days after the publication of the Final Rule in the Federal Register. RTOs and ISOs are required to make a compliance filing by this same deadline, but their compliance filings will be assessed using the independent entity variation standard as described in Part II.C.5 of this preamble.

## 2. Grandfathering of Existing Interconnection Agreements (ISOs and non-ISOs)

911. The Commission is not requiring retroactive changes to individual interconnection agreements filed with the Commission prior to the effective date of this Final Rule. <sup>170</sup> Non-generic agreements submitted for approval by the Commission before the effective date of the Final Rule are grandfathered and will not be rejected outright for failing to conform to the Final Rule LGIA. Generic interconnection procedures submitted for approval or approved by the Commission before the effective date of the Final Rule must be resubmitted after being revised to conform to this Final Rule. For previously accepted individual interconnection agreements, the Commission's interconnection case law and policies govern.

912. As for requests for interconnection pending when the Final Rule takes effect, Final Rule LGIP Section 5.1 ensures that an Interconnection Customer that has been assigned a Queue Position before the issuance of the Final Rule retains that Queue Position. If an Interconnection Customer has signed any Interconnection Study agreement as of the effective date of the Final Rule, it has the option to either continue with the remaining Interconnection Studies under the Transmission Provider's existing study process or complete the remaining studies for which it does not have a signed Interconnection Study agreement under the provisions of the Final Rule LGIP.

### 3. Order No. 2001 and the Filing of Interconnection Agreements

\*166 913. Order No. 2001 <sup>171</sup> revised the format through which traditional public utilities and power marketers must satisfy their obligation, pursuant to Section 205 of the Federal Power Act and Part 35 of the Commission's Regulations, to file agreements with the Commission. <sup>172</sup> Public utilities that have standard forms of agreement in their transmission tariffs, cost-based power sales tariffs, or tariffs for other generally applicable services no longer need to file conforming service agreements with the Commission. The filing requirement for conforming agreements is now satisfied by filing the standard form of agreement and an Electronic Quarterly Report. <sup>173</sup> Order No. 2001 also lifts the requirement that parties to an expiring conforming agreement file a notice of cancellation or a cancellation tariff sheet with the Commission. The public utility may simply remove the agreement from its Electric Quarterly Report in the quarter after it terminates. <sup>174</sup>

914. Non-conforming agreements, which are agreements for transmission, cost-based power sales and other generally applicable services that do not conform to an applicable standard form of agreement in a public utility's tariff, must continue to be filed with the Commission for approval before going into effect. <sup>175</sup> This category includes unexecuted agreements and agreements that do not precisely match the applicable standard form of service agreement. <sup>176</sup>

915. With respect to interconnection agreements, Order No. 2001 found that Part 35 of the Commission's Regulations does not make a distinction between an interconnection agreement and other agreements for service that must be filed in conformance with this part of the Commission's Regulations. <sup>177</sup> Order No. 2001 therefore found that if an interconnection agreement conforms with a Commission-approved standard form of interconnection agreement, the utility does not have to file it but must report it in the Electric Quarterly Reports. Order No. 2001 also states that the requirement to file contract data and transaction data begins with the first Electric Quarterly Report filed after service commences under an agreement, and continues until the Electric Quarterly Report filed after it expires or by order of the Commission. However, an Interconnection Agreement that does not precisely match the Transmission Provider's approved standard LGIA or that is unexecuted must be filed in its entirety. The Transmission Provider should clearly indicate where the agreement does not conform to its standard Interconnection Agreement, preferably through red-lining and strike-out.

### III. INFORMATION COLLECTION STATEMENT

916. The Office of Management and Budget (OMB) regulations require that OMB approve certain reporting and record keeping (collections of information) imposed by an agency. <sup>178</sup> The information collection requirements in this Final Rule are identified

under the Commission data collection, FERC-516 "Electric Rate Schedule Filings." In accordance with Section 3507(d) of the Paperwork Reduction Act of 1995, <sup>179</sup> the proposed reporting requirements in the subject rulemaking will be submitted to OMB for review. Interested persons may obtain information on the reporting requirements by contacting the Federal Energy Regulatory Commission, 888 First Street, NE, Washington, D.C. 20426 (Attention: Michael Miller, Office of the Executive Director, 202-502-8415) or from the Office of Management and Budget (Attention: Desk Officer for the Federal Energy Regulatory Commission, fax: 202-395-7285, e-mail pamelabeverly.oirasubmission@omb.eop.gov).

\*167 917. The regulated entities shall not be penalized for failure to respond to this collection of information unless the collection of information displays a valid OMB control number.

918. **Public Reporting Burden**: The Commission did not receive specific comments concerning its burden estimates and uses the same estimates here in the Final Rule. Comments on the substantive issues raised in the NOPR are addressed elsewhere in the Final Rule.

Data Collection	No. of Respondents	No. of Responses	Hours Per Response	Total Annual Hours
FERC-516				
LGIPs & LGIAs	95	1	4	380
LGIPs & LGIAs to be developed	81	1	6	486
	81	1	25	2,205
Recordkeeping	176	1	6	1,056

Total Annual Hours for Collection: (reporting (2,891) + recordkeeping (1,056) = 3,947 hours.

**Information Collection Costs**: The Commission sought comments about the time to comply with these requirements. No comments were received. Staffing requirements to review and modify existing LGIPs & LGIAs = \$19,000 (95 respondents x \$200 (4 hours @ \$50 hourly rate)). To be added to this cost are the costs for review and preparation of new LGIPs and LGIAs or \$125,550 (81 respondents x \$1,550 (31 hours @ \$50 hourly rate)) = \$144,550. There are also the annualized costs for processing (operations) and maintenance (recordkeeping) of these documents = \$70,752 (176 respondents x \$402 ((6 hours @ \$50 hourly rate) (for processing these documents)(operations) + (6 hours @\$17 hourly rate) (recordkeeping/maintenance)). The Commission believes there will be a one-time start up costs to comply with these requirements for the procedures and agreements and then an additional \$70,752 to maintain them. Total annualized costs = \$215,302.

Titles: FERC-516 "Electric Rate Schedule Filings."

Action: Revision of Currently Approved Collection of Information

**OMB Control Nos.**: 1902-0096.

**Respondents**: Business or other for profit.

Frequency of Responses: One-time implementation.

**Necessity of Information**: The final rule revises the reporting requirements contained in 18 CFR Part 35. The Commission promulgates a standard LGIP and standard LGIA that public utilities must adopt. As noted in the Final Rule, the adoption of these procedures and agreement will (1) reduce interconnection costs and time for generators and Transmission Providers

alike; (2) limit opportunities for Transmission Providers to favor their own generation; (3) facilitate market entry for generation competitors; and (4) encourage needed investment in generator and transmission infrastructure.

\*168 919. Interconnection plays a growing crucial role in bringing much needed generation into the market to meet the needs of electricity customers. However, requests for interconnection frequently result in complex technical disputes about interconnection feasibility, cost and cost responsibility. The Commission expects that a standard LGIP and standard LGIA will reduce interconnection costs and time for Interconnection Customers and Transmission Providers, resolve most interconnection disputes, minimize opportunities for undue discrimination, foster increased development of economic generation, and improve system reliability.

920. For information on the requirements, submitting comments on the collection of information and the associated burden estimates including suggestions for reducing this burden, please send your comments to the Federal Energy Regulatory Commission, 888 First Street, NE, Washington, D.C. 20426 (Attention: Michael Miller, Office of the Executive Director, 202-502-8415) or send comments to the Office of Management and Budget (Attention: Desk Officer for the Federal Energy Regulatory Commission, fax: 202-395-7285, e-mail pamelabeverly.oirasubmission@omb.eop.gov)..

### IV. ENVIRONMENTAL IMPACT STATEMENT

921. Commission Regulations require that an environmental assessment or an environmental impact statement be prepared for any Commission action that may have a significant adverse effect on the human environment. <sup>180</sup> No environmental consideration is necessary for the promulgation of a rule that is clarifying, corrective, or procedural or does not substantially change the effect of legislation or regulations being amended, <sup>181</sup> and also for information gathering, analysis, and dissemination. <sup>182</sup> The Final Rule updates Part 35 of the Commission's Regulations and does not substantially change the effect of the underlying legislation or the regulations being revised or eliminated. In addition, the Final Rule involves information gathering, analysis and dissemination. Therefore, this Final Rule falls within categorical exemptions provided in the Commission's Regulations. Consequently, neither an environmental impact statement nor an environmental assessment is required.

## V. REGULATORY FLEXIBILITY ACT

922. The Regulatory Flexibility Act (RFA) <sup>183</sup> requires that a rulemaking contain either a description and analysis of the effect that the proposed rule will have on small entities or a certification that the rule will not have a significant economic impact on a substantial number of small entities. In the NOPR, the Commission stated that the proposed regulations would impose requirements only on interstate transmission providers, which are not small businesses. The Commission certified that the proposed regulations would not have a significant adverse impact on a substantial number of small entities.

## **Comments**

923. NRECA-APPA argues that the Commission failed to adequately account for the limited resources of small service providers when drafting the NOPR's RFA compliance statement. According to NRECA-APPA, the NOPR inconsistently suggests that it would apply to wholesale sales through Distribution Systems, but the RFA compliance language states that the regulations impose requirements only on interstate Transmission Providers.

# **Commission Conclusion**

\*169 924. As explained above, only facilities owned by public utilities that own, control, or operate interstate transmission facilities (Transmission Providers) are subject to the Final Rule. Thus the Final Rule applies to the same class of entities subject to Order No. 888. In Order No. 888, the Commission concluded that the number of affected small entities did not constitute a

"substantial number" under the RFA and noted that small entities would be eligible for a waiver. <sup>184</sup> The Commission adopts the same reasoning here. The waiver available for compliance with the Commission's Order No. 888 <sup>185</sup> is also available for this Final Rule.

The Regulatory Flexibility Act of 1980 (RFA) <sup>186</sup> generally requires a description and analysis of the effect of proposed or Final Rules that will have significant economic impact on a substantial number of small entities or a certification that the rule will not have such an economic effect. In this Final Rule, the Commission is requiring public utilities that own, control, or operate facilities used for transmitting electric energy in interstate commerce to modify their OATTs, first established under Order No. 888, to include a standard LGIP and standard LGIA. In Order Numbers 888 and 889, the Commission certified that its rules would not impose a significant economic impact on a substantial number of small entities. <sup>187</sup> In Order No. 888, the Commission found that just over one-tenth of the total number of public utilities constitute small entities. <sup>188</sup> And of that number, several had already filed OATTs, reducing this number even further. As the Commission noted in Order No. 888 and reemphasizes here, waiver provisions are applicable here. <sup>189</sup> This waiver policy follows the provisions of the Small Business Act (SBA) by acknowledging the definition of a small electric utility. The Small Business Size Standards component of the North American Industry Classification System defines a small electric utility as one that, including its affiliates, is primarily engaged in the generation, transmission, and/or distribution of electric energy for sale and whose total electric output for the preceding fiscal vear did not exceed 4 million MWh. <sup>190</sup> Continuing to make the waiver process available should address the concerns of those entities that ask the Commission to extend the "small utility" exception. <sup>191</sup> This Final Rule will promote consistent reporting practices for all reporting companies. It will not be a significant burden to industry, since several Transmission Providers have already filed interconnection procedures as part of their OATTs and much of the information is already being supplied under interconnection agreements throughout the industry. Accordingly, the Commission certifies that this Final Rule will not have a significant economic impact on a substantial number of small entities.

#### VI. DOCUMENT AVAILABILITY

\*170 925. In addition to publishing the full text of this document in the Federal Register, the Commission also provides all interested persons an opportunity to view and/or print the contents of this document via the Internet through the Commission's Home Page (<a href="http://www.ferc.gov">http://www.ferc.gov</a>) and in the Commission's Public Reference Room during normal business hours (8:30 a.m. to 5:00 p.m. Eastern time) at 888 First Street, N.E., Room 2A, Washington, D.C. 20426.

926. From the Commission's Home Page on the Internet, this information is available in the Federal Energy Regulatory Records Information System (FERRIS). The full text of this document is available on FERRIS in PDF and WordPerfect format for viewing, printing, and/or downloading. To access this document in FERRIS, type the docket number excluding the last three digits of this document in the docket number field.

927. User assistance is available for FERRIS and the Commission's Website during normal business hours from FERC Online Support (by phone at (866)208-3676 (toll free) or for TTY, contact (202)502-6652, or by e-mail at FERCOnlineSupport@ferc.gov), for TTY (202) 502-8659.

### VII. EFFECTIVE DATE AND CONGRESSIONAL NOTIFICATION

928. This Final Rule will take effect on [insert date that is 60 days after date of publication in the FEDERAL REGISTER]. The Commission has determined, with the concurrence of the Administrator of the Office of Information and Regulatory Affairs of the Office of Management and Budget, that this rule is not a "major rule" within the meaning of Section 251 of the Small Business Regulatory Enforcement Fairness Act of 1996. <sup>192</sup> The Commission will submit the Final Rule to both houses of Congress and the General Accounting Office. <sup>193</sup>

List of subjects in 18 CFR Part 35
Electric power rates, Electric utilities, Reporting and recordkeeping requirements.
By the Commission.
(SEAL)
Magalie R. Salas Secretary
In consideration of the foregoing, the Commission revises part 35, Chapter I, Title 18 of the Code of Federal Regulations, as follows.
PART 35 - FILING OF RATE SCHEDULES
1. The authority citation for part 35 continues to read as follows:
<b>Authority</b> : 16 U.S.C. 791a -825r, 2601 -2645; 31 U.S.C. 9701; 42 U.S.C. 7101 -7352.
2. In § 35.28, the last sentence in the paragraph (d) introductory text is revised, and paragraph (f) is added to read as follows:
§ 35.28 Non-discriminatory open access transmission tariff.
* * * * *
(d) Waivers. * * * Except as provided in paragraph (f) of this section, an application for waiver must be filed either:
* * * * *
(f) Standard generator interconnection procedures and agreement.
(1) Every public utility that is required to have on file a non-discriminatory open access transmission tariff under this section must amend such tariff by adding the standard interconnection procedures and agreement contained in Order No. 2003, FERC Stats. & Regs. ¶ (Final Rule on Generator Interconnection) or such other interconnection procedures and agreement as may be approved by the Commission consistent with Order No. 2003, FERC Stats. & Regs. ¶ (Final Rule on Generator Interconnection).
(i) The amendment required by the preceding subsection must be filed no later than [insert date 60 days after publication in the FEDERAL REGISTER].
(ii) Any public utility that seeks a deviation from the standard interconnection procedures and agreement contained in Order

No. 2003, FERC Stats. & Regs. ¶ \_\_\_\_\_ (Final Rule on Generator Interconnection), must demonstrate that the deviation is consistent with the principles of Order No. 2003, FERC Stats. & Regs. ¶ \_\_\_\_\_ (Final Rule on Generator Interconnection).

(2) The non-public utility procedures for tariff reciprocity compliance described in paragraph (e) of this section are applicable

to the standard interconnection procedures and agreement.

- (3) A public utility subject to the requirements of this paragraph may file a request for waiver of all or part of the requirements of this paragraph, for good cause shown. An application for waiver must be filed either:
- (i) No later than [insert date 60 days after publication in the FEDERAL REGISTER], or
- (ii) No later than 60 days prior to the time the public utility would otherwise have to comply with the requirements of this paragraph.

The following Appendices will not be published in the Code of Federal Regulations.

## Appendix A

# Flow Chart of the Large Generating Facility Interconnection Process

## TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

## Appendix B

### **Commenter Acronyms**

ACEEE - American Council for an Energy Efficient Economy

**AEP** - American Electric Power System

Alabama MEA - Alabama Municipal Electric Authority

Alabama PSC - Alabama Public Service Commission

Ameren - Ameren Services Company

American Boiler - American Boiler Manufacturers Association

American Forest - American Forest & Paper Association

American National - American National Power, Inc.

American Superconductor - American Superconductor Corporation

American Transmission - American Transmission Company, LLC

American Wind Energy - American Wind Energy Association

APS - Arizona Public Service Company

Arkansas Coops - Arkansas Electric Cooperative Corporation

Arkansas PSC - Arkansas Public Service Commission

Avista - Avista Corporation

Baker & McKenzie - Baker & McKenzie

Basin Electric - Basin Electric Power Cooperative

Bergey Windpower - Bergey Windpower Company

BP Solar - BP Solar

**BPA** - Bonneville Power Administration

Bridger Valley - Bridger Valley Electric Association, Inc.

Bruder - Bruder, Gentile & Marcoux, L.L.P.

Bureau of Reclamation - Bureau of Reclamation, U.S. Department of Interior

Cal EOB - California Electricity Oversight Board

Cal Cogen - Cogeneration Association of California

Cal DWR - California Department of Water Resources

Cal ISO - California ISO

Calpine - Calpine Corporation

Central Maine - Central Maine Power Company, New York State Electric & Gas Corporation, and Rochester Gas & Electric Corporation

Central Vermont PSC - Central Vermont Public Service Corporation

Cinergy - Cinergy Services, Inc.

Cleco - Cleco Power, LLC

**Coalition for Contract Terms** - Coalition in Support of Retaining and/or Modifying Certain Commercial Contract Terms for the Standard Interconnection Agreement

Coalition for Pricing - Coalition for Equitable Transmission Pricing

Coalition for Services - Coalition for Appropriate Interconnection Services

Combined Heat & Power - U.S. Combined Heat and Power Association

Connecticut PUC - Connecticut Department of Public Utility Control

Construction Issues Coalition - Transmission Owner/Provider Construction Issues Coalition

Consumers - Consumers Energy Company

**CPUC** - California Public Utilities Commission

Cummins - Cummins, Inc.

Dairyland Power - Dairyland Power Cooperative

**DG** Alliance - Distributed Generation Alliance

**Dominion Resources** - Dominion Resources Services, Inc.

Duke Energy - Duke Energy Corporation

Dynegy - Dynegy Power Corporation

E3 - The E Cubed Company, LLC

Edison Mission - Edison Mission Energy

**EEI** - Edison Electric Institute, Alliance of Energy Suppliers, EEI Transmission Group, EEI Distributed Generation Task Force and Tax Analysis Research Subcommittee

El Paso - El Paso Electric Company

**ELCON** - Electricity Consumers Resource Council

**Encorp** - Encorp, Inc.

**Enercon** - Enercon Engineering, Inc.

**Energy Consortium** - The Energy Consortium

Entergy - Entergy Services, Inc.

**EPSA** - The Electric Power Supply Association

EPUC - The Energy Producers and Users Coalition

Exelon - Exelon Corporation

Financial Security Issues Coalition - Transmission Owner/Provider Financial Security Issues Coalition

FirstEnergy - FirstEnergy Corporation

Florida PSC - Florida Public Service Commission

Florida RCC - Florida Reliability Coordinating Council

FP&L - Florida Power & Light Company

Georgia Transmission - Georgia Transmission Corporation

**GE Power** - GE Power Systems

Great Northern - Great Northern Power Development

Great River - Great River Energy

H Power - H Power

Idaho Power - Idaho Power Company

Ida Tech - Ida Tech

Imperial Irrigation - Imperial Irrigation District

Independent Market Operator - Independent Electricity Market Operator

**Independent Producers** - Independent Energy Producers Association

Industrial Energy - Industrial Energy Consumer Group

Interconnection Services Coalition - Transmission Owners Coalition for Appropriate Interconnection Services

International Paper - International Paper Company

ISO New England - ISO New England

Joint Consumer Advocates - Joint Consumer Advocates

Kentucky PSC - Public Service Commission of the Commonwealth of Kentucky

**KeySpan** - KeySpan-Glenwood Energy Center LLC, KeySpan-Port Jefferson Energy Center, LLC, and KeySpan-Ravenswood, Inc.

LADWP - Los Angeles Department of Water and Power

Lakeland - Lakeland Electric, Kissimmee Utility Authority, Gainesville Regional Utilities, and The City of Tallahassee, Florida

LPPC - Large Public Power Council

LG&E Energy - LG&E Energy Corp., Louisville Gas and Electric Company, and Kentucky Utilities Company

LIPA - Long Island Power Authority

Louisiana PSC - Louisiana Public Service Commission

Maine PSC - Maine Public Service Company

Maine Public Advocate - Maine Office of the Public Advocate

Maine PUC - Maine Public Utilities Commission

Maryland PSC - Public Service Commissions of Maryland, Delaware, and the District of Columbia

Memphis LG&W - Memphis Light, Gas and Water Division

MidAmerican - MidAmerican Energy Company

Midwest ISO - Midwest ISO

Midwest ISO TO - Midwest ISO Transmission Owners

Mirant - Mirant Americas, Inc.

Mississippi PSC - Mississippi Public Service Commission

**Monongahela Power** - Monongahela Power Company, The Potomac Edison Company, West Penn Power Company, and Allegheny Energy Supply Company, LLC

NARUC - National Association of Regulatory Utility Commissioners

National Energy Marketers - National Energy Marketers Association

National Grid - National Grid USA

Nebraska PPD - Nebraska Public Power District

**NEMA** - National Electrical Manufacturers Association

NE PCC - Northeast Power Coordinating Council

NERC - North America Electric Reliability Council

**NE Utilities** - Northeast Utilities Service Company

Nevada Power - Nevada Power Company

New York PSC - New York State Public Service Commission

NiSource - NiSource, Inc.

NMA - National Mining Association

North Carolina Commission - North Carolina Utilities Commission

Norton Energy - Norton Energy Storage, L.L.C.

NRECA-APPA - National Rural Electric Cooperative Association and the American Public Power Association

NRG - NRG Energy, Inc.

NSTAR - NSTAR Electric and Gas Corporation

NTTRC - National Transmission Technical Research Center

NYISO - New York ISO

NYTO - New York Transmission Owners

Ohio PUC - Public Utilities Commission of Ohio

Oklahoma G&E - Oklahoma Gas and Electric Company

Old Dominion - Old Dominion Electric Cooperative

**ONEOK** - ONEOK Power Marketing Company

PacifiCorp - PacifiCorp

Peabody - Peabody Energy Corporation

PGE - Portland General Electric Company

PG&E - Pacific Gas and Electric Company

Pinnacle West - Pinnacle West Energy Company

**PJM** - PJM International LLC

**PJMTO** - PJM Transmissions Owners Group

Plug Power - Plug Power

Progress Energy - Progress Energy, Inc.

**PSEG** - The PSEG Companies

PSNM - Public Service Company of New Mexico

Public Interest Organizations - Public Interest Organizations

Public Power Council - Public Power Council

RealEnergy - RealEnergy, Inc.

Reliant - Reliant Resources, Inc.

Rhode Island Consortium - The Energy Consortium of Rhode Island

RTO West Utilities - Certain RTO West Filing Utilities

Salt River Project - Salt River Project Agricultural Improvement and Power District

Schott - Schott Applied Power Corporation

Seminole Electric - Seminole Electric Cooperative

**Sempra** - Sempra Energy

Sithe - Sithe Energies, Inc.

SMUD - Sacramento Municipal Utility District

SoCal Edison - Southern California Edison Company

SoCal Water District - The Metropolitan Water District of Southern California

SoCal PPA - Southern California Public Power Authority

Solar Energy - Solar Energy Industries Association

Solar Turbines - Solar Turbines, Inc.

South Carolina PSA - South Carolina Public Service Authority

Southern - Southern Company Services, Inc.

Southwest Transmission - Southwest Transmission Cooperative

Sunflower Electric - Sunflower Electric Power Corporation

TANC - Transmission Agency of Northern California

TAPS - Transmission Access Policy Study Group

**TECO Energy** - TECO Energy, Inc.

Tenaska - Tenaska, Inc.

Tennessee Valley PPA - Tennessee Valley Public Power Association

Third Party Issues Coalition - Transmission Owner/Provider Third Party Issues Coalition

TI - Texas Instruments

TransEnergie - TransEnergie U.S. Ltd.

Tucson Electric - Tucson Electric Power Company

TVA - Tennessee Valley Authority

**TXU** - TXU Operating Companies

United Technologies - United Technologies Corporation

Vermont DPS - Vermont Department of Public Service

Western - Western Area Power Administration

**WEPCO** - Wisconsin Electric Power Company, Madison Gas and Electric Company, and Alliant Energy Corporate Services, Inc.

Westar - Westar Energy, Inc.

Westconnect RTO - Westconnect RTO, LLC

Williams Energy - Williams Energy Marketing and Trading Company

Wisconsin PSC - Wisconsin Public Service Commission

Xcel - XCEL Energy Services, Inc.

### APPENDIX C

## STANDARD LARGE GENERATOR INTERCONNECTION PROCEDURES (LGIP)

## including

# STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT (LGIA)

Standard Large Generator Interconnection Procedures (LGIP)

(Applicable to Generating Facilities that exceed 20 MWs)

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## **SECTION 1. DEFINITIONS**

**Adverse System Impact** shall mean the negative effects due to technical or operational limits on conductors or equipment being exceeded that may compromise the safety and reliability of the electric system.

**Affected System** shall mean an electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

Affected System Operator shall mean the entity that operates an Affected System.

**Affiliate** shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Ancillary Services** shall mean those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the Transmission Provider's Transmission System in accordance with Good Utility Practice.

**Applicable Laws and Regulations** shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Applicable Reliability Council** shall mean the reliability council applicable to the Transmission System to which the Generating Facility is directly interconnected.

**Applicable Reliability Standards** shall mean the requirements and guidelines of NERC, the Applicable Reliability Council, and the Control Area of the Transmission System to which the Generating Facility is directly interconnected.

Base Case shall mean the base case power flow, short circuit, and stability data bases used for the Interconnection Studies by the Transmission Provider or Interconnection Customer.

Breach shall mean the failure of a Party to perform or observe any material term or condition of the Standard Large Generator Interconnection Agreement.

Breaching Party shall mean a Party that is in Breach of the Standard Large Generator Interconnection Agreement.

Business Day shall mean Monday through Friday, excluding Federal Holidays.

Calendar Day shall mean any day including Saturday, Sunday or a Federal Holiday.

Clustering shall mean the process whereby a group of Interconnection Requests is studied together, instead of serially, for the purpose of conducting the Interconnection System Impact Study.

Commercial Operation Date of a unit shall mean the date on which Interconnection Customer commences commercial operation of the unit at the Generating Facility after Trial Operation of such unit has been completed as confirmed in writing substantially in the form shown in Appendix E to the Standard Large Generator Interconnection Agreement.

Confidential Information shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise.

Control Area shall mean an electrical system or systems bounded by interconnection metering and telemetry, capable of controlling generation to maintain its interchange schedule with other Control Areas and contributing to frequency regulation of the interconnection. A Control Area must be certified by NERC.

Default shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of the Standard Large Generator Interconnection Agreement.

Dispute Resolution shall mean the procedure for resolution of a dispute between the Parties in which they will first attempt to resolve the dispute on an informal basis.

Distribution System shall mean the Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas.

Distribution Upgrades shall mean the additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility and render the transmission service necessary to effect Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

Effective Date shall mean the date on which the Standard Large Generator Interconnection Agreement becomes effective upon execution by the Parties subject to acceptance by the Commission, or if filed unexecuted, upon the date specified by the Commission.

Emergency Condition shall mean a condition or situation: (1) that in the judgement of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of a Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to Transmission Provider's Transmission System, Transmission Provider's Interconnection Facilities or the electric systems of others to which the Transmission Provider's Transmission System is directly connected; or (3) that, in the case of Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer's Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions; provided that Interconnection Customer is not obligated by the Standard Large Generator Interconnection Agreement to possess black start capability.

Energy Resource Interconnection Service (ER Interconnection Service) shall mean an Interconnection Service that allows the Interconnection Customer to connect its Generating Facility to the Transmission Provider's Transmission System to be eligible to deliver the Generating Facility's electric output using the existing firm or nonfirm capacity of the Transmission Provider's Transmission System on an as available basis. Energy Resource Interconnection Service in and of itself does not convey transmission service.

Engineering & Procurement (E&P) Agreement shall mean an agreement that authorizes the Transmission Provider to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request.

Environmental Law shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

Federal Power Act shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a et seq.

FERC shall mean the Federal Energy Regulatory Commission (Commission) or its successor.

Force Majeure shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include an act of negligence or intentional wrongdoing.

Generating Facility shall mean Interconnection Customer's device for the production of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

Generating Facility Capacity shall mean the net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple energy production devices.

Good Utility Practice shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

Governmental Authority shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include Interconnection Customer, Transmission Provider, or any Affiliate thereof.

Hazardous Substances shall mean any chemicals, materials or substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "hazardous constituents," "restricted hazardous materials," "extremely hazardous substances," "toxic substances," "radioactive substances," "contaminants," "pollutants," "toxic pollutants" or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

Initial Synchronization Date shall mean the date upon which the Generating Facility is initially synchronized and upon which Trial Operation begins.

In-Service Date shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Transmission Provider's Interconnection Facilities to obtain back feed power

Interconnection Customer shall mean any entity, including the Transmission Provider, Transmission Owner or any of the Affiliates or subsidiaries of either, that proposes to interconnect its Generating Facility with the Transmission Provider's Transmission System.

Interconnection Customer's Interconnection Facilities shall mean all facilities and equipment, as identified in Appendix A of the Standard Large Generator Interconnection Agreement, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Transmission Provider's Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

Interconnection Facilities shall mean the Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

Interconnection Facilities Study shall mean a study conducted by the Transmission Provider or a third party consultant for the Interconnection Customer to determine a list of facilities (including Transmission Provider's Interconnection Facilities and Network Upgrades as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Generating Facility with the Transmission Provider's Transmission System. The scope of the study is defined in Section 8 of the Standard Large Generator Interconnection Procedures.

Interconnection Facilities Study Agreement shall mean the form of agreement contained in Appendix 4 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection Facilities Study.

Interconnection Feasibility Study shall mean a preliminary evaluation of the system impact and cost of interconnecting the Generating Facility to the Transmission Provider's Transmission System, the scope of which is described in Section 6 of the Standard Large Generator Interconnection Procedures.

Interconnection Feasibility Study Agreement shall mean the form of agreement contained in Appendix 2 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection Feasibility Study.

Interconnection Request shall mean an Interconnection Customer's request, in the form of Appendix 1 to the Standard Large Generator Interconnection Procedures, in accordance with the Tariff, to interconnect a new Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Generating Facility that is interconnected with the Transmission Provider's Transmission System.

Interconnection Service shall mean the service provided by the Transmission Provider associated with interconnecting the Interconnection Customer's Generating Facility to the Transmission Provider's Transmission System and enabling it to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Standard Large Generator Interconnection Agreement and, if applicable, the Transmission Provider's Tariff.

Interconnection Study shall mean any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, and the Interconnection Facilities Study described in the Standard Large Generator Interconnection Procedures.

Interconnection System Impact Study shall mean an engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of Transmission Provider's Transmission System and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility were interconnected without project modifications or system modifications, focusing on the Adverse System Impacts identified in the Interconnection Feasibility Study, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Standard Large Generator Interconnection Procedures.

Interconnection System Impact Study Agreement shall mean the form of agreement contained in Appendix 3 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection System Impact Study.

IRS shall mean the Internal Revenue Service.

Joint Operating Committee shall be a group made up of representatives from Interconnection Customers and the Transmission Provider to coordinate operating and technical considerations of Interconnection Service.

Large Generating Facility shall mean a Generating Facility having a Generating Facility Capacity of more than 20 MW.

Loss shall mean any and all losses relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's performance, or non-performance of its obligations under the Standard Large Generator Interconnection Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnifying Party.

Material Modification shall mean those modifications that have a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

Metering Equipment shall mean all metering equipment installed or to be installed at the Generating Facility pursuant to the Standard Large Geneator Interconnection Agreement at the metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

NERC shall mean the North American Electric Reliability Council or its successor organization.

Network Resource shall mean that portion of a Generating Facility that is integrated with the Transmission Provider's Transmission System, designated as a Network Resource pursuant to the terms of the Tariff, and subjected to redispatch directives as ordered by the Transmission Provider in accordance with the Tariff.

Network Resource Interconnection Service (NR Interconnection Service) shall mean an Interconnection Service that allows the Interconnection Customer to integrate its Large Generating Facility with the Transmission Provider's Transmission System (1) in a manner comparable to that in which the Transmission Provider integrates its generating facilities to serve native load customers; or (2) in an RTO or ISO with market based congestion management, in the same manner as all other Network Resources. Network Resource Interconnection Service in and of itself does not convey transmission service.

Network Upgrades shall mean the additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Interconnection Customer interconnects to the Transmission Provider's Transmission System to accommodate the interconnection of the Large Generating Facility to the Transmission Provider's Transmission System.

Notice of Dispute shall mean a written notice of a dispute or claim that arises out of or in connection with the Standard Large Generator Interconnection Agreement or its performance.

Optional Interconnection Study shall mean a sensitivity analysis based on assumptions specified by the Interconnection Customer in the Optional Interconnection Study Agreement.

Optional Interconnection Study Agreement shall mean the form of agreement contained in Appendix 5 of the Standard Large Generator Interconnection Procedures for conducting the Optional Interconnection Study.

Party or Parties shall mean Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

Point of Change of Ownership shall mean the point, as set forth in Appendix A to the Standard Large Generator Interconnection Agreement, where the Interconnection Customer's Interconnection Facilities connect to the Transmission Provider's Interconnection Facilities.

Point of Interconnection shall mean the point, as set forth in Appendix A to the Standard Large Generator Interconnection Agreement, where the Interconnection Facilities connect to the Transmission Provider's Transmission System.

Queue Position shall mean the order of a valid Interconnection Request, relative to all other pending valid Interconnection Requests, that is established based upon the date and time of receipt of the valid Interconnection Request by the Transmission Provider.

Reasonable Efforts shall mean, with respect to an action required to be attempted or taken by a Party under the Standard Large Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

Scoping Meeting shall mean the meeting between representatives of the Interconnection Customer and Transmission Provider conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.

Site Control shall mean documentation reasonably demonstrating: (1) ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Generating Facility; (2) an option to purchase or acquire a leasehold site for such purpose; or (3) an exclusivity or other business relationship between Interconnection Customer and the entity having the right to sell, lease or grant Interconnection Customer the right to possess or occupy a site for such purpose.

Small Generating Facility shall mean a Generating Facility that has a Generating Facility Capacity of no more than 20 MW.

Stand Alone Network Upgrades shall mean 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.

Standard Large Generator Interconnection Agreement (LGIA) shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to a Large Generating Facility, that is included in the Transmission Provider's Tariff.

Standard Large Generator Interconnection Procedures (LGIP) shall mean the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that are included in the Transmission Provider's Tariff.

System Protection Facilities shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) the Transmission Provider's Transmission System from faults or other electrical disturbances occurring at the Generating Facility and (2) the Generating Facility from faults or other electrical system disturbances occurring on the Transmission Provider's Transmission System or on other delivery systems or other generating systems to which the Transmission Provider's Transmission System is directly connected.

Tariff shall mean the Transmission Provider's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the Commission, and as amended or supplemented from time to time, or any successor tariff.

Transmission Owner shall mean an entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the Standard Large Generator Interconnection Agreement to the extent necessary.

Transmission Provider shall mean the public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from the Transmission Provider.

Transmission Provider's Interconnection Facilities shall mean 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.

Transmission System shall mean the facilities owned, controlled or operated by the Transmission Provider or Transmission Owner that are used to provide transmission service under the Tariff.

Trial Operation shall mean the period during which Interconnection Customer is engaged in on-site test operations and commissioning of the Generating Facility prior to commercial operation.

#### Section 2. Scope and Application.

## 2.1 Application of Standard Large Generator Interconnection Procedures.

Sections 2 through 13 apply to processing an Interconnection Request pertaining to a Large Generating Facility.

#### 2.2 Comparability.

The Transmission Provider shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in this LGIP. The Transmission Provider will use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers, whether the Generating Facilities are owned by Transmission Provider, its subsidiaries or Affiliates or others.

#### 2.3 Base Case Data.

Transmission Provider shall provide base power flow, short circuit and stability databases, including all underlying assumptions, and contingency list upon request subject to confidentiality provisions. Such databases and lists, hereinafter referred to as Base Cases, shall include all (1) generation projects and (ii) transmission projects, including merchant transmission projects that are proposed for the Transmission System for which a transmission expansion plan has been submitted and approved by the applicable authority.

## 2.4 No Applicability to Transmission Service.

Nothing in this LGIP shall constitute a request for transmission service or confer upon an Interconnection Customer any right to receive transmission service.

#### Section 3. Interconnection Requests.

#### 3.1 General.

An Interconnection Customer shall submit to the Transmission Provider an Interconnection Request in the form of Appendix 1 to this LGIP and a refundable deposit of \$10,000. The Transmission Provider shall apply the deposit toward the cost of an Interconnection Feasibility Study. The Interconnection Customer shall submit a separate Interconnection Request for each site and may submit multiple Interconnection Requests for a single site. The Interconnection Customer must submit a deposit with each Interconnection Request even when more than one request is submitted for a single site. An Interconnection Request to evaluate one site at two different voltage levels shall be treated as two Interconnection Requests.

At Interconnection Customer's option, Transmission Provider and Interconnection Customer will identify alternative Point(s) of Interconnection and configurations at the Scoping Meeting to evaluate in this process and attempt to eliminate alternatives in a reasonable fashion given resources and information available. Interconnection Customer will select the definitive Point(s) of Interconnection to be studied no later than the execution of the Interconnection Feasibility Study Agreement.

3.2 Identification of Types of Interconnection Services.

At the time the Interconnection Request is submitted, Interconnection Customer must request either ER Interconnection Service or NR Interconnection Service, as described; provided, however, any Interconnection Customer requesting NR Interconnection Service may also request that it be concurrently studied as an ER Interconnection Service, up to the point when an Interconnection Facility Study Agreement is executed. Interconnection Customer may then elect to proceed with NR Interconnection Service or to proceed under a lower level of interconnection service to the extent that only certain upgrades will be completed.

- 3.2.1 Energy Resource Interconnection Service (ER Interconnection Service).
- 3.2.1.1 The Product. ER Interconnection Service allows Interconnection Customer to connect the Large Generating Facility to the Transmission System and be eligible to deliver the Large Generating Facility's output using the existing firm or non-firm capacity of the Transmission System on an "as available" basis. ER Interconnection Service does not in and of itself convey any transmission service.
- 3.2.1.2 The Study. The study consists of short circuit/fault duty, steady state (thermal and voltage) and stability analyses. The short circuit/fault duty analysis would identify direct Interconnection Facilities required and the Network Upgrades necessary to address short circuit issues associated with the Interconnection Facilities. The stability and steady state studies would identify necessary upgrades to allow full output of the proposed Large Generating Facility and would also identify the maximum allowed output, at the time the study is performed, of the interconnecting Large Generating Facility without requiring additional Network Upgrades.
- 3.2.2 Network Resource Interconnection Service (NR Interconnection Service).
- 3.2.2.1 The Product. The Transmission Provider must conduct the necessary studies and construct the Network Upgrades needed to integrate the Large Generating Facility (1) in a manner comparable to that in which the Transmission Provider integrates its Generating Facilities to serve native load customers; or (2) in an ISO or RTO with market based congestion management, in the same manner as all other Network Resources. NR Interconnection Service Allows the Interconnection Customer 's Large Generating Facility to be designated as a Network Resource, up to the Large Generating Facility's full output, on the same basis as all other existing Network Resources interconnected to the Transmission Provider's Transmission System, and to be studied as a Network Resource on the assumption that such a designation will occur.
- 3.2.2.2 The Study. The Interconnection Study for NR Interconnection Service shall assure that the Interconnection Customer's Large Generating Facility meets the requirements for NR Interconnection Service and as a general matter, that such Large Generating Facility's interconnection is also studied with the Transmission Provider's Transmission System at peak load, under a variety of severely stressed conditions, to determine whether, with the Large Generating Facility at full output, the aggregate of generation in the local area can be delivered to the aggregate of load on the Transmission Provider's Transmission System, consistent with the Transmission Provider's reliability criteria and procedures. This approach assumes that some portion of existing Network Resources are displaced by the output of the Interconnection Customer's Large Generating Facility. NR Interconnection Service in and of itself does not convey any transmission service.
- 3.3 Valid Interconnection Request.
- 3.3.1 Initiating an Interconnection Request.

To initiate an Interconnection Request, Interconnection Customer must submit all of the following: (i) a \$10,000 deposit, (ii) a completed application in the form of Appendix 1, and (iii) demonstration of Site Control or a posting of an additional

deposit of \$10,000. Such deposits shall be applied toward any Interconnection Studies pursuant to the Interconnection Request. If Interconnection Customer demonstrates Site Control within the cure period specified in Section 3.3.3 after submitting its Interconnection Request, the additional deposit shall be refundable; otherwise, all such deposit(s), additional and initial, become non-refundable.

The expected In-Service Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility shall be no more than the process window for the regional expansion planning period (or in the absence of a regional planning process, the process window for the Transmission Provider's expansion planning period) not to exceed seven years from the date the Interconnection Request is received by the Transmission Provider, unless the Interconnection Customer demonstrates that engineering, permitting and construction of the new Large Generating Facility or increase in capacity of the existing Generating Facility will take longer than the regional expansion planning period. The In-Service Date may succeed the date the Interconnection Request is received by the Transmission Provider by a period up to ten years, or longer where the Interconnection Customer and Transmission Provider agree, such agreement not to be unreasonably withheld.

## 3.3.2 Acknowledgment of Interconnection Request.

Transmission Provider shall acknowledge receipt of the Interconnection Request within five (5) Business Days of receipt of the request and attach a copy of the received Interconnection Request to the acknowledgement.

#### 3.3.3 Deficiencies in Interconnection Request.

An Interconnection Request will not be considered to be a valid request until all items in Section 3.3.1 have been received by the Transmission Provider. If an Interconnection Request fails to meet the requirements set forth in Section 3.3.1, the Transmission Provider shall notify the Interconnection Customer within five (5) Business Days of receipt of the initial Interconnection Request of the reasons for such failure and that the Interconnection Request does not constitute a valid request. Interconnection Customer shall provide the Transmission Provider the additional requested information needed to constitute a valid request within ten (10) Business Days after receipt of such notice. Failure by Interconnection Customer to comply with this Section 3.3.3 shall be treated in accordance with Section 3.6.

## 3.3.4 Scoping Meeting.

Within ten (10) Business Days after receipt of a valid Interconnection Request, Transmission Provider shall establish a date agreeable to Interconnection Customer for the Scoping Meeting, and such date shall be no later than thirty (30) Calendar Days from receipt of the valid Interconnection Request, unless otherwise mutually agreed upon by the Parties.

The purpose of the Scoping Meeting shall be to discuss alternative interconnection options, to exchange information including any transmission data that would reasonably be expected to impact such interconnection options, to analyze such information and to determine the potential feasible Points of Interconnection. Transmission Provider and Interconnection Customer will bring to the meeting such technical data, including, but not limited to: (i) general facility loadings, (ii) general instability issues, (iii) general short circuit issues, (iv) general voltage issues, and (v) general reliability issues as may be reasonably required to accomplish the purpose of the meeting. Transmission Provider and Interconnection Customer will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. On the basis of the meeting, Interconnection Customer shall designate its Point of Interconnection, pursuant to Section 6.1, and one or more available alternative Point(s) of Interconnection. The duration of the meeting shall be sufficient to accomplish its purpose.

## 3.4 OASIS Posting.

The Transmission Provider will maintain on its OASIS a list of all Interconnection Requests. The list will identify, for each Interconnection Request: (i) the maximum summer and winter megawatt electrical output; (ii) the location by county and state; (iii) the station or transmission line or lines where the interconnection will be made; (iv) the projected In-Service Date; (v) the status of the Interconnection Request, including Queue Position; (vi) the type of Interconnection Service being requested; and (vii) the availability of any studies related to the Interconnection Request; (viii) the date of the Interconnection Request; (ix) the type of Generating Facility to be constructed (combined cycle, base load or combustion turbine and fuel type); and (x) for Interconnection Requests that have not resulted in a completed interconnection, an explanation as to why it was not completed. The list will not disclose the identity of the Interconnection Customer until the Interconnection Customer executes an LGIA or requests that the Transmission Provider file an unexecuted LGIA with FERC. The Transmission Provider shall post to its OASIS site any deviations from the study timelines set forth herein. Interconnection Study reports and Optional Interconnection Customer and the Transmission Provider to discuss the applicable study results. The Transmission Provider shall also post any known deviations in the Large Generating Facility's In-Service Date.

#### 3.5 Coordination with Affected Systems.

The Transmission Provider will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System Operators and, if possible, include those results in its applicable Interconnection Study within the time frame specified in this LGIP. The Transmission Provider will include such Affected System Operators in all meetings held with the Interconnection Customer as required by this LGIP. The Interconnection Customer will cooperate with the Transmission Provider in all matters related to the conduct of studies and the determination of modifications to Affected Systems. A Transmission Provider which may be an Affected System shall cooperate with the Transmission Provider with whom interconnection has been requested in all matters related to the conduct of studies and the determination of modifications to Affected Systems.

#### 3.6 Withdrawal.

The Interconnection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to the Transmission Provider. In addition, if the Interconnection Customer fails to adhere to all requirements of this LGIP, except as provided in Section 13.5 (Disputes), the Transmission Provider shall deem the Interconnection Request to be withdrawn and shall provide written notice to the Interconnection Customer of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Upon receipt of such written notice, the Interconnection Customer shall have fifteen (15) Business Days in which to either respond with information or actions that cures the deficiency or to notify the Transmission Provider of its intent to pursue Dispute Resolution.

Withdrawal shall result in the loss of the Interconnection Customer's Queue Position. If an Interconnection Customer disputes the withdrawal and loss of its Queue Position, then during Dispute Resolution, the Interconnection Customer's Interconnection Request is eliminated from the queue until such time that the outcome of Dispute Resolution would restore its Queue Position. An Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request shall pay to the Transmission Provider all costs that the Transmission Provider prudently incurs with respect to that Interconnection Request prior to the Transmission Provider's receipt of notice described above. The Interconnection Customer must pay all monies due to the Transmission Provider before it is allowed to obtain any Interconnection Study data or results.

The Transmission Provider shall (i) update the OASIS Queue Position posting and (ii) refund to the Interconnection Customer any portion of the Interconnection Customer's's deposit or study payments that exceeds the costs that the Transmission Provider has incurred, including interest calculated in accordance with section 35.19a(a)(2) of FERC's regulations. In the event of such withdrawal, the Transmission Provider, subject to the confidentiality provisions of Section 13.1, shall provide, at Interconnection Customer's request, all information that the Transmission Provider developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.

Section 4. Queue Position.

#### 4.1 General.

The Transmission Provider shall assign a Queue Position based upon the date and time of receipt of the valid Interconnection Request; provided that, if the sole reason an Interconnection Request is not valid is the lack of required information on the application form, and the Interconnection Customer provides such information in accordance with Section 3.3.3, then the Transmission Provider shall assign the Interconnection Customer a Queue Position based on the date the application form was originally filed. Moving a Point of Interconnection shall result in a lowering of Queue Position if it is deemed a Material Modification under Section 4.4.3.

The Queue Position of each Interconnection Request will be used to determine the order of performing the Interconnection Studies and determination of cost responsibility for the facilities necessary to accommodate the Interconnection Request. A higher queued Interconnection Request is one that has been placed "earlier" in the queue in relation to another Interconnection Request that is lower queued.

## 4.2 Clustering.

At Transmission Provider's option, Interconnection Requests may be studied serially or in clusters for the purpose of the Interconnection System Impact Study.

Clustering shall be implemented on the basis of Queue Position. If Transmission Provider elects to study Interconnection Requests using Clustering, all Interconnection Requests received within a period not to exceed one hundred and eighty (180) Calendar Days, hereinafter referred to as the "Queue Cluster Window" shall be studied together without regard to the nature of the underlying Interconnection Service, whether ER Interconnection Service or NR Interconnection Service. Deadline for completing all Interconnection System Impact Studies for which an Interconnection System Impact Study Agreement has been executed during a Queue Cluster Window shall be in accordance with Section 7.4, for all Interconnection Requests assigned to the same Queue Cluster Window. Transmission Provider may study an Interconnection Request separately to the extent warranted by Good Utility Practice based upon the electrical remoteness of the proposed Large Generating Facility.

Clustering Interconnection System Impact Studies shall be conducted in such a manner to ensure the efficient implementation of the applicable regional transmission expansion plan in light of the Transmission System's capabilities at the time of each study.

The Queue Cluster Window shall have a fixed time interval based on fixed annual opening and closing dates. Any changes to the established Queue Cluster Window interval and opening or closing dates shall be announced with a posting on the Transmission Provider's OASIS beginning at least one hundred and eighty (180) Calendar Days in advance of the change and continuing thereafter through the end date of the first Queue Cluster Window that is to be modified.

## 4.3 Transferability of Queue Position.

An Interconnection Customer may transfer its Queue Position to another entity only if such entity acquires the specific Generating Facility identified in the Interconnection Request and the Point of Interconnection does not change.

## 4.4 Modifications.

The Interconnection Customer shall submit to the Transmission Provider, in writing, modifications to any information provided in the Interconnection Request. The Interconnection Customer shall retain its Queue Position if the modifications are in accordance with Sections 4.4.1, 4.4.2 or 4.4.5, or are determined not to be Material Modifications pursuant to Section 4.4.3.

Notwithstanding the above, during the course of the Interconnection Studies, either the Interconnection Customer or Transmission Provider may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes are acceptable to the Transmission Provider and Interconnection Customer, such acceptance not to be unreasonably withheld, Transmission Provider shall modify the Point of Interconnection and/or configuration in accordance with such changes and proceed with any re-studies necessary to do so in accordance with Section 6.4, Section 7.6 and Section 8.5 as applicable and Interconnection Customer shall retain its Queue Position.

- 4.4.1 Prior to the return of the executed Interconnection System Impact Study Agreement to the Transmission Provider, modifications permitted under this Section shall include specifically: (a) a reduction up to 60 percent (MW) of electrical output of the proposed project; (b) modifying the technical parameters associated with the Large Generating Facility technology or the Large Generating Facility step-up transformer impedance characteristics; and (c) modifying the interconnection configuration. For plant increases, the incremental increase in plant output will go to the end of the queue for the purposes of cost allocation and study analysis.
- 4.4.2 Prior to the return of the executed Interconnection Facility Study Agreement to the Transmission Provider, the modifications permitted under this Section shall include specifically: (a) additional 15 percent decrease in plant size (MW), and (b) Large Generating Facility technical parameters associated with modifications to Large Generating Facility technology and transformer impedances; provided, however, the incremental costs associated with those modifications are the responsibility of the requesting Interconnection Customer.
- 4.4.3 Prior to making any modification other than those specifically permitted by Sections 4.4.1, 4.4.2, and 4.4.5, Interconnection Customer may first request that the Transmission Provider evaluate whether such modification is a Material Modification. In response to Interconnection Customer's request, the Transmission Provider shall evaluate the proposed modifications prior to making them and inform the Interconnection Customer in writing of whether the modifications would constitute a Material Modification. Any change to the Point of Interconnection shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.
- 4.4.4 Upon receipt of Interconnection Customer's request for modification permitted under this Section 4.4, the Transmission Provider shall commence and perform any necessary additional studies as soon as practicable, but in no event shall the Transmission Provider commence such studies later than thirty (30) Calendar Days after receiving notice of Interconnection Customer's request. Any additional studies resulting from such modification shall be done at Interconnection Customer's cost.
- 4.4.5 Extensions of less than three (3) cumulative years in the Commercial Operation Date of the Large Generating Facility to which the Interconnection Request relates are not material and should be handled through construction sequencing.
- Section 5. Procedures for Interconnection Requests Submitted Prior to Effective Date of Standard Large Generator Interconnection Procedures.
- 5.1 Queue Position for Pending Requests.
- 5.1.1 Any Interconnection Customer assigned a Queue Position prior to the effective date of this LGIP shall retain that Queue Position.

- 5.1.1.1 If an Interconnection Study Agreement has not been executed as of the effective date of this LGIP, then such Interconnection Study, and any subsequent Interconnection Studies, shall be processed in accordance with this LGIP.
- 5.1.1.2 If an Interconnection Study Agreement has been executed prior to the effective date of this LGIP, such Interconnection Study shall be completed in accordance with the terms of such agreement. With respect to any remaining studies for which an Interconnection Customer has not signed an Interconnection Study Agreement prior to the effective date of the LGIP, the Transmission Provider must offer the Interconnection Customer the option of either continuing under the Transmission Provider's existing interconnection study process or going forward with the completion of the necessary Interconnection Studies (for which it does not have a signed Interconnection Studies Agreement) in accordance with this LGIP.
- 5.1.1.3 If an LGIA has been submitted to the Commission for approval before the effective date of the LGIP, then the LGIA would be grandfathered.

#### 5.1.2 Transition Period.

To the extent necessary, the Transmission Provider and Interconnection Customers with an outstanding request (i.e., an Interconnection Request for which an LGIA has not been submitted to the Commission for approval as of the effective date of this LGIP) shall transition to this LGIP within a reasonable period of time not to exceed sixty (60) Calendar Days. The use of the term "outstanding request" herein shall mean any Interconnection Request, on the effective date of this LGIP: (i) that has been submitted but not yet accepted by the Transmission Provider; (ii) where the related interconnection agreement has not yet been submitted to the Commission for approval in executed or unexecuted form, (iii) where the relevant Interconnection Study Agreements have not yet been executed, or (iv) where any of the relevant Interconnection Studies are in process but not yet completed. Any Interconnection Customer with an outstanding request as of the effective date of this LGIP may request a reasonable extension of any deadline, otherwise applicable, if necessary to avoid undue hardship or prejudice to its Interconnection Request. A reasonable extension shall be granted by the Transmission Provider to the extent consistent with the intent and process provided for under this LGIP.

## 5.2 New Transmission Provider.

If the Transmission Provider transfers control of its Transmission System to a successor Transmission Provider during the period when an Interconnection Request is pending, the original Transmission Provider shall transfer to the successor Transmission Provider any amount of the deposit or payment with interest thereon that exceeds the cost that it incurred to evaluate the request for interconnection. Any difference between such net amount and the deposit or payment required by this LGIP shall be paid by or refunded to the Interconnection, as appropriate. The original Transmission Provider shall coordinate with the successor Transmission Provider to complete any Interconnection Study, as appropriate, that the original Transmission Provider has begun but has not completed. If the Transmission Provider has tendered a draft LGIA to the Interconnection Customer but the Interconnection Customer has not either executed the LGIA or requested the filing of an unexecuted LGIA with FERC, unless otherwise provided, the Interconnection Customer may elect to complete negotiations with the Transmission Provider or the successor Transmission Provider.

Section 6. Interconnection Feasibility Study.

### 6.1 Interconnection Feasibility Study Agreement.

Simultaneously with the acknowledgement of a valid Interconnection Request the Transmission Provider shall provide to Interconnection Customer an Interconnection Feasibility Study Agreement in the form of Appendix 2. The Interconnection Feasibility Study Agreement shall specify that Interconnection Customer is responsible for the actual cost of the Interconnection Feasibility Study. Within five (5) Business Days following the Scoping Meeting Interconnection Customer shall specify

for inclusion in the attachment to the Interconnection Feasibility Study Agreement the Point(s) of Interconnection and any reasonable alternative Point(s) of Interconnection. Within five (5) Business Days following the Transmission Provider's receipt of such designation, Transmission Provider shall tender to Interconnection Customer the Interconnection Feasibility Study Agreement signed by Transmission Provider, which includes a good faith estimate of the cost for completing the Interconnection Feasibility Study. The Interconnection Customer shall execute and deliver to the Transmission Provider the Interconnection Feasibility Study Agreement along with a \$10,000 deposit no later than thirty (30) Calendar Days after its receipt.

On or before the return of the executed Interconnection Feasibility Study Agreement to the Transmission Provider, the Interconnection Customer shall provide the technical data called for in Appendix 1, Attachment A.

If the Interconnection Feasibility Study uncovers any unexpected result(s) not contemplated during the Scoping Meeting, a substitute Point of Interconnection identified by either Interconnection Customer or Transmission Provider, and acceptable to the other, such acceptance not to be unreasonably withheld, will be substituted for the designated Point of Interconnection specified above without loss of Queue Position, and Re-studies shall be completed pursuant to Section 6.4 as applicable. For the purpose of this Section 6.1, if the Transmission Provider and Interconnection Customer cannot agree on the substituted Point of Interconnection, then Interconnection Customer may direct that one of the alternatives as specified in the Interconnection Feasibility Study Agreement, as specified pursuant to Section 3.3.4, shall be the substitute.

## 6.2 Scope of Interconnection Feasibility Study.

The Interconnection Feasibility Study shall preliminarily evaluate the feasibility of the proposed interconnection to the Transmission System.

The Interconnection Feasibility Study will consider the Base Case as well as all Generating Facilities (and with respect to (iii), any identified Network Upgrades) that, on the date the Interconnection Feasibility Study is commenced: (i) are directly interconnected to the Transmission System; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending higher queued Interconnection Request to interconnect to the Transmission System; and (iv) have no Queue Position but have executed an LGIA or requested that an unexecuted LGIA be filed with FERC. The Interconnection Feasibility Study will consist of a power flow and short circuit analysis. The Interconnection Feasibility Study will provide a list of facilities and a non-binding good faith estimate of cost responsibility and a non-binding good faith estimated time to construct.

#### 6.3 Interconnection Feasibility Study Procedures.

The Transmission Provider shall utilize existing studies to the extent practicable when it performs the study. The Transmission Provider shall use Reasonable Efforts to complete the Interconnection Feasibility Study no later than forty-five (45) Calendar Days after the Transmission Provider receives the fully executed Interconnection Feasibility Study Agreement. At the request of the Interconnection Customer or at any time the Transmission Provider determines that it will not meet the required time frame for completing the Interconnection Feasibility Study, Transmission Provider shall notify the Interconnection Customer as to the schedule status of the Interconnection Feasibility Study. If the Transmission Provider is unable to complete the Interconnection Feasibility Study within that time period, it shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required. Upon request, the Transmission Provider shall provide the Interconnection Customer supporting documentation, workpapers and relevant power flow, short circuit and stability databases for the Interconnection Feasibility Study, subject to confidentiality arrangements consistent with Section 13.1.

## 6.3.1 Meeting with Transmission Provider.

Within ten (10) Business Days of providing an Interconnection Feasibility Study report to Interconnection Customer, Transmission Provider and Interconnection Customer shall meet to discuss the results of the Interconnection Feasibility Study.

## 6.4 Re-Study.

If Re-Study of the Interconnection Feasibility Study is required due to a higher queued project dropping out of the queue, or a modification of a higher queued project subject to Section 4.4, or re-designation of the Point of Interconnection pursuant to Section 6.1 Transmission Provider shall notify Interconnection Customer in writing. Such Re-Study shall take not longer than forty-five (45) Calendar Days from the date of the notice. Any cost of Re-Study shall be borne by the Interconnection Customer being re-studied.

## Section 7. Interconnection System Impact Study.

### 7.1 Interconnection System Impact Study Agreement.

Unless otherwise agreed, pursuant to the Scoping Meeting provided in Section 3.3.4, simultaneously with the delivery of the Interconnection Feasibility Study to the Interconnection Customer, the Transmission Provider shall provide to the Interconnection Customer an Interconnection System Impact Study Agreement in the form of Appendix 3 to this LGIP. The Interconnection System Impact Study Agreement shall provide that the Interconnection Customer shall compensate the Transmission Provider for the actual cost of the Interconnection System Impact Study. Within three (3) Business Days following the Interconnection Feasibility Study results meeting, the Transmission Provider shall provide to Interconnection Customer a non-binding good faith estimate of the cost and timeframe for completing the Interconnection System Impact Study.

#### 7.2 Execution of Interconnection System Impact Study Agreement.

The Interconnection Customer shall execute the Interconnection System Impact Study Agreement and deliver the executed Interconnection System Impact Study Agreement to the Transmission Provider no later than thirty (30) Calendar Days after its receipt along with demonstration of Site Control, and a \$50,000 deposit.

If the Interconnection Customer does not provide all such technical data when it delivers the Interconnection System Impact Study Agreement, the Transmission Provider shall notify the Interconnection Customer of the deficiency within five (5) Business Days of the receipt of the executed Interconnection System Impact Study Agreement and the Interconnection Customer shall cure the deficiency within ten (10) Business Days of receipt of the notice, provided, however, such deficiency does not include failure to deliver the executed Interconnection System Impact Study Agreement or deposit.

If the Interconnection System Impact Study uncovers any unexpected result(s) not contemplated during the Scoping Meeting and the Interconnection Feasibility Study, a substitute Point of Interconnection identified by either Interconnection Customer or Transmission Provider, and acceptable to the other, such acceptance not to be unreasonably withheld, will be substituted for the designated Point of Interconnection specified above without loss of Queue Position, and restudies shall be completed pursuant to Section 7.6 as applicable. For the purpose of this Section 7.6, if the Transmission Provider and Interconnection Customer cannot agree on the substituted Point of Interconnection, then Interconnection Customer may direct that one of the alternatives as specified in the Interconnection Feasibility Study Agreement, as specified pursuant to Section 3.3.4, shall be the substitute.

## 7.3 Scope of Interconnection System Impact Study.

The Interconnection System Impact Study shall evaluate the impact of the proposed interconnection on the reliability of the Transmission System. The Interconnection System Impact Study will consider the Base Case as well as all Generating Facilities (and with respect to (iii) below, any identified Network Upgrades associated with such higher queued interconnection) that, on the date the Interconnection System Impact Study is commenced: (i) are directly interconnected to the Transmission System; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending higher

queued Interconnection Request to interconnect to the Transmission System; and (iv) have no Queue Position but have executed an LGIA or requested that an unexecuted LGIA be filed with FERC.

The Interconnection System Impact Study will consist of a short circuit analysis, a stability analysis, and a power flow analysis. The Interconnection System Impact Study will state the assumptions upon which it is based; state the results of the analyses; and provide the requirements or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. The Interconnection System Impact Study will provide a list of facilities that are required as a result of the Interconnection Request and a non-binding good faith estimate of cost responsibility and a non-binding good faith estimated time to construct.

## 7.4 Interconnection System Impact Study Procedures.

The Transmission Provider shall coordinate the Interconnection System Impact Study with any Affected System that is affected by the Interconnection Request pursuant to Section 3.5 above. The Transmission Provider shall utilize existing studies to the extent practicable when it performs the study. The Transmission Provider shall use Reasonable Efforts to complete the Interconnection System Impact Study within ninety (90) Calendar Days after the receipt of the Interconnection System Impact Study Agreement or notification to proceed, study payment, and technical data. If Transmission Provider uses Clustering, the Transmission Provider shall use Reasonable Efforts to deliver a completed Interconnection System Impact Study within ninety (90) Calendar Days after the close of the Queue Cluster Window.

At the request of the Interconnection Customer or at any time the Transmission Provider determines that it will not meet the required time frame for completing the Interconnection System Impact Study, Transmission Provider shall notify the Interconnection Customer as to the schedule status of the Interconnection System Impact Study. If the Transmission Provider is unable to complete the Interconnection System Impact Study within the time period, it shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required. Upon request, the Transmission Provider shall provide the Interconnection Customer all supporting documentation, workpapers and relevant pre-Interconnection Request and post-Interconnection Request power flow, short circuit and stability databases for the Interconnection System Impact Study, subject to confidentiality arrangements consistent with Section 13.1.

### 7.5 Meeting with Transmission Provider.

Within ten (10) Business Days of providing an Interconnection System Impact Study report to Interconnection Customer, Transmission Provider and Interconnection Customer shall meet to discuss the results of the Interconnection System Impact Study.

#### 7.6 Re-Study.

If Re-Study of the Interconnection System Impact Study is required due to a higher queued project dropping out of the queue, a modification of a higher queued project subject to 4.4, or re-designation of the Point of Interconnection pursuant to Section 6.1 Transmission Provider shall notify Interconnection Customer in writing. Such Re-Study shall take no longer than sixty (60) Calendar Days from the date of notice. Any cost of Re-Study shall be borne by the Interconnection Customer being re-studied.

Section 8. Interconnection Facilities Study.

8.1 Interconnection Facilities Study Agreement.

Simultaneously with the delivery of the Interconnection System Impact Study to the Interconnection Customer, the Transmission Provider shall provide to the Interconnection Customer an Interconnection Facilities Study Agreement in the form of Appendix 4 to this LGIP. The Interconnection Facilities Study Agreement shall provide that the Interconnection Customer shall compensate the Transmission Provider for the actual cost of the Interconnection Facilities Study. Within three (3) Business Days following the Interconnection System Impact Study results meeting, the Transmission Provider shall provide to Interconnection Customer a non-binding good faith estimate of the cost and timeframe for completing the Interconnection Facilities Study. The Interconnection Customer shall execute the Interconnection Facilities Study Agreement and deliver the executed Interconnection Facilities Study Agreement to the Transmission Provider within thirty (30) Calendar Days after its receipt, together with the required technical data and the greater of \$100,000 or Interconnection Customer's portion of the estimated monthly cost of conducting the Interconnection Facilities Study.

8.1.1 Transmission Provider shall invoice Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection Facilities Study each month. Interconnection Customer shall pay invoiced amounts within thirty (30) Calendar Days of receipt of invoice. Transmission Provider shall continue to hold the amounts on deposit until settlement of the final invoice.

## 8.2 Scope of Interconnection Facilities Study.

The Interconnection Facilities Study shall specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Interconnection System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Interconnection Facility to the Transmission System. The Interconnection Facilities Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Transmission Provider's Interconnection Facilities and Network Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities.

## 8.3 Interconnection Facilities Study Procedures.

The Transmission Provider shall coordinate the Interconnection Facilities Study with any Affected System pursuant to Section 3.5 above. The Transmission Provider shall utilize existing studies to the extent practicable in performing the Interconnection Facilities Study. The Transmission Provider shall use Reasonable Efforts to complete the study and issue a draft Interconnection Facilities Study report to the Interconnection Customer within the following number of days after receipt of an executed Interconnection Facilities Study Agreement: ninety (90) Calendar Days, with no more than a +/- 20 percent cost estimate contained in the report; or one hundred eighty (180) Calendar Days, if the Interconnection Customer requests a +/- 10 percent cost estimate.

At the request of the Interconnection Customer or at any time the Transmission Provider determines that it will not meet the required time frame for completing the Interconnection Facilities Study, Transmission Provider shall notify the Interconnection Customer as to the schedule status of the Interconnection Facilities Study. If the Transmission Provider is unable to complete the Interconnection Facilities Study and issue a draft Interconnection Facilities Study report within the time required, it shall notify the Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required.

The Interconnection Customer may, within thirty (30) Calendar Days after receipt of the draft report, provide written comments to the Transmission Provider, which the Transmission Provider shall include in the final report. The Transmission Provider shall issue the final Interconnection Facilities Study report within fifteen (15) Business Days of receiving the Interconnection Customer's comments or promptly upon receiving Interconnection Customer's statement that it will not provide comments. The Transmission Provider may reasonably extend such fifteen-day period upon notice to the Interconnection Customer if the Interconnection Customer's comments require the Transmission Provider to perform additional analyses or make other

significant modifications prior to the issuance of the final Interconnection Facilities Report. Upon request, the Transmission Provider shall provide the Interconnection Customer supporting documentation, workpapers, and databases or data developed in the preparation of the Interconnection Facilities Study, subject to confidentiality arrangements consistent with Section 13.1.

#### 8.4 Meeting with Transmission Provider.

Within ten (10) Business Days of providing a draft Interconnection Facilities Study report to Interconnection Customer, Transmission Provider and Interconnection Customer shall meet to discuss the results of the Interconnection Facilities Study.

## 8.5 Re-Study.

If Re-Study of the Interconnection Facilities Study is required due to a higher queued project dropping out of the queue or a modification of a higher queued project pursuant to Section 4.4, Transmission Provider shall so notify Interconnection Customer in writing. Such Re-Study shall take no longer than sixty (60) Calendar Days from the date of notice. Any cost of Re-Study shall be borne by the Interconnection Customer being re-studied.

## Section 9. Engineering & Procurement ("E&P") Agreement.

Prior to executing an LGIA, an Interconnection Customer may, in order to advance the implementation of its interconnection, request and Transmission Provider shall offer the Interconnection Customer, an E&P Agreement that authorizes the Transmission Provider to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. However, the Transmission Provider shall not be obligated to offer an E&P Agreement if Interconnection Customer is in Dispute Resolution as a result of an allegation that Interconnection Customer has failed to meet any milestones or comply with any prerequisites specified in other parts of the LGIP. The E&P Agreement is an optional procedure and it will not alter the Interconnection Customer's Queue Position or In-Service Date. The E&P Agreement shall provide for the Interconnection Customer to pay the cost of all activities authorized by the Interconnection Customer and to make advance payments or provide other satisfactory security for such costs.

The Interconnection Customer shall pay the cost of such authorized activities and any cancellation costs for equipment that is already ordered for its interconnection, which cannot be mitigated as hereafter described, whether or not such items or equipment later become unnecessary. If Interconnection Customer withdraws its application for interconnection or either party terminates the E&P Agreement, to the extent the equipment ordered can be canceled under reasonable terms, Interconnection Customer shall be obligated to pay the associated cancellation costs. To the extent that the equipment cannot be reasonably canceled, Transmission Provider may elect: (i) to take title to the equipment, in which event Transmission Provider shall refund Interconnection Customer any amounts paid by Interconnection Customer for such equipment and shall pay the cost of delivery of such equipment, or (ii) to transfer title to and deliver such equipment to Interconnection Customer, in which event Interconnection Customer shall pay any unpaid balance and cost of delivery of such equipment.

## Section 10. Optional Interconnection Study.

### 10.1 Optional Interconnection Study Agreement.

On or after the date when the Interconnection Customer receives Interconnection System Impact Study results, the Interconnection Customer may request, and the Transmission Provider shall perform a reasonable number of Optional Studies. The request shall describe the assumptions that the Interconnection Customer wishes the Transmission Provider to study within the scope described in Section 10.2. Within five (5) Business Days after receipt of a request for an Optional Interconnection

Study, the Transmission Provider shall provide to the Interconnection Customer an Optional Interconnection Study Agreement in the form of Appendix 5.

The Optional Interconnection Study Agreement shall: (i) specify the technical data that the Interconnection Customer must provide for each phase of the Optional Interconnection Study, (ii) specify Interconnection Customer's assumptions as to which Interconnection Requests with earlier queue priority dates will be excluded from the Optional Interconnection Study case and assumptions as to the type of interconnection service for Interconnection Requests remaining in the Optional Interconnection Study case, and (iii) the Transmission Provider's estimate of the cost of the Optional Interconnection Study. To the extent known by the Transmission Provider, such estimate shall include any costs expected to be incurred by any Affected System whose participation is necessary to complete the Optional Interconnection Study. Notwithstanding the above, the Transmission Provider shall not be required as a result of an Optional Interconnection Study request to conduct any additional Interconnection Studies with respect to any other Interconnection Request.

The Interconnection Customer shall execute the Optional Interconnection Study Agreement within ten (10) Business Days of receipt and deliver the Optional Interconnection Study Agreement, the technical data and a \$10,000 deposit to the Transmission Provider.

## 10.2 Scope of Optional Interconnection Study.

The Optional Interconnection Study will consist of a sensitivity analysis based on the assumptions specified by the Interconnection Customer in the Optional Interconnection Study Agreement. The Optional Interconnection Study will also identify the Transmission Provider's Interconnection Facilities and the Network Upgrades, and the estimated cost thereof, that may be required to provide transmission service or Interconnection Service based upon the results of the Optional Interconnection Study. The Optional Interconnection Study shall be performed solely for informational purposes. The Transmission Provider shall use Reasonable Efforts to coordinate the study with any Affected Systems that may be affected by the types of Interconnection Services that are being studied. The Transmission Provider shall utilize existing studies to the extent practicable in conducting the Optional Interconnection Study.

#### 10.3 Optional Interconnection Study Procedures.

The executed Optional Interconnection Study Agreement, the prepayment, and technical and other data called for therein must be provided to the Transmission Provider within ten (10) Business Days of Interconnection Customer receipt of the Optional Interconnection Study Agreement. The Transmission Provider shall use Reasonable Efforts to complete the Optional Interconnection Study within a mutually agreed upon time period specified within the Optional Interconnection Study Agreement. If the Transmission Provider is unable to complete the Optional Interconnection Study within such time period, it shall notify the Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required. Any difference between the study payment and the actual cost of the study shall be paid to the Transmission Provider or refunded to the Interconnection Customer, as appropriate. Upon request, the Transmission Provider shall provide the Interconnection Customer supporting documentation and workpapers and databases or data developed in the preparation of the Optional Interconnection Study, subject to confidentiality arrangements consistent with Section 13.1.

Section 11. Standard Large Generator Interconnection Agreement (LGIA).

#### 11.1 Tender.

Simultaneously with the issuance of the draft Interconnection Facilities Study report to the Interconnection Customer, the Transmission Provider shall tender to the Generator a draft LGIA together with draft appendices completed to the extent practicable. The draft LGIA shall be in the form of the Transmission Provider's Commission-approved standard form LGIA,

which is in Appendix 6. Within thirty (30) Calendar Days after the issuance of the draft Interconnection Facilities Study Report, the Transmission Provider shall tender the completed draft LGIA appendices.

## 11.2 Negotiation.

Notwithstanding Section 11.1, at the request of the Interconnection Customer the Transmission Provider shall begin negotiations with the Interconnection Customer concerning the appendices to the LGIA at any time after the Interconnection Customer executes the Interconnection Facilities Study Agreement. The Transmission Provider and the Interconnection Customer shall negotiate concerning any disputed provisions of the appendices to the draft LGIA for not more than sixty (60) Calendar Days after tender of the final Interconnection Facilities Study Report. If the Interconnection Customer determines that negotiations are at an impasse, it may request termination of the negotiations at any time after tender of the LGIA pursuant to Section 11.1 and request submission of the unexecuted LGIA with FERC or initiate Dispute Resolution procedures pursuant to Section 13.5. If the Interconnection Customer requests termination of the negotiations, but within sixty (60) Calendar Days thereafter fails to request either the filing of the unexecuted LGIA or initiate Dispute Resolution, it shall be deemed to have withdrawn its Interconnection Request. Unless otherwise agreed by the Parties, if the Interconnection Customer has not executed the LGIA, requested filing of an unexecuted LGIA, or initiated Dispute Resolution procedures pursuant to Section 13.5 within sixty days of tender of completed draft of the LGIA appendices, it shall be deemed to have withdrawn its Interconnection Request. The Transmission Provider shall provide to the Interconnection Customer a final LGIA within fifteen (15) Business Days after the completion of the negotiation process.

## 11.3 Execution and Filing.

Within fifteen (15) Business Days after receipt of the final LGIA, the Interconnection Customer shall provide the Transmission Provider (A) reasonable evidence that continued Site Control or (B) posting of \$250,000, non-refundable additional security, which shall be applied toward future construction costs. At the same time, Interconnection Customer also shall provide reasonable evidence that one or more of the following milestones in the development of the Large Generating Facility, at the Interconnection Customer election, has been achieved: (i) the execution of a contract for the supply or transportation of fuel to the Large Generating Facility; (ii) the execution of a contract for the supply of cooling water to the Large Generating Facility; (iii) execution of a contract for the engineering for, procurement of major equipment for, or construction of, the Large Generating Facility; (iv) execution of a contract for the sale of electric energy or capacity from the Large Generating Facility; or (v) application for an air, water, or land use permit.

The Interconnection Customer shall either: (i) execute two originals of the tendered LGIA and return them to the Transmission Provider; or (ii) request in writing that the Transmission Provider file with FERC an LGIA in unexecuted form. As soon as practicable, but not later than ten (10) Business Days after receiving either the two executed originals of the tendered LGIA (if it does not conform with a Commission-approved standard form of interconnection agreement) or the request to file an unexecuted LGIA, the Transmission Provider shall file the LGIA with FERC, together with its explanation of any matters as to which the Interconnection Customer and the Transmission Provider disagree and support for the costs that the Transmission Provider proposes to charge to the Interconnection Customer under the LGIA. An unexecuted LGIA should contain terms and conditions deemed appropriate by the Transmission Provider for the Interconnection Request. If the Parties agree to proceed with design, procurement, and construction of facilities and upgrades under the agreed-upon terms of the unexecuted LGIA, they may proceed pending Commission action.

#### 11.4 Commencement of Interconnection Activities.

If the Interconnection Customer executes the final LGIA, the Transmission Provider and the Interconnection Customer shall perform their respective obligations in accordance with the terms of the LGIA, subject to modification by FERC. Upon submission of an unexecuted LGIA, both Interconnection Customer and Transmission Provider shall promptly comply with the unexecuted LGIA, subject to modification by FERC.

Section 12. Construction of Transmission Provider's Interconnection Facilities and Network Upgrades.

#### 12.1 Schedule.

The Transmission Provider and the Interconnection Customer shall negotiate in good faith concerning a schedule for the construction of the Transmission Provider's Interconnection Facilities and the Network Upgrades.

## 12.2 Construction Sequencing.

## 12.2.1 General

In general, the In-Service Date of an Interconnection Customers seeking interconnection to the Transmission System will determine the sequence of construction of Network Upgrades.

12.2.2 Advance Construction of Network Upgrades that are an Obligation of an Entity other than the Interconnection Customer An Interconnection Customer with an LGIA, in order to maintain its In-Service Date, may request that the Transmission Provider advance to the extent necessary the completion of Network Upgrades that: (i) were assumed in the Interconnection Studies for such Interconnection Customer, (ii) are necessary to support such In-Service Date, and (iii) would otherwise not be completed, pursuant to a contractual obligation of an entity other than the Interconnection Customer that is seeking interconnection to the Transmission System, in time to support such In-Service Date. Upon such request, Transmission Provider will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that the Interconnection Customer commits to pay Transmission Provider: (i) any associated expediting costs and (ii) the cost of such Network Upgrades.

The Transmission Provider will refund to the Interconnection Customer both the expediting costs and the cost of Network Upgrades, in accordance with Article 11.4 of the LGIA. Consequently, the entity with a contractual obligation to construct such Network Upgrades shall be obligated to pay only that portion of the costs of the Network Upgrades that Transmission Provider has not refunded to the Interconnection Customer. Payment by that entity shall be due on the date that it would have been due had there been no request for advance construction. The Transmission Provider shall forward to the Interconnection Customer the amount paid by the entity with a contractual obligation to construct the Network Upgrades as payment in full for the outstanding balance owed to the Interconnection Customer. The Transmission Provider then shall refund to that entity the amount that it paid for the Network Upgrades, in accordance with Article 11.4 of the LGIA

12.2.3 Advancing Construction of Network Upgrades that are Part of an Expansion Plan of the Transmission Provider An Interconnection Customer with an LGIA, in order to maintain its In-Service Date, may request that the Transmission Provider advance to the extent necessary the completion of Network Upgrades that: (i) are necessary to support such In-Service Date and (ii) would otherwise not be completed, pursuant to an expansion plan of the Transmission Provider, in time to support such In-Service Date. Upon such request, Transmission Provider will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that the Interconnection Customer commits to pay Transmission Provider any associated expediting costs. The Interconnection Customer shall be entitled to transmission credits, if any, for any expediting costs paid.

## 12.2.4 Amended Interconnection System Impact Study

An Interconnection System Impact Study will be amended to determine the facilities necessary to support the requested In-Service Date. This amended study will include those transmission and Large Generating Facilities that are expected to be in service on or before the requested In-Service Date.

Section 13. Miscellaneous.

## 13.1 Confidentiality.

Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by either of the Parties to the other prior to the execution of an LGIA.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential.

If requested by either Party, the other Party shall provide in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

## 13.1.1 Scope

Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of the LGIA; or (6) is required, in accordance with Section 13.1.6, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the LGIA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Party that it no longer is confidential.

### 13.1.2 Release of Confidential Information

Neither Party shall release or disclose Confidential Information to any other person, except to its employees, consultants, or to parties who may be or considering providing financing to or equity participation with Interconnection Customer, or to potential purchasers or assignees of Interconnection Customer, on a need-to-know basis in connection with these procedures, unless such person has first been advised of the confidentiality provisions of this Section 13.1 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Section 13.1.

## 13.1.3 Rights

Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Party. The disclosure by each Party to the other Party of Confidential Information shall not be deemed a waiver by either Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

#### 13.1.4 No Warranties

By providing Confidential Information, neither Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, neither Party obligates itself to provide any particular information or Confidential Information to the other Party nor to enter into any further agreements or proceed with any other relationship or joint venture.

#### 13.1.5 Standard of Care

Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Party under these procedures or its regulatory requirements.

#### 13.1.6 Order of Disclosure

If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires either Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Party with prompt notice of such request(s) or requirement(s) so that the other Party may seek an appropriate protective order or waive compliance with the terms of the LGIA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

#### 13.1.7 Remedies

The Parties agree that monetary damages would be inadequate to compensate a Party for the other Party's Breach of its obligations under this Section 13.1. Each Party accordingly agrees that the other Party shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Section 13.1, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Section 13.1, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Section 13.1.

## 13.1.8 Disclosure to FERC or its Staff

Notwithstanding anything in this Section 13.1 to the contrary, and pursuant to 18 C.F.R. section 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to the LGIP, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. section 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party prior to the release of the Confidential Information to the Commission or its staff. The Party shall notify the other Party to the LGIA when its is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. section 388.112.

13.1.9 Subject to the exception in Section 13.1.8, any information that a Party claims is competitively sensitive, commercial or financial information ("Confidential Information") shall not be disclosed by the other Party to any person not employed or retained by the other Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Party, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this LGIP or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a subregional, regional or national reliability organization or planning group. The Party asserting confidentiality shall notify the other Party in writing of the information it claims is confidential. Prior to any disclosures of the other Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

- 13.1.10 This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a Breach of this provision).
- 13.1.11 The Transmission Provider shall, at Interconnection Customer's election, destroy, in a confidential manner, or return the Confidential Information provided at the time of Confidential Information is no longer needed.

## 13.2 Delegation of Responsibility.

The Transmission Provider may use the services of subcontractors as it deems appropriate to perform its obligations under this LGIP. Transmission Provider shall remain primarily liable to the Interconnection Customer for the performance of such subcontractors and compliance with its obligations of this LGIP. The subcontractor shall keep all information provided confidential and shall use such information solely for the performance of such obligation for which it was provided and no other purpose.

## 13.3 Obligation for Study Costs.

Transmission Provider shall charge and Interconnection Customer shall pay the actual costs of the Interconnection Studies. Any difference between the study deposit and the actual cost of the applicable Interconnection Study shall be paid by or refunded, except as otherwise provided herein, to Interconnection Customer or offset against the cost of any future Interconnection Studies associated with the applicable Interconnection Request prior to beginning of any such future Interconnection Studies. Any invoices for Interconnection Studies shall include a detailed and itemized accounting of the cost of each Interconnection Study. Interconnection Customer shall pay any such undisputed costs within thirty (30) Calendar Days of receipt of an invoice therefor. The Transmission Provider shall not be obligated to perform or continue to perform any studies unless Interconnection Customer has paid all undisputed amounts in compliance herewith.

#### 13.4 Third Parties Conducting Studies.

If (i) at the time of the signing of an Interconnection Study Agreement there is disagreement as to the estimated time to complete an Interconnection Study, (ii) the Interconnection Customer receives notice pursuant to Sections 6.3, 7.4 or 8.3 that the Transmission Provider will not complete an Interconnection Study within the applicable timeframe for such Interconnection Study, or (iii) the Interconnection Customer receives neither the Interconnection Study nor a notice under Sections 6.3, 7.4 or 8.3 within the applicable timeframe for such Interconnection Study, then the Interconnection Customer may require the Transmission Provider to utilize a third party consultant reasonably acceptable to Interconnection Customer and Transmission Provider to perform such Interconnection Study under the direction of the Transmission Provider. At other times, Transmission Provider may also utilize a third party consultant to perform such Interconnection Study, either in response to a general request of the Interconnection Customer, or on its own volition.

In all cases, use of a third party consultant shall be in accord with Article 26 of the LGIA (Subcontractors) and limited to situations where the Transmission Provider determines that doing so will help maintain or accelerate the study process for the Interconnection Customer's pending Interconnection Request and not interfere with the Transmission Provider's progress on Interconnection Studies for other pending Interconnection Requests. In cases where the Interconnection Customer requests use of a third party consultant to perform such Interconnection Study, Interconnection Customer and Transmission Provider shall negotiate all of the pertinent terms and conditions, including reimbursement arrangements and the estimated study completion date and study review deadline. Transmission Provider shall convey all workpapers, data bases, study results and all other supporting documentation prepared to date with respect to the Interconnection Request as soon as practicable upon Interconnection Customer's request subject to the confidentiality provision in Section 13.1. In any case, such third party contract may be entered into with either the Interconnection Customer or the Transmission Provider at the Transmission Provider's discretion. In the case of (iii) the Interconnection Customer maintains its right to submit a claim to Dispute Resolution to recover the costs of such third party study. Such third party consultant shall be required to comply with this LGIP, Article 26 of the LGIA (Subcontractors), and the relevant OATT procedures and protocols as would apply if the Transmission Provider were to conduct the Interconnection Study and shall use the information provided to it solely for purposes of performing such services and for no other purposes. The Transmission Provider shall cooperate with such third party consultant and Interconnection Customer to complete and issue the Interconnection Study in the shortest reasonable time.

#### 13.5 Disputes.

#### 13.5.1 Submission.

In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with the LGIA, the LGIP, or their performance, such Party (the "disputing Party") shall provide the other Party with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party's receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this LGIA.

#### 13.5.2 External Arbitration Procedures.

Any arbitration initiated under these procedures shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) Calendar Days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules") and any applicable FERC regulations or RTO rules; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Section 13, the terms of this Section 13 shall prevail.

## 13.5.3 Arbitration Decisions.

Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons therefor. The arbitrator(s) shall be authorized only to

interpret and apply the provisions of the LGIA and LGIP and shall have no power to modify or change any provision of the LGIA and LGIP in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

### 13.5.4 Costs.

Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

### APPENDICES TO LGIP

APPENDIX 1	INTERCONNECTION REQUEST
APPENDIX 2	INTERCONNECTION FEASIBILITY STUDY AGREEMENT
APPENDIX 3	INTERCONNECTION SYSTEM IMPACT STUDY AGREEMENT
APPENDIX 4	INTERCONNECTION FACILITIES STUDY AGREEMENT
APPENDIX 5	OPTIONAL INTERCONNECTION STUDY AGREEMENT
APPENDIX 6	STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT

## APPENDIX 1 to LGIP

INTERCONNECTION REQUEST
1. The undersigned Interconnection Customer submits this request to interconnect its Large Generating Facility with the
Transmission Provider's Transmission System pursuant to a Tariff.
2. This Interconnection Request is for (check one):
A proposed new Large Generating Facility.
An increase in the generating capacity or a Material Modification of an existing Generating Facility.
3. The type of interconnection service requested (check one or both as appropriate):
[It is intended that the types of interconnection services specified in Article 4 of the LGIA be placed here.]
4. The Interconnection Customer provides the following information:

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To Appendix 1

# **Interconnection Request**

# LARGE GENERATING FACILITY DATA UNIT RATINGS

kVA	°F	Voltage
Power Factor		
Speed (RPM)		Connection (e.g. Wye)
Short Circuit Ratio		Frequency, Hertz
Stator Amperes at Rated kVA	_	Field Volts
Max Turbine MW	°F	
COMBINED TURBINE-GENERATOR	R-EXCITER INERTIA DA	TA
Inertia Constant, H = kW sec	z/kVA	
Moment-of-Inertia, WR2 =1	b. ft.2	
REACTANCE DATA (PER UNIT-RA	ΓΕ <b>D</b> KVA)DIRECT AXIS(	QUADRATURE AXIS
Synchronous - saturated	Xdv	Xqv
Synchronous - unsaturated	Xdi	Xqi
Transient - saturated	X'dv	X'qv
Transient - unsaturated	X'di	X'qi
Subtransient - saturated	X""dv	X''qv
Subtransient - unsaturated	X""di	X''qi
Negative Sequence - saturated	X2v	
Negative Sequence - unsaturated	X2i	
Zero Sequence - saturated	X0v	
Zero Sequence - unsaturated	X0i	
Leakage Reactance	Xlm	
FIELD TIME CONSTANT DATA (SE	<b>C</b> )	
Open Circuit	T'do	T'qo

Line to Line Short Circuit Transient  T'd2  Line to Neutral Short Circuit Transient  T'd1  Short Circuit Subtransient  T"d  T	"q
Line to Neutral Short Circuit Transient  T'd1  Short Circuit Subtransient  T"do  T  Open Circuit Subtransient  T"do  T  ARMATURE TIME CONSTANT DATA (SEC)  Three Phase Short Circuit  Ta3  Line to Line Short Circuit  Ta2  Line to Neutral Short Circuit  Ta1  NOTE: If requested information is not applicable, indicate by marking "N / A."  Attachment A (page 4)  To Appendix 1	"a
Short Circuit Subtransient  T"d	"a
Open Circuit Subtransient  ARMATURE TIME CONSTANT DATA (SEC)  Three Phase Short Circuit  Ta3  Line to Line Short Circuit  Ta2  Line to Neutral Short Circuit  Ta1  NOTE: If requested information is not applicable, indicate by marking "N / A."  Attachment A (page 4)  To Appendix 1	"a
ARMATURE TIME CONSTANT DATA (SEC)  Three Phase Short Circuit  Ta3  Line to Line Short Circuit  Ta2  Line to Neutral Short Circuit  Ta1  NOTE: If requested information is not applicable, indicate by marking "N / A."  Attachment A (page 4)  To Appendix 1	Ч
Three Phase Short Circuit  Ta3  Line to Line Short Circuit  Ta2  Line to Neutral Short Circuit  Ta1  NOTE: If requested information is not applicable, indicate by marking "N / A."  Attachment A (page 4)  To Appendix 1	"'qo
Line to Line Short Circuit  Ta2  Line to Neutral Short Circuit  Ta1  NOTE: If requested information is not applicable, indicate by marking "N / A."  Attachment A (page 4)  To Appendix 1	
Line to Neutral Short Circuit  Ta1  NOTE: If requested information is not applicable, indicate by marking "N / A."  Attachment A (page 4)  To Appendix 1	
NOTE: If requested information is not applicable, indicate by marking "N / A."  Attachment A (page 4)  To Appendix 1	
Attachment A (page 4)  To Appendix 1	
To Appendix 1	
Interconnection Request	
<del>-</del>	
MW CAPABILITY AND PLANT CONFIGURATION	I
GENERATOR DATA	
ARMATURE WINDING RESISTANCE DATA (PER UN	NT)
Positive R1	
Negative R2	
Zero R0	
Rotor Short Time Thermal Capacity I22t =	
Field Current at Rated kVA, Armature Voltage = amps and PF	
Field Current at Rated kVA and Armature = amps Voltage, 0 PF	
Three Phase Armature Winding Capacitance = microfarad	
Field Winding Resistance = ohms	

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Armature Winding Resistance (Per Phase)	=	ohms		°C	
CURVES					
Saturation, Vee, Reactive Capability, Capacity Toperating range for multiple curves	emperature (	Correction Designate	normal and emer	gency Hydrogen Pres	sure
	Attachme	nt A (page 3)			
	То Ар	pendix 1			
	Interconne	ction Request			
GENERATO	OR STEP-U	PTRANSFORMER	DATA		
	RA	ΓINGS			
CapacitySelf-cooled/maximum nameplate					
kVA					
Voltage RatioGenerator side/System side					
kV					
Winding ConnectionsLow V/High V (Delta or W	ye)				
/					
Fixed Taps Available					
Present Tap Setting					
IMPEDANCE					
Positive Z1 (on self-cooled kVA rating)	%	X/R			
Zero Z0 (on self-cooled kVA rating)	_ %	X/R			
	Attachme	nt A (page 4)			
	То Ар	pendix 1			
	Interconne	ction Request			

# **EXCITATION SYSTEM DATA**

Identify appropriate IEEE model block diagram of excitation system and power system stabilizer (PSS) for computer representation in power system stability simulations and the corresponding excitation system and PSS constants for use in the model.

## GOVERNOR SYSTEM DATA

Identify appropriate IEEE model block diagram of governor system for computer representation in power system stability simulations and the corresponding governor system constants for use in the model.

## WIND GENERATORS

Number of generators to be interconnected pursuant to
this Interconnection Request:
Elevation: Single Phase Three Phase
Inverter manufacturer, model name, number, and version:
List of adjustable setpoints for the protective equipment or software: Note: A completed General Electric Company Power Systems Load Flow (PSLF) data sheet must be supplied with the Interconnection Request. If other data sheets are more appropriate to the proposed device then they shall be provided and discussed at Scoping Meeting.
Attachment A (page 5)
To Appendix 1
Interconnection Request
INDUCTION GENERATORS:
(*) Field Volts:
(*) Field Amperes:
(*) Motoring Power (kW):
(*) Neutral Grounding Resistor (If Applicable):
(*) I22t or K (Heating Time Constant):
(*) Rotor Resistance:
(*) Stator Resistance:
(*) Stator Reactance:

(*) Rotor Reactance:
(*) Magnetizing Reactance:
(*) Short Circuit Reactance:
(*) Exciting Current:
(*) Temperature Rise:
(*) Frame Size:
(*) Design Letter:
(*) Reactive Power Required In Vars (No Load):
(*) Reactive Power Required In Vars (Full Load):
(*) Total Rotating Inertia, H: Per Unit on KVA Base
Note: Please consult Transmission Provider prior to submitting the Interconnection Request to determine if the information designated by (*) is required.
APPENDIX 2 to LGIP
INTERCONNECTION FEASIBILITY STUDY AGREEMENT
THIS AGREEMENT is made and entered into this day of, 20 by and between, a organized and existing under the laws of the State of , ("Interconnection Customer,") and a existing under the laws of the State of, ("Transmission Provider "). Interconnection Customer and Transmission Provider each may be referred to as a "Party," or collectively as the "Parties."
RECITALS
<b>WHEREAS</b> , Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated and
WHEREAS, Interconnection Customer desires to interconnect the Large Generating Facility with the Transmission Systems and
WHEREAS, Interconnection Customer has requested the Transmission Provider to perform an Interconnection Feasibility Study to assess the feasibility of interconnecting the proposed Large Generating Facility to the Transmission System, and of any Affected Systems;
NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows: 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the Transmission Provider's Commission-approved LGIP.

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- 2.0 Interconnection Customer elects and Transmission Provider shall cause to be performed an Interconnection Feasibility Study consistent with Section 6.0 of this LGIP in accordance with the Tariff.
- 3.0 The scope of the Interconnection Feasibility Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Interconnection Feasibility Study shall be based on the technical information provided by Interconnection Customer in the Interconnection Request, as may be modified as the result of the Scoping Meeting. Transmission Provider reserves the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection Feasibility Study and as designated in accordance with Section 3.3.4 of the LGIP. If, after the designation of the Point of Interconnection pursuant to Section 3.3.4 of the LGIP, Interconnection Customer modifies its Interconnection Request pursuant to Section 4.4, the time to complete the Interconnection Feasibility Study may be extended.
- 5.0 The Interconnection Feasibility Study report shall provide the following information:
- preliminary identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection;
- preliminary identification of any thermal overload or voltage limit violations resulting from the interconnection; and
- preliminary description and non-bonding estimated cost of facilities required to interconnect the Large Generating Facility to the Transmission System and to address the identified short circuit and power flow issues.
- 6.0 The Interconnection Customer shall provide a deposit of \$10,000 for the performance of the Interconnection Feasibility Study.

Upon receipt of the Interconnection Feasibility Study the Transmission Provider shall charge and Interconnection Customer shall pay the actual costs of the Interconnection Feasibility Study.

Any difference between the deposit and the actual cost of the study shall be paid by or refunded to the Interconnection Customer, as appropriate.

7.0 Miscellaneous. The Interconnection Feasibility Study Agreement shall include standard miscellaneous terms including, but not limited to, indemnities, representations, disclaimers, warranties, governing law, amendment, execution, waiver, enforceability and assignment, that reflect best practices in the electric industry, and that are consistent with regional practices, Applicable Laws and Regulations, and the organizational nature of each Party. All of these provisions, to the extent practicable, shall be consistent with the provisions of the LGIP and the LGIA.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[Insert name of Transmission Provider or Transmission Owner, if applicable]

By:	By:
Title:	Title:
Date:	Date:

**WHEREAS**, Interconnection Customer has requested the Transmission Provider to perform an Interconnection System Impact Study to assess the impact of interconnecting the Large Generating Facility to the Transmission System, and of any Affected

Systems;

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows: 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the Transmission Provider's Commission-approved LGIP.

- 2.0 Interconnection Customer elects and Transmission Provider shall cause to be performed an Interconnection System Impact Study consistent with Section 7.0 of this LGIP in accordance with the Tariff.
- 3.0 The scope of the Interconnection System Impact Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study and the technical information provided by Interconnection Customer in the Interconnection Request, subject to any modifications in accordance with Section 4.4 of the LGIP. Transmission Provider reserves the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection Customer System Impact Study. If Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the time to complete the Interconnection System Impact Study may be extended.
- 5.0 The Interconnection System Impact Study report shall provide the following information:
- identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection;
- identification of any thermal overload or voltage limit violations resulting from the interconnection;
- identification of any instability or inadequately damped response to system disturbances resulting from the interconnection and
- description and non-binding, good faith estimated cost of facilities required to interconnect the Large Generating Facility to the Transmission System and to address the identified short circuit, instability, and power flow issues.
- 6.0 The Interconnection Customer shall provide a deposit of \$50,000 for the performance of the Interconnection System Impact Study. The Transmission Provider's good faith estimate for the time of completion of the Interconnection System Impact Study is [insert date].

Upon receipt of the Interconnection System Impact Study, Transmission Provider shall charge and Interconnection Customer shall pay the actual costs of the Interconnection System Impact Study.

Any difference between the deposit and the actual cost of the study shall be paid by or refunded to the Interconnection Customer, as appropriate.

7.0 Miscellaneous. The Interconnection System Impact Study Agreement shall include standard miscellaneous terms including, but not limited to, indemnities, representations, disclaimers, warranties, governing law, amendment, execution, waiver, enforceability and assignment, that reflect best practices in the electric industry, that are consistent with regional practices, Applicable Laws and Regulations and the organizational nature of each Party. All of these provisions, to the extent practicable, shall be consistent with the provisions of the LGIP and the LGIA.]

IN WITNESS THEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[Insert name of Transmission Provider or Transmission Owner, if applicable] By:\_\_\_\_ By:\_\_\_\_ Title:\_\_\_\_ Title:\_\_\_\_ Date:\_\_\_\_ Date:\_\_\_\_ [Insert name of Interconnection Customer] By: \_\_\_\_ Title: \_\_\_\_\_ Date: Attachment A To Appendix 3 **Interconnection System Impact Study Agreement** ASSUMPTIONS USED IN CONDUCTING THE INTERCONNECTION SYSTEM IMPACT STUDY The Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study, subject to any modifications in accordance with Section 4.4 of the LGIP, and the following assumptions: Designation of Point of Interconnection and configuration to be studied. Designation of alternative Point(s) of Interconnection and configuration. [Above assumptions to be completed by Interconnection Customer and other assumptions to be provided by Interconnection Customer and Transmission Provider] APPENDIX 4 to LGIP INTERCONNECTION FACILITIES STUDY AGREEMENT THIS AGREEMENT is made and entered into this \_\_\_\_\_ day of \_\_\_\_, 20\_ by and between \_\_\_\_, a \_\_\_\_ organized and existing under the laws of the State of, ("Interconnection Customer,") and \_\_\_\_\_ a \_\_\_\_ existing under the laws of the State of \_, ("Transmission Provider"). Interconnection Customer and Transmission Provider each may be referred to as a "Party," or collectively as the "Parties." RECITALS WHEREAS, Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated; and WHEREAS, Interconnection Customer desires to interconnect the Large Generating Facility with the Transmission System;

Standardization of Generator Interconnection Agreements..., 104 FERC P 61103...

WHEREAS, the Transmission Provider has completed an Interconnection System Impact Study (the "System Impact Study") and provided the results of said study to the Interconnection Customer; and

WHEREAS, Interconnection Customer has requested the Transmission Provider to perform an Interconnection Facilities Study to specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Interconnection System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Large Generating Facility to the Transmission System.

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows: 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the Transmission Provider's Commission-approved LGIP.

- 2.0 Interconnection Customer elects and Transmission Provider shall cause an Interconnection Facilities Study consistent with Section 8.0 of this LGIP to be performed in accordance with the Tariff.
- 3.0 The scope of the Interconnection Facilities Study shall be subject to the assumptions set forth in Attachment A and the data provided in Attachment B to this Agreement.
- 4.0 The Interconnection Facilities Study report (i) shall provide a description, estimated cost of (consistent with Attachment A), schedule for required facilities to interconnect the Large Generating Facility to the Transmission System and (ii) shall address the short circuit, instability, and power flow issues identified in the Interconnection System Impact Study.
- 5.0 The Interconnection Customer shall provide a deposit of \$100,000 for the performance of the Interconnection Facilities Study. The time for completion of the Interconnection Facilities Study is specified in Attachment A.

Transmission Provider shall invoice Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection Facilities Study each month. Interconnection Customer shall pay invoiced amounts within thirty (30) Calendar Days of receipt of invoice. Transmission Provider shall continue to hold the amounts on deposit until settlement of the final invoice.

6.0 Miscellaneous. The Interconnection Facility Study Agreement shall include standard miscellaneous terms including, but not limited to, indemnities, representations, disclaimers, warranties, governing law, amendment, execution, waiver, enforceability and assignment, that reflect best practices in the electric industry, and that are consistent with regional practices, Applicable Laws and Regulations, and the organizational nature of each Party. All of these provisions, to the extent practicable, shall be consistent with the provisions of the LGIP and the LGIA.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[Insert name of Transmission Provider or Transmission Owner, if applicable]

By:	By:
Title:	Title:
Date:	Date:

On the one line indicate the location of auxiliary power. (Minimum load on CT/PT) Amps

Will an alternate source of auxiliary power be available during CT/PT maintenance? Yes No

Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? Yes No (Please indicate on one line).

What type of control system or PLC will be located at the Interconnection Customer's	s's Large Generating Facility?
What protocol does the control system or PLC use?	
Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmiss	sion line, and property line.
Physical dimensions of the proposed interconnection station:	
Bus length from generation to interconnection station:	
Attachment B (page 2)	
Appendix 4	
Interconnection Facilities	
Study Agreement	
Line length from interconnection station to Transmission Provider's transmission line	
Tower number observed in the field. (Painted on tower leg)*	
Number of third party easements required for transmission lines*:	
* To be completed in coordination with Transmission Provider.	
Is the Large Generating Facility in the Transmission Provider's service area?	
Yes No Local provider:	
Please provide proposed schedule dates:	
Begin Construction	Date:
Generator step-up transformer receives back feed power	Date:
Generation Testing	Date:
Commercial Operation	Date:
APPENDIX 5 to LGIP	
OPTIONAL INTERCONNECTION STUDY AGRI	EEMENT
THIS AGREEMENT is made and entered into this day of, 20 by and existing under the laws of the State of, ("Interconnection Customer,") and State of, ("Transmission Provider"). Interconnection Customer and Transmiss a "Party," or collectively as the "Parties."	_ a existing under the laws of the

#### RECITALS

**WHEREAS**, Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated;

WHEREAS, Interconnection Customer is proposing to establish an interconnection with the Transmission System; and

WHEREAS, Interconnection Customer has submitted to Transmission Provider an Interconnection Request; and

**WHEREAS**, on or after the date when the Interconnection Customer receives the Interconnection System Impact Study results, Interconnection Customer has further requested that the Transmission Provider prepare an Optional Interconnection Study;

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows: 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the Transmission Provider's Commission-approved LGIP.

- 2.0 Interconnection Customer elects and Transmission Provider shall cause an Optional Interconnection Study consistent with Section 10.0 of this LGIP to be performed in accordance with the Tariff.
- 3.0 The scope of the Optional Interconnection Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Optional Interconnection Study shall be performed solely for informational purposes.
- 5.0 The Optional Interconnection Study report shall provide a sensitivity analysis based on the assumptions specified by the Interconnection Customer in Attachment A to this Agreement. The Optional Interconnection Study will identify the Transmission Provider's Interconnection Facilities and the Network Upgrades, and the estimated cost thereof, that may be required to provide transmission service or interconnection service based upon the assumptions specified by the Interconnection Customer in Attachment A.
- 6.0 The Interconnection Customer shall provide a deposit of \$10,000 for the performance of the Optional Interconnection Study. The Transmission Provider's good faith estimate for the time of completion of the Optional Interconnection Study is [insert date].

Upon receipt of the Optional Interconnection Study, the Transmission Provider shall charge and Interconnection Customer shall pay the actual costs of the Optional Study.

Any difference between the initial payment and the actual cost of the study shall be paid by or refunded to the Interconnection Customer, as appropriate.

7.0 Miscellaneous. The Optional Interconnection Study Agreement shall include standard miscellaneous terms including, but not limited to, indemnities, representations, disclaimers, warranties, governing law, amendment, execution, waiver, enforceability and assignment, that reflect best practices in the electric industry, and that are consistent with regional practices, Applicable Laws and Regulations, and the organizational nature of each Party. All of these provisions, to the extent practicable, shall be consistent with the provisions of the LGIP and the LGIA.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[Insert name of Transmission Provider or Transmi	ission Owner, if applicable]
By:	Ву:
Title:	Title:
Date:	Date:
[Insert name of Interconnection Customer]	
Ву:	
Title:	
Date:	
	Attachment A
	Appendix 5
Optional	Interconnection Study Agreement
ASSUMPTIONS USED IN CONDU	UCTING THE OPTIONAL INTERCONNECTION STUDY
[To be completed by Interconnection Customer co	onsistent with Section 10 of the LGIP.]
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(Applicable to C	Generating Facilities that exceed 20 MW)
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# STANDARD LARGE GENERATORINTERCONNECTION AGREEMENT

THIS STANDARD LARGE GENERATORINTERCONNECTION AGREEMENT ("Agreement") is made and entered
into this day of 20, by and between, a organized and existing under the laws of the State/
Commonwealth of ("Interconnection Customer" with a Large Generating Facility), and, a [corporation] organized
and existing under the laws of the State/Commonwealth of ("Transmission Provider and/or Transmission Owner").
Interconnection Customer and Transmission Provider each may be referred to as a "Party" or collectively as the "Parties."

# RECITALS

WHEREAS, Transmission Provider operates the Transmission System; and

**WHEREAS**, Interconnection Customer intends to own, lease and/or control and operate the Generating Facility identified as a Large Generating Facility in Appendix C to this Agreement; and,

**WHEREAS**, Interconnection Customer and Transmission Provider have agreed to enter into this Agreement for the purpose of interconnecting the Large Generating Facility with the Transmission System;

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein, it is agreed:

When used in this Standard Large Generator Interconnection Agreement, terms with initial capitalization that are not defined in Article 1 shall have the meanings specified in the Article in which they are used.

### **ARTICLE 1. DEFINITIONS**

**Adverse System Impact** shall mean the negative effects due to technical or operational limits on conductors or equipment being exceeded that may compromise the safety and reliability of the electric system.

Affected System shall mean an electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

Affected System Operator shall mean the entity that operates an Affected System.

Affiliate shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

Ancillary Services shall mean those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the Transmission Provider's Transmission System in accordance with Good Utility Practice.

Applicable Laws and Regulations shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

Applicable Reliability Council shall mean the reliability council applicable to the Transmission System to which the Generating Facility is directly interconnected.

Applicable Reliability Standards shall mean the requirements and guidelines of NERC, the Applicable Reliability Council, and the Control Area of the Transmission System to which the Generating Facility is directly interconnected.

Base Case shall mean the base case power flow, short circuit, and stability data bases used for the Interconnection Studies by the Transmission Provider or Interconnection Customer.

Breach shall mean the failure of a Party to perform or observe any material term or condition of the Standard Large Generator Interconnection Agreement. Breaching Party shall mean a Party that is in Breach of the Standard Large Generator Interconnection Agreement.

Business Day shall mean Monday through Friday, excluding Federal Holidays.

Calendar Day shall mean any day including Saturday, Sunday or a Federal Holiday.

Clustering shall mean the process whereby a group of Interconnection Requests is studied together, instead of serially, for the purpose of conducting the Interconnection System Impact Study.

Commercial Operation Date of a unit shall mean the date on which Interconnection Customer commences commercial operation of the unit at the Generating Facility after Trial Operation of such unit has been completed as confirmed in writing substantially in the form shown in Appendix E to the Standard Large Generator Interconnection Agreement.

Confidential Information shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is

designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise.

Control Area shall mean an electrical system or systems bounded by interconnection metering and telemetry, capable of controlling generation to maintain its interchange schedule with other Control Areas and contributing to frequency regulation of the interconnection. A Control Area must be certified by NERC.

Default shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of the Standard Large Generator Interconnection Agreement.

Dispute Resolution shall mean the procedure fo resolution of a dispute between the Parties in which they will first attempt to resolve the dispute on an informal basis.

Distribution System shall mean the Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas. Distribution Upgrades shall mean the additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility and render the transmission service necessary to effect Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

Effective Date shall mean the date on which the Standard Large Generator Interconnection Agreement becomes effective upon execution by the Parties subject to acceptance by the Commission, or if filed unexecuted, upon the date specified by the Commission.

Emergency Condition shall mean a condition or situation: (1) that in the judgement of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of a Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to Transmission Provider's Transmission System, Transmission Provider's Interconnection Facilities or the electric systems of others to which the Transmission Provider's Transmission System is directly connected; or (3) that, in the case of Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer's Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions; provided, that Interconnection Customer is not obligated by the Standard Large Generator Interconnection Agreement to possess black start capability.

Energy Resource Interconnection Service (ER Interconnection Service) shall mean an Interconnection Service that allows the Interconnection Customer to connect its Generating Facility to the Transmission Provider's Transmission System to be eligible to deliver the Generating Facility's electric output using the existing firm or nonfirm capacity of the Transmission Provider's Transmission System on an as available basis. Energy Resource Interconnection Service in and of itself does not convey transmission service.

Engineering & Procurement (E&P) Agreement shall mean an agreement that authorizes the Transmission Provider to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request.

Environmental Law shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

Federal Power Act shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a et seq. FERC shall mean the Federal Energy Regulatory Commission (Commission) or its successor.

Force Majeure shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other caused beyond a Party's control. A Force Majeure event does not include an act of negligence or intentional wrongdoing.

Generating Facility shall mean Interconnection Customer's device for the production of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

Generating Facility Capacity shall mean the net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple energy production devices.

Good Utility Practice shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

Governmental Authority shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include Interconnection Customer, Transmission Provider, or any Affiliate thereof.

Hazardous Substances shall mean any chemicals, materials or substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "hazardous constituents," "restricted hazardous materials," "extremely hazardous substances," "toxic substances," "radioactive substances," "contaminants," "pollutants," "toxic pollutants" or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law. Initial Synchronization Date shall mean the date upon which the Generating Facility is initially synchronized and upon which Trial Operation begins.

In-Service Date shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Transmission Provider's Interconnection Facilities to obtain back feed power.

Interconnection Customer shall mean any entity, including the Transmission Provider, Transmission Owner or any of the Affiliates or subsidiaries of either, that proposes to interconnect its Generating Facility with the Transmission Provider's Transmission System.

Interconnection Customer's Interconnection Facilities shall mean all facilities and equipment, as identified in Appendix A of the Standard Large Generator Interconnection Agreement, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Transmission Provider's Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

Interconnection Facilities shall mean the Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities and equipment between the Generating

Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

Interconnection Facilities Study shall mean a study conducted by the Transmission Provider or a third party consultant for the Interconnection Customer to determine a list of facilities (including Transmission Provider's Interconnection Facilities and Network Upgrades as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Generating Facility with the Transmission Provider's Transmission System. The scope of the study is defined in Section 8 of the Standard Large Generator Interconnection Procedures.

Interconnection Facilities Study Agreement shall mean the form of agreement contained in Appendix 4 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection Facilities Study. Interconnection Feasibility Study shall mean a preliminary evaluation of the system impact and cost of interconnecting the Generating Facility to the Transmission Provider's Transmission System, the scope of which is described in Section 6 of the Standard Large Generator Interconnection Procedures.

Interconnection Feasibility Study Agreement shall mean the form of agreement contained in Appendix 2 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection Feasibility Study.

Interconnection Request shall mean an Interconnection Customer's request, in the form of Appendix 1 to the Standard Large Generator Interconnection Procedures, in accordance with the Tariff, to interconnect a new Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Generating Facility that is interconnected with the Transmission Provider's Transmission System.

Interconnection Service shall mean the service provided by the Transmission Provider associated with interconnecting the Interconnection Customer's Generating Facility to the Transmission Provider's Transmission System and enabling it to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Standard Large Generator Interconnection Agreement and, if applicable, the Transmission Provider's Tariff.

Interconnection Study shall mean any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, and the Interconnection Facilities Study described in the Standard Large Generator Interconnection Procedures.

Interconnection System Impact Study shall mean an engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of Transmission Provider's Transmission System and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility were interconnected without project modifications or system modifications, focusing on the Adverse System Impacts identified in the Interconnection Feasibility Study, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Standard Large Generator Interconnection Procedures.

Interconnection System Impact Study Agreement shall mean the form of agreement contained in Appendix 3 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection System Impact Study.

IRS shall mean the Internal Revenue Service.

Joint Operating Committee shall be a group made up of representatives from Interconnection Customers and the Transmission Provider to coordinate operating and technical considerations of Interconnection Service.

Large Generating Facility shall mean a Generating Facility having a Generating Facility Capacity of more than 20 MW.

Loss shall mean any and all losses relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's performance, or non-performance of its obligations under the Standard Large Generator Interconnection Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnifying Party.

Material Modification shall mean those modifications that have a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

Metering Equipment shall mean all metering equipment installed or to be installed at the Generating Facility pursuant to the Standard Large Generator Interconnection Agreement at the metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

NERC shall mean the North American Electric Reliability Council or its successor organization.

Network Resource shall mean that portion of a Generating Facility that is integrated with the Transmission Provider's Transmission System, designated as a Network Resource pursuant to the terms of the Tariff, and subjected to redispatch directives as ordered by the Transmission Provider in accordance with the Tariff.

Network Resource Interconnection Service (NR Interconnection Service) shall mean an Interconnection Service that allows the Interconnection Customer to integrate its Large Generating Facility with the Transmission Provider's Transmission System (1) in a manner comparable to that in which the Transmission Provider integrates its generating facilities to serve native load customers; or (2) in an RTO or ISO with market based congestion management, in the same manner as all other Network Resources. Network Resource Interconnection Service in and of itself does not convey transmission service.

Network Upgrades shall mean the additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Interconnection Customer interconnects to the Transmission Provider's Transmission System to accommodate the interconnection of the Large Generating Facility to the Transmission Provider's Transmission System.

Notice of Dispute shall mean a written notice of a dispute or claim that arises out of or in connection with the Standard Large Generator Interconnection Agreement or its performance.

Optional Interconnection Study shall mean a sensitivity analysis based on assumptions specified by the Interconnection Customer in the Optional Interconnection Study Agreement.

Optional Interconnection Study Agreement shall mean the form of agreement contained in Appendix 5 of the Standard Large Generator Interconnection Procedures for conducting the Optional Interconnection Study.

Party or Parties shall mean Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

Point of Change of Ownership shall mean the point, as set forth in Appendix A to the Standard Large Generator Interconnection Agreement, where the Interconnection Customer's Interconnection Facilities connect to the Transmission Provider's Interconnection Facilities.

Point of Interconnection shall mean the point, as set forth in Appendix A to the Standard Large Generator Interconnection Agreement, where the Interconnection Facilities connect to the Transmission Provider's Transmission System.

Queue Position shall mean the order of a valid Interconnection Request, relative to all other pending valid Interconnection Requests, that is established based upon the date and time of receipt of the valid Interconnection Request by the Transmission Provider.

Reasonable Efforts shall mean, with respect to an action required to be attempted or taken by a Party under the Standard Large Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

Scoping Meeting shall mean the meeting between representatives of the Interconnection Customer and Transmission Provider conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.

Site Control shall mean documentation reasonably demonstrating: (1) ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Generating Facility; (2) an option to purchase or acquire a leasehold site for such purpose; or (3) an exclusivity or other business relationship between Interconnection Customer and the entity having the right to sell, lease or grant Interconnection Customer the right to possess or occupy a site for such purpose.

Small Generating Facility shall mean a Generating Facility that has a Generating Facility Capacity of no more than 20 MW.

Stand Alone Network Upgrades shall mean 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.

Standard Large Generator Interconnection Agreement (LGIA) shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to a Large Generating Facility, that is included in the Transmission Provider's Tariff.

Standard Large Generator Interconnection Procedures (LGIP) shall mean the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that are included in the Transmission Provider's Tariff.

System Protection Facilities shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) the Transmission Provider's Transmission System from faults or other electrical disturbances occurring at the Generating Facility and (2) the Generating Facility from faults or other electrical system disturbances occurring on the Transmission Provider's Transmission System or on other delivery systems or other generating systems to which the Transmission Provider's Transmission System is directly connected.

Tariff shall mean the Transmission Provider's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the Commission, and as amended or supplemented from time to time, or any successor tariff.

Transmission Owner shall mean an entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the Standard Large Generator Interconnection Agreement to the extent necessary.

Transmission Provider shall mean the public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from the Transmission Provider.

Transmission Provider's Interconnection Facilities shall mean 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.

Transmission System shall mean the facilities owned, controlled or operated by the Transmission Provider or Transmission Owner that are used to provide transmission service under the Tariff.

Trial Operation shall mean the period during which Interconnection Customer is engaged in on-site test operations and commissioning of the Generating Facility prior to commercial operation.

## ARTICLE 2. EFFECTIVE DATE, TERM AND TERMINATION

- 2.1 Effective Date. This LGIA shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by FERC. Transmission Provider shall promptly file this LGIA with FERC upon execution in accordance with Article 3.1, if required.
- 2.2 Term of Agreement. Subject to the provisions of Article 2.3, this LGIA shall remain in effect for a period of ten (10) years from the Effective Date or such other longer period as the Interconnection Customer may request (*Term to be Specified in Individual Agreements*) and shall be automatically renewed for each successive one-year period thereafter.
- 2.3 Termination Procedures. This LGIA may be terminated as follows:
- 2.3.1 Written Notice. The Interconnection Customer may terminate this LGIA after giving the Transmission Provider ninety (90) Calendar Days advance written notice; or
- 2.3.2 Default. Either Party may terminate this LGIA in accordance with Article 17.Notwithstanding the foregoing, no termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this LGIA, which notice has been accepted for filing by FERC.
- 2.4 Termination Costs. If a Party elects to terminate this Agreement pursuant to Article 2.3 above, each Party shall pay all costs incurred (including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment) or charges assessed by the other Party, as of the date of the other Party's receipt of such notice of termination, that are the responsibility of the Terminating Party under this LGIA. In the event of termination by either Party, both Parties shall use commercially Reasonable Efforts to mitigate the costs, damages and charges arising as a consequence of termination. Upon termination of this LGIA, unless otherwise ordered or approved by FERC:
- 2.4.1 With respect to any portion of the Transmission Provider's Interconnection Facilities that have not yet been constructed or installed, the Transmission Provider shall to the extent possible and with Interconnection Customer's authorization cancel any pending orders of, or return, any materials or equipment for, or contracts for construction of, such facilities; provided that in the event Interconnection Customer elects not to authorize such cancellation, Interconnection Customer shall assume all payment obligations with respect to such materials, equipment, and contracts, and the Transmission Provider shall deliver such material and equipment, and, if necessary, assign such contracts, to Interconnection Customer as soon as practicable, at Interconnection Customer's expense. To the extent that Interconnection Customer has already paid Transmission Provider for any or all such costs of materials or equipment not taken by Interconnection Customer, Transmission Provider shall promptly refund such amounts to Interconnection Customer, less any costs, including penalties incurred by the Transmission Provider to cancel any pending orders of or return such materials, equipment, or contracts.

If an Interconnection Customer terminates this LGIA, it shall be responsible for all costs incurred in association with that Interconnection Customer's interconnection, including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment, and other expenses including any Network Upgrades for which the Transmission Provider has incurred expenses and has not been reimbursed by the Interconnection Customer.

- 2.4.2 Transmission Provider may, at its option, retain any portion of such materials, equipment, or facilities that Interconnection Customer chooses not to accept delivery of, in which case Transmission Provider shall be responsible for all costs associated with procuring such materials, equipment, or facilities.
- 2.4.3 With respect to any portion of the Interconnection Facilities, and any other facilities already installed or constructed pursuant to the terms of this LGIA, Interconnection Customer shall be responsible for all costs associated with the removal, relocation or other disposition or retirement of such materials, equipment, or facilities.
- 2.5 Disconnection. Upon termination of this LGIA, the Parties will take all appropriate steps to disconnect the Large Generating Facility from the Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this LGIA or such non-terminating Party otherwise is responsible for these costs under this LGIA.
- 2.6 Survival. This LGIA shall continue in effect after termination to the extent necessary to provide for final billings and payments and for costs incurred hereunder, including billings and payments pursuant to this LGIA; to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this LGIA was in effect; and to permit each Party to have access to the lands of the other Party pursuant to this LGIA or other applicable agreements, to disconnect, remove or salvage its own facilities and equipment.

# **ARTICLE 3. REGULATORY FILINGS**

3.1 Filing. The Transmission Provider shall file this LGIA (and any amendment hereto) with the appropriate Governmental Authority, if required. Any information related to studies for interconnection asserted by Interconnection Customer to contain competitively sensitive commercial or financial information shall be maintained by the Transmission Provider and identified as "confidential" under seal stating that Interconnection Customer asserts such information is Confidential Information and has requested such information be kept under seal. If requested by the Transmission Provider, Interconnection Customer shall provide the Transmission Provider, in writing, with the Interconnection Customer's basis for asserting that the information referred to in this Article 3.1 is competitively sensitive information, and the Transmission Provider may disclose such writing to the appropriate Governmental Authority. Interconnection Customer shall be responsible for the costs associated with affording confidential treatment of such information. If the Interconnection Customer has executed this LGIA, or any amendment thereto, the Interconnection Customer shall reasonably cooperate with Transmission Provider with respect to such filing and to provide any information reasonably requested by Transmission Provider needed to comply with applicable regulatory requirements.

## ARTICLE 4. SCOPE OF SERVICE

- 4.1 Interconnection Product Options. Interconnection Customer has selected the following (checked) type of Interconnection Service:
- 4.1.1 Energy Resource Interconnection Service (ER Interconnection Service).
- 4.1.1.1 The Product. ER Interconnection Service allows Interconnection Customer to connect the Large Generating Facility to the Transmission System and be eligible to deliver the Large Generating Facility's output using the existing firm or non-firm capacity of the Transmission System on an "as available" basis. To the extent Interconnection Customer wants to receive ER Interconnection Service, the Transmission Provider shall construct facilities consistent with the studies identified in Attachment

A. ER Interconnection Service does not in and of itself convey any transmission delivery service. 4.1.1.2 Transmission Delivery Service Implications. Under ER Interconnection Service, the Interconnection Customer will be able to inject power from the Large Generating Facility into and deliver power across the interconnecting Transmission Provider's Transmission System on an "as available" basis up to the amount of MW's identified in the applicable stability and steady state studies to the extent the upgrades initially required to qualify for ER Interconnection Service have been constructed. Where eligible to do so (e.g., PJM, ISO-NE, NYISO), the Interconnection Customer may place a bid to sell into the market up to the maximum identified Large Generating Facility output, subject to any conditions specified in the interconnection service approval, and the Large Generating Facility will be dispatched to the extent the Interconnection Customer's bid clears. In all other instances, no transmission delivery service from the Large Generating Facility is assured, but the Interconnection Customer may obtain point-to-point transmission delivery service or be used for secondary network transmission service, pursuant to the Transmission Provider's Tariff, up to the maximum output identified in the stability and steady state studies. In those instances, in order for the Interconnection Customer to obtain the right to deliver or inject energy beyond the Large Generating Facility Point of Interconnection or to improve its ability to do so, transmission delivery service must be obtained pursuant to the provisions of the Transmission Provider's Tariff. The Interconnection Customer's ability to inject its Large Generating Facility output beyond the Point of Interconnection, therefore, will depend on the existing capacity of the Transmission Provider's Transmission System at such time as a transmission service request is made that would accommodate such delivery. The provision of firm point-to-point transmission service may require the construction of additional Network Upgrades.

- 4.1.2 Network Resource Interconnection Service (NR Interconnection Service).
- 4.1.2.1 The Product. The Transmission Provider must conduct the necessary studies and construct the Network Upgrades needed to integrate the Large Generating Facility (1) in a manner comparable to that in which the Transmission Provider integrates its generating facilities to serve native load customers; or (2) in an ISO or RTO with market based congestion management, in the same manner as all other Network Resources. NR Interconnection Service in and of itself does not convey any transmission delivery service.

4.1.2.2 Transmission Delivery Service Implications. NR Interconnection Service allows the Interconnection Customer's Large Generating Facility to be designated by any Network Customer under the Tariff on the Transmission Provider's Transmission System as a Network Resource, up to the Large Generating Facility's full output, on the same basis as all other existing Network Resources interconnected to the Transmission Provider's Transmission System, and to be studied as a Network Resource on the assumption that such a designation will occur. Although NR Interconnection Service does not convey a reservation of transmission service, any Network Customer under the Tariff can utilize its network service under the Tariff to obtain delivery of energy from the interconnected Interconnection Customer's Large Generating Facility in the same manner as it accesses other Network Resources. A Large Generating Facility receiving NR Interconnection Service may also be used to provide Ancillary Services after technical studies and/or periodic analyses are performed with respect to the Large Generating Facility's ability to provide any applicable Ancillary Services, provided that such studies and analyses have been or would be required in connection with the provision of such Ancillary Services by any existing Network Resource. However, if an Interconnection Customer's Large Generating Facility has not been designated as a Network Resource by any load, it cannot be required to provide Ancillary Services except to the extent such requirements extend to all Generating Facilities that are similarly situated.

NR Interconnection Service does not necessarily provide the Interconnection Customer with the capability to physically deliver the output of its Large Generating Facility to any particular load on the Transmission Provider's Transmission System without incurring congestion costs. In the event of transmission constraints on the Transmission Provider's Transmission System, the Interconnection Customer's Large Generating Facility shall be subject to the applicable congestion management procedures in the Transmission Provider's Transmission System in the same manner as all other Network Resources.

There is no requirement either at the time of study or interconnection, or at any point in the future, that the Interconnection Customer's Large Generating Facility be designated as a Network Resource by a Network Service Customer under the Tariff

or that the Interconnection Customer identify a specific buyer (or sink). To the extent a Network Customer does designate the Large Generating Facility as a Network Resource, it must do so pursuant to the Transmission Provider's Tariff.

Once an Interconnection Customer satisfies the requirements for obtaining NR Interconnection Service, any future transmission service request for delivery from the Large Generating Facility within the Transmission Provider's Transmission System of any amount of capacity and/or energy, up to the amount initially studied, will not require that any additional studies be performed or that any further upgrades associated with such Large Generating Facility be undertaken, regardless of whether or not such Large Generating Facility is ever designated by a Network Customer as a Network Resource and regardless of changes in ownership of the Large Generating Facility. To the extent the Interconnection Customer enters into an arrangement for long term transmission service for deliveries from the Large Generating Facility outside the Transmission Provider's Transmission System, such request may require additional studies and upgrades in order for the Transmission Provider to grant such request.

- 4.2 Provision of Service. Transmission Provider shall provide Interconnection Service for the Large Generating Facility at the Point of Interconnection.
- 4.3 Generator Balancing Service Arrangements. Interconnection Customer must demonstrate, to the Transmission Provider's reasonable satisfaction, that it has satisfied the requirements of this Article 4.3 prior to the submission of any schedules for delivery service to such Transmission Provider identifying the Large Generating Facility as the Point of Receipt for such scheduled delivery.
- 4.3.1 Interconnection Customer is responsible for ensuring that its actual Large Generating Facility output matches the scheduled delivery from the Large Generating Facility to the Transmission Provider's Transmission System, consistent with the scheduling requirements of the Transmission Provider's FERC-approved market structure, including ramping into and out of such scheduled delivery, as measured at the Point of Interconnection, consistent with the scheduling requirements of the Transmission Provider's Tariff and any applicable FERC-approved market structure.

Interconnection Customer shall arrange for the supply of energy when there is a difference between the actual Large Generating Facility output and the scheduled delivery from the Large Generating Facility (the "Generator Balancing Service Arrangements").

Interconnection Customer may satisfy its obligation for making such Generator Balancing Service Arrangements by:
(a) obtaining such service from another entity that (i) has generating resources deliverable within the applicable Control Area, (ii) agrees to assume responsibility for providing such Generator Balancing Service Arrangements to the Interconnection Customer, and (iii) has appropriate coordination service arrangements or agreements with the applicable Control Area that addresses Generator Balancing Service Arrangements for all generating resources for which the entity is responsible within the applicable Control Area:

- (b) committing sufficient additional unscheduled generating resources to the control of and dispatch by the applicable Control Area operator that are capable of supplying energy not supplied by the Interconnection Customer's scheduled Large Generating Facility, and entering into an appropriate coordination services agreement with the applicable Control Area that addresses Generator Balancing Service Arrangements obligations for the Large Generating Facility;
- (c) entering into an arrangement with another Control Area to dynamically schedule the Interconnection Customer's Large Generating Facility out of the applicable Control Area and into such other Control Area;
- (d) entering into a Generator Balancing Service Arrangements with the applicable Control Area; or
- (e) in the event the load/generation balancing function of the applicable Control Area is accomplished through the function of its market structures approved by FERC, by entering into an arrangement consistent with such FERC-approved market structure.

In the event Interconnection Customer fails to demonstrate to the Transmission Provider that it has otherwise complied with this Article 4.3, the Interconnection Customer shall be deemed to have elected to enter into a Generator Balancing Service Arrangements with the applicable Control Area.

Nothing in this provision shall prejudice either Party from obtaining a FERC-approved tariff addressing its obligations and rights with respect to Generator Balancing Service Arrangements.

- 4.4 Performance Standards. Each Party shall perform all of its obligations under this LGIA in accordance with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice, and to the extent a Party is required or prevented or limited in taking any action by such regulations and standards, such Party shall not be deemed to be in Breach of this LGIA for its compliance therewith. If such Party is the Transmission Provider or Transmission Owner, then that Party shall amend the LGIA and submit the amendment to the Commission for approval.
- 4.5 No Transmission Delivery Service. The execution of this LGIA does not constitute a request for, nor the provision of, any transmission delivery service under the Transmission Provider's Tariff.
- 4.6 Interconnection Customer Provided Services. The services provided by Interconnection Customer under this LGIA are set forth in Article 9.6 and Article 13.5.1. Interconnection Customer shall be paid for such services in accordance with Article 11.6.

# ARTICLE 5. INTERCONNECTION FACILITIES ENGINEERING, PROCUREMENT, AND CONSTRUCTION

- 5.1 Options. Unless otherwise mutually agreed to between the Parties, Interconnection Customer shall select the In-Service Date, Initial Synchronization Date, and Commercial Operation Date; and either Standard Option or Alternate Option set forth below for completion of the Transmission Provider's Interconnection Facilities and Network Upgrades as set forth in Appendix A, Interconnection Facilities and Network Upgrades, and such dates and selected option shall be set forth in Appendix B, Milestones.
- 5.1.1 Standard Option. The Transmission Provider shall design, procure, and construct the Transmission Provider's Interconnection Facilities and Network Upgrades, using Reasonable Efforts to complete the Transmission Provider's Interconnection Facilities and Network Upgrades by the dates set forth in Appendix B, Milestones. The Transmission Provider shall not be required to undertake any action which is inconsistent with its standard safety practices, its material and equipment specifications, its design criteria and construction procedures, its labor agreements, and Applicable Laws and Regulations. In the event the Transmission Provider reasonably expects that it will not be able to complete the Transmission Provider's Interconnection Facilities and Network Upgrades by the specified dates, the Transmission Provider shall promptly provide written notice to the Interconnection Customer and shall undertake Reasonable Efforts to meet the earliest dates thereafter.
- 5.1.2 Alternate Option. If the dates designated by Interconnection Customer are acceptable to Transmission Provider, the Transmission Provider shall so notify Interconnection Customer within thirty (30) Calendar Days, and shall assume responsibility for the design, procurement and construction of the Transmission Provider's Interconnection Facilities by the designated dates.

If Transmission Provider subsequently fails to complete Transmission Provider's Interconnection Facilities by the In-Service Date, to the extent necessary to provide back feed power; or fails to complete Network Upgrades by the Initial Synchronization Date to the extent necessary to allow for Trial Operation at full power output, unless other arrangements are made by the Parties for such Trial Operation; or fails to complete the Network Upgrades by the Commercial Operation Date, as such dates are reflected in Appendix B, Milestones; Transmission Provider shall pay Interconnection Customer liquidated damages in

accordance with Article 5.3, Liquidated Damages, provided, however, the dates designated by Interconnection Customer shall be extended day for day for each day that the applicable RTO or ISO refuses to grant clearances to install equipment.

- 5.1.3 Option to Build. If the dates designated by Interconnection Customer are not acceptable to Transmission Provider, the Transmission Provider shall so notify the Interconnection Customer within thirty (30) Calendar Days, and unless the Parties agree otherwise, Interconnection Customer shall have the option to assume responsibility for the design, procurement and construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades. Both Transmission Provider and Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Appendix A to the LGIA. Except for Stand Alone Upgrades, Interconnection Customer shall have no right to construct Network Upgrades under this option.
- 5.1.4 Negotiated Option. If the Interconnection Customer elects not to exercise its option under Article 5.1.3, Option to Build, Interconnection Customer shall so notify Transmission Provider within thirty (30) Calendar Days, and the Parties shall in good faith attempt to negotiate terms and conditions (including revision of the specified dates and liquidated damages, the provision of incentives or the procurement and construction of a portion of the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades by Interconnection Customer) pursuant to which Transmission Provider is responsible for the design, procurement and construction of the Transmission Provider's Interconnection Facilities and Network Upgrades. If the Parties are unable to reach agreement on such terms and conditions, Transmission Provider shall assume responsibility for the design, procurement and construction of the Transmission Provider's Interconnection Facilities and Network Upgrades pursuant to 5.1.1, Standard Option.
- 5.2 General Conditions Applicable to Option to Build. If Interconnection Customer assumes responsibility for the design, procurement and construction of the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades, (1) the Interconnection Customer shall engineer, procure equipment, and construct the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by the Transmission Provider;
- (2) Interconnection Customer's engineering, procurement and construction of the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law to which Transmission Provider would be subject in the engineering, procurement or construction of the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades;
- (3) Transmission Provider shall review and approve the engineering design, equipment acceptance tests, and the construction of the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades;
- (4) prior to commencement of construction, Interconnection Customer shall provide to Transmission Provider a schedule for construction of the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades, and shall promptly respond to requests for information from Transmission Provider;
- (5) at any time during construction, Transmission Provider shall have the right to gain unrestricted access to the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades and to conduct inspections of the same;(6) at any time during construction, should any phase of the engineering, equipment procurement, or construction of the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and specifications provided by Transmission Provider, the Interconnection Customer shall be obligated to remedy deficiencies in that portion of the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades;

- (7) the Interconnection Customer shall indemnify the Transmission Provider for claims arising from the Interconnection Customer's construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to Article 18.1 Indemnity;
- (8) the Interconnection Customer shall transfer control of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades to the Transmission Provider; and
- (9) Transmission Provider shall approve and accept for operation and maintenance the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with this Article 5.2.
- 5.3 Liquidated Damages. The actual damages to the Interconnection Customer, in the event the Transmission Provider's Interconnection Facilities or Network Upgrades are not completed by the dates designated by the Interconnection Customer and accepted by the Transmission Provider pursuant to subparagraphs 5.1.2 or 5.1.4, above, may include Interconnection Customer's fixed operation and maintenance costs and lost opportunity costs. Such actual damages are uncertain and impossible to determine at this time. Because of such uncertainty, any liquidated damages paid by the Transmission Provider to the Interconnection Customer in the event that Transmission Provider does not complete any portion of the Transmission Provider's Interconnection Facilities or Network Upgrades by the applicable dates, shall be an amount equal to 1/2 of 1 percent per day of the actual cost of the Transmission Provider's Interconnection Facilities and Network Upgrades, in the aggregate, for which Transmission Provider has assumed responsibility to design, procure and construct.

However, in no event shall the total liquidated damages exceed 20 percent of the actual cost of the Transmission Provider Interconnection Facilities and Network Upgrades for which the Transmission Provider has assumed responsibility to design, procure, and construct. The foregoing payments will be made by the Transmission Provider to the Interconnection Customer as just compensation for the damages caused to the Interconnection Customer, which actual damages are uncertain and impossible to determine at this time, and as reasonable liquidated damages, but not as a penalty or a method to secure performance of this LGIA.No liquidated damages shall be paid to Interconnection Customer if: (1) Interconnection Customer is not ready to commence use of the Transmission Provider's Interconnection Facilities or Network Upgrades to take the delivery of power for the Large Generating Facility's Trial Operation or to export power from the Large Generating Facility on the specified dates, unless the Interconnection Customer would have been able to commence use of the Transmission Provider's Interconnection Facilities or Network Upgrades to take the delivery of power for Large Generating Facility's Trial Operation or to export power from the Large Generating Facility, but for Transmission Provider's delay; (2) the Transmission Provider's failure to meet the specified dates is the result of the action or inaction of the Interconnection Customer or any other Interconnection Customer who has entered into an LGIA with the Transmission Provider or any cause beyond Transmission Provider's reasonable control or reasonable ability to cure; (3) the interconnection Customer has assumed responsibility for the design, procurement and construction of the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades; or (4) the Parties have otherwise agreed.

- 5.4 Power System Stabilizers. The Interconnection Customer shall procure, install, maintain and operate Power System Stabilizers in accordance with the guidelines and procedures established by the Applicable Reliability Council. Transmission Provider reserves the right to reasonably establish minimum acceptable settings for any installed Power System Stabilizers, subject to the design and operating limitations of the Large Generating Facility. If the Large Generating Facility's Power System Stabilizers are removed from service or not capable of automatic operation, the Interconnection Customer shall immediately notify the Transmission Provider's system operator, or its designated representative.
- 5.5 Equipment Procurement. If responsibility for construction of the Transmission Provider's Interconnection Facilities or Network Upgrades is to be borne by the Transmission Provider, then the Transmission Provider shall commence design of the

Transmission Provider's Interconnection Facilities or Network Upgrades and procure necessary equipment as soon as practicable after all of the following conditions are satisfied, unless the Parties otherwise agree in writing:

- 5.5.1 The Transmission Provider has completed the Facilities Study pursuant to the Facilities Study Agreement;
- 5.5.2 The Transmission Provider has received written authorization to proceed with design and procurement from the Interconnection Customer by the date specified in Appendix B, Milestones; and
- 5.5.3 The Interconnection Customer has provided security to the Transmission Provider in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.
- 5.6 Construction Commencement. The Transmission Provider shall commence construction of the Transmission Provider's Interconnection Facilities and Network Upgrades for which it is responsible as soon as practicable after the following additional conditions are satisfied:
- 5.6.1 Approval of the appropriate Governmental Authority has been obtained for any facilities requiring regulatory approval;
- 5.6.2 Necessary real property rights and rights-of-way have been obtained, to the extent required for the construction of a discrete aspect of the Transmission Provider's Interconnection Facilities and Network Upgrades;
- 5.6.3 The Transmission Provider has received written authorization to proceed with construction from the Interconnection Customer by the date specified in Appendix B, Milestones; and
- 5.6.4 The Interconnection Customer has provided security to the Transmission Provider in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.
- 5.7 Work Progress. The Parties will keep each other advised periodically as to the progress of their respective design, procurement and construction efforts. Either Party may, at any time, request a progress report from the other Party. If, at any time, the Interconnection Customer determines that the completion of the Transmission Provider's Interconnection Facilities will not be required until after the specified In-Service Date, the Interconnection Customer will provide written notice to the Transmission Provider of such later date upon which the completion of the Transmission Provider's Interconnection Facilities will be required.
- 5.8 Information Exchange. As soon as reasonably practicable after the Effective Date, the Parties shall exchange information regarding the design and compatibility of the Parties' Interconnection Facilities and compatibility of the Interconnection Facilities with the Transmission Provider's Transmission System, and shall work diligently and in good faith to make any necessary design changes.5.9 Limited Operation. If any of the Transmission Provider's Interconnection Facilities or Network Upgrades are not reasonably expected to be completed prior to the Commercial Operation Date of the Large Generating Facility, Transmission Provider shall, upon the request and at the expense of Interconnection Customer, perform operating studies on a timely basis to determine the extent to which the Large Generating Facility and the Interconnection Customer Interconnection Facilities may operate prior to the completion of the Transmission Provider's Interconnection Facilities or Network Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and this LGIA. Transmission Provider shall permit Interconnection Customer to operate the Large Generating Facility and the Interconnection Customer Interconnection Facilities in accordance with the results of such studies.
- 5.10 Interconnection Customer's Interconnection Facilities ("ICIF"). Interconnection Customer shall, at its expense, design, procure, construct, own and install the ICIF, as set forth in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades.

- 5.10.1 Large Generating Facility Specifications. Interconnection Customer shall submit initial specifications for the ICIF, including System Protection Facilities, to Transmission Provider at least one hundred eighty (180) Calendar Days prior to the Initial Synchronization Date; and final specifications for review and comment at least ninety (90) Calendar Days prior to the Initial Synchronization Date. Transmission Provider shall review such specifications to ensure that the ICIF are compatible with the technical specifications, operational control, and safety requirements of the Transmission Provider and comment on such specifications within thirty (30) Calendar Days of Interconnection Customer's submission. All specifications provided hereunder shall be deemed confidential.
- 5.10.2 Transmission Provider's Review. Transmission Provider's review of Interconnection Customer's final specifications shall not be construed as confirming, endorsing, or providing a warranty as to the design, fitness, safety, durability or reliability of the Large Generating Facility, or the ICIF. Interconnection Customer shall make such changes to the ICIF as may reasonably be required by Transmission Provider, in accordance with Good Utility Practice, to ensure that the ICIF are compatible with the telemetry, communications, and safety requirements of the Transmission Provider.
- 5.10.3 ICIF Construction. The ICIF shall be designed and constructed in accordance with Good Utility Practice. Within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, the Interconnection Customer shall deliver to the Transmission Provider "as-built" drawings, information and documents for the ICIF, such as: a one-line diagram, a site plan showing the Large Generating Facility and the ICIF, plan and elevation drawings showing the layout of the ICIF, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with the Interconnection Customer's step-up transformers, the facilities connecting the Large Generating Facility to the step-up transformers and the ICIF, and the impedances (determined by factory tests) for the associated step-up transformers and the Large Generating Facilities. The Interconnection Customer shall provide Transmission Provider specifications for the excitation system, automatic voltage regulator, Large Generating Facility control and protection settings, transformer tap settings, and communications.
- 5.11 Transmission Provider's Interconnection Facilities Construction. The Transmission Provider's Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Upon request, within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, the Transmission Provider shall deliver to the Interconnection Customer the following "as-built" drawings, information and documents for the Transmission Provider's Interconnection Facilities [include appropriate drawings and relay diagrams]. The Transmission Provider will obtain control of the Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades upon completion of such facilities.
- 5.12 Access Rights. Upon reasonable notice and supervision by a Party, and subject to any required or necessary regulatory approvals, a Party ("Granting Party") shall furnish *at no cost* to the other Party ("Access Party") any rights of use, licenses, rights of way and easements with respect to lands owned or controlled by the Granting Party and its agents that are necessary to enable the Access Party to obtain ingress and egress to construct, operate, maintain, repair, test (or witness testing), inspect, replace or remove facilities and equipment to: (i) interconnect the Large Generating Facility with the Transmission System; (ii) operate and maintain the Large Generating Facility, the Interconnection Facilities and the Transmission System; and (iii) disconnect or remove the Access Party's facilities and equipment upon termination of this LGIA. In exercising such licenses, rights of way and easements, the Access Party shall not unreasonably disrupt or interfere with normal operation of the Granting Party's business and shall adhere to the safety rules and procedures established in advance, as may be changed from time to time, by the Granting Party and provided to the Access Party.
- 5.13 Lands of Other Property Owners. If any part of the Transmission Provider or Transmission Owner's Interconnection Facilities and/or Network Upgrades is to be installed on property owned by persons other than Interconnection Customer or Transmission Provider or Transmission Owner, the Transmission Provider or Transmission Owner shall at Interconnection

Customer's expense use efforts, similar in nature and extent to those that it typically undertakes on its own behalf, including use of its eminent domain authority, and to the extent consistent with state law, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove the Transmission Provider or Transmission Owner's Interconnection Facilities and/or Network Upgrades upon such property. Upon receipt of a reasonable siting request, Transmission Provider shall provide siting assistance to the Interconnection Customer comparable to that provided to the Transmission Provider's own, or an Affiliate's generation.

- 5.14 Permits. The LGIA shall specify the allocation of the responsibilities of the Transmission Provider or Transmission Owner and the Interconnection Customer to obtain all permits, licenses and authorizations that are necessary to accomplish the interconnection in compliance with Applicable Laws and Regulations. The Transmission Provider or Transmission Owner and the Interconnection Customer shall cooperate with each other in good faith in obtaining any such permits, licenses and authorizations. With respect to this paragraph, Transmission Provider or Transmission Owner shall provide permitting assistance to the Interconnection Customer comparable to that provided to the Transmission Provider's own, or an Affiliate's generation.
- 5.15 Early Construction of Base Case Facilities. Interconnection Customer may request Transmission Provider to construct, and Transmission Provider shall construct, using Reasonable Efforts to accommodate Interconnection Customer's In-Service Date, all or any portion of any Network Upgrades required for Interconnection Customer to be interconnected to the Transmission System which are included in the Base Case of the Facilities Study for the Interconnection Customer, and which also are required to be constructed for another Interconnection Customer, but where such construction is not scheduled to be completed in time to achieve Interconnection Customer's In-Service Date.
- 5.16 Suspension. Interconnection Customer reserves the right, upon written notice to Transmission Provider, to suspend at any time all work by Transmission Provider associated with the construction and installation of Transmission Provider's Interconnection Facilities and/or Network Upgrades required under this LGIA with the condition that the Transmission Provider shall be left in a safe and reliable condition in accordance with Good Utility Practice and the Transmission Provider's safety and reliability criteria. In such event, Interconnection Customer shall be responsible for all reasonable and necessary costs which Transmission Provider (i) has incurred pursuant to this LGIA prior to the suspension and (ii) incurs in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Transmission System during such suspension and, if applicable, any costs incurred in connection with the cancellation or suspension of material, equipment and labor contracts which Transmission Provider cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, Transmission Provider shall obtain Interconnection Customer's authorization to do so.

Transmission Provider shall invoice Interconnection Customer for such costs pursuant to Article 12 and shall use due diligence to minimize its costs. In the event Interconnection Customer suspends work by Transmission Provider required under this LGIA pursuant to this Article 5.16, and has not requested Transmission Provider to recommence the work required under this LGIA on or before the expiration of three (3) years following commencement of such suspension, this LGIA shall be deemed terminated.

# 5.17 Taxes.

- 5.17.1 Interconnection Customer Payments Not Taxable. The Parties intend that all payments or property transfers made by Interconnection Customer to Transmission Provider for the installation of the Transmission Provider's Interconnection Facilities and the Network Upgrades shall be non-taxable, either as contributions to capital, or as an advance, in accordance with the Internal Revenue Code and any applicable state income tax laws and shall not be taxable as contributions in aid of construction or otherwise under the Internal Revenue Code and any applicable state income tax laws.
- 5.17.2 Representations And Covenants. In accordance with IRS Notice 2001-82 and IRS Notice 88-129, Interconnection Customer represents and covenants that (i) ownership of the electricity generated at the Large Generating Facility will pass to another party prior to the transmission of the electricity on the Transmission System, (ii) for income tax purposes, the

amount of any payments and the cost of any property transferred to the Transmission Provider for the Transmission Provider's Interconnection Facilities will be capitalized by Interconnection Customer as an intangible asset and recovered using the straight-line method over a useful life of twenty (20) years, and (iii) any portion of the Transmission Provider's Interconnection Facilities that is a "dual-use intertie," within the meaning of IRS Notice 88-129, is reasonably expected to carry only a de minimis amount of electricity in the direction of the Large Generating Facility. For this purpose, "de minimis amount" means no more than 5 percent of the total power flows in both directions, calculated in accordance with the "5 percent test" set forth in IRS Notice 88-129. This is not intended to be an exclusive list of the relevant conditions that must be met to conform to IRS requirements for non-taxable treatment.

At Transmission Provider's request, Interconnection Customer shall provide Transmission Provider with a report from an independent engineer confirming its representation in clause (iii), above. Transmission Provider represents and covenants that the cost of the Transmission Provider's Interconnection Facilities paid for by Interconnection Customer will have no net effect on the base upon which rates are determined.

5.17.3 Indemnification for Taxes Imposed Upon Transmission Provider. Notwithstanding Article 5.17.1, Interconnection Customer shall protect, indemnify and hold harmless Transmission Provider from income taxes imposed against Transmission Provider as the result of payments or property transfers made by Interconnection Customer to Transmission Provider under this LGIA, as well as any interest and penalties, other than interest and penalties attributable to any delay caused by Transmission Provider.

Transmission Provider shall not include a gross-up for income taxes in the amounts it charges Interconnection Customer under this LGIA unless (i) Transmission Provider has determined, in good faith, that the payments or property transfers made by Interconnection Customer to Transmission Provider should be reported as income subject to taxation or (ii) any Governmental Authority directs Transmission Provider to report payments or property as income subject to taxation; <u>provided, however,</u> that Transmission Provider may require Interconnection Customer to provide security, in a form reasonably acceptable to Transmission Provider (such as a parental guarantee or a letter of credit), in an amount equal to Interconnection Customer's estimated tax liability under this Article 5.17. Interconnection Customer shall reimburse Transmission Provider for such taxes on a fully grossed-up basis, in accordance with Article 5.17.4, within thirty (30) Calendar Days of receiving written notification from Transmission Provider of the amount due, including detail about how the amount was calculated.

In the event that the Transmission Provider includes a gross-up upon its own determination that the payments or property transfers should be reported as income subject to taxation, the Interconnection Customer may require the Transmission Provider to provide security, in a form reasonably acceptable to the Interconnection Customer (such as a parental guarantee ora letter of credit) in an amount equal to the Interconnection Customer's estimated tax liability under this Article 5.17.

The indemnification obligation shall terminate at the earlier of (1) the expiration of the 10-year testing period, as contemplated by IRS Notice 88-129, and the applicable statute of limitation, as it may be extended by the Transmission Provider upon request of the IRS, to keep these years open for audit or adjustment, or (2) the occurrence of a subsequent taxable event and the payment of any related indemnification obligations as contemplated by this Article 5.17.

5.17.4 Tax Gross-Up Amount. Interconnection Customer's liability for taxes under this Article 5.17 shall be calculated on a fully grossed-up basis. Except as may otherwise be agreed to by the parties, this means that Interconnection Customer will pay Transmission Provider, in addition to the amount paid for the Interconnection Facilities and Network Upgrades, an amount equal to (1) the current taxes imposed on Transmission Provider ("Current Taxes") on the excess of (a) the gross income realized by Transmission Provider as a result of payments or property transfers made by Interconnection Customer to Transmission Provider under this LGIA (without regard to any payments under this Article 5.17) (the "Gross Income Amount") over (b) the present value of future tax deductions for depreciation that will be available as a result of such payments or property transfers (the "Present Value Depreciation Amount"), plus (2) an additional amount sufficient to permit the Transmission Provider to receive and retain, after the payment of all Current Taxes, an amount equal to the net amount described in clause (1).

For this purpose, (i) Current Taxes shall be computed based on Transmission Provider's composite federal and state tax rates at the time the payments or property transfers are received and Transmission Provider will be treated as being subject to tax at the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting Transmission Provider's anticipated tax depreciation deductions as a result of such payments or property transfers by Transmission Provider's current weighted average cost of capital. Thus, the formula for calculating Interconnection Customer's liability to Transmission Owner pursuant to this Article 5.17.4 can be expressed as follows: (Current Tax Rate x (Gross Income Amount - Present Value of Tax Depreciation))/(1-Current Tax Rate). Interconnection Customer's estimated tax liability in the event taxes are imposed shall be stated in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades.

5.17.5 Private Letter Ruling or Change or Clarification of Law. At Interconnection Customer's request and expense, Transmission Provider shall file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by Interconnection Customer to Transmission Provider under this LGIA are subject to federal income taxation. Interconnection Customer will prepare the initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of Interconnection Customer's knowledge. Transmission Provider and Interconnection Customer shall cooperate in good faith with respect to the submission of such request.

Transmission Provider shall keep Interconnection Customer fully informed of the status of such request for a private letter ruling and shall execute either a privacy act waiver or a limited power of attorney, in a form acceptable to the IRS, that authorizes Interconnection Customer to participate in all discussions with the IRS regarding such request for a private letter ruling. Transmission Provider shall allow Interconnection Customer to attend all meetings with IRS officials about the request and shall permit Interconnection Customer to prepare the initial drafts of any follow-up letters in connection with the request. If the private letter ruling concludes that such transfers or sums are not subject to federal income taxation, or a clarification of or change in law results in Transmission Provider determining in good faith that such transfers or sums are not subject to federal income taxation, Parties' obligations regarding a gross-up or security under this Article 5.17 shall be reduced accordingly.

5.17.6 Subsequent Taxable Events. If, within 10 years from the date on which the relevant Transmission Provider Interconnection Facilities are placed in service, (i) Interconnection Customer Breaches the covenant contained in Article 5.17.2(i), (ii) a "disqualification event" occurs within the meaning of IRS Notice 88-129, or (iii) this LGIA terminates and Transmission Provider retains ownership of the Interconnection Facilities and Network Upgrades, the Interconnection Customer shall pay a tax gross-up for the taxes imposed on Transmission Provider, calculated using the methodology described in Article 5.17.4 and in accordance with IRS Notice 90-60.

5.17.7 Contests. In the event any Governmental Authority determines that Transmission Provider's receipt of payments or property constitutes income that is subject to taxation, Transmission Provider shall notify Interconnection Customer, in writing, within thirty (30) Calendar Days of receiving notification of such determination by a Governmental Authority. Upon the timely written request by Interconnection Customer and at Interconnection Customer's sole expense, Transmission Provider shall appeal, protest, seek abatement of, or otherwise oppose such determination. Upon Interconnection Customer's written request and sole expense, Transmission Provider shall file a claim for refund with respect to any taxes paid under this Article 5.17, whether or not it has received such a determination. Transmission Provider reserves the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the selection of counsel and compromise or settlement of the claim, but Transmission Provider shall keep Interconnection Customer informed, shall consider in good faith suggestions from Interconnection Customer about the conduct of the contest, and shall reasonably permit Interconnection Customer or an Interconnection Customer representative to attend contest proceedings.

Interconnection Customer shall pay to Transmission Provider on a periodic basis, as invoiced by Transmission Provider, Transmission Provider's documented reasonable costs of prosecuting such appeal, protest, abatement or other contest. Transmission Provider will not be required to appeal or seek further review beyond one level of judicial review. At any time

during the contest, Transmission Provider may agree to a settlement either with Interconnection Customer's consent or after obtaining written advice from nationally-recognized tax counsel, selected by Transmission Provider, but reasonably acceptable to Interconnection Customer, that the proposed settlement represents a reasonable settlement given the hazards of litigation. Interconnection Customer's obligation shall be based on the amount of the settlement agreed to by Interconnection Customer, or if a higher amount, so much of the settlement that is supported by the written advice from nationally-recognized tax counsel selected under the terms of the preceding sentence. Any settlement without Interconnection Customer's consent or such written advice will relieve Interconnection Customer from any obligation to indemnify Transmission Provider for the tax at issue in the contest.

- 5.17.8 Refund. In the event that (a) a private letter ruling is issued to Transmission Provider which holds that any amount paid or the value of any property transferred by Interconnection Customer to Transmission Provider under the terms of this LGIA is not subject to federal income taxation, (b) any legislative change or administrative announcement, notice, ruling or other determination makes it reasonably clear to Transmission Provider in good faith that any amount paid or the value of any property transferred by Interconnection Customer to Transmission Provider under the terms of this LGIA is not taxable to Transmission Provider, (c) any abatement, appeal, protest, or other contest results in a determination that any payments or transfers made by Interconnection Customer to Transmission Provider are not subject to federal income tax, or (d) if Transmission Provider receives a refund from any taxing authority for any overpayment of tax attributable to any payment or property transfer made by Interconnection Customer to Transmission Provider pursuant to this LGIA, Transmission Provider shall promptly refund to Interconnection Customer the following:
- (i) any payment made by Interconnection Customer under this Article 5.17 for taxes that is attributable to the amount determined to be non-taxable, together with interest thereon,
- (ii) on any amounts paid by Interconnection Customer to Transmission Provider for such taxes which Transmission Provider did not submit to the taxing authority, calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(ii) from the date payment was made by Interconnection Customer to the date Transmission Provider refunds such payment to Interconnection Customer, and
- (iii) with respect to any such taxes paid by Transmission Provider, any refund or credit Transmission Provider receives or to which it may be entitled from any Governmental Authority, interest (or that portion thereof attributable to the payment described in clause (i), above) owed to the Transmission Provider for such overpayment of taxes (including any reduction in interest otherwise payable by Transmission Provider to any Governmental Authority resulting from an offset or credit); provided, however, that Transmission Provider will remit such amount promptly to Interconnection Customer only after and to the extent that Transmission Provider has received a tax refund, credit or offset from any Governmental Authority for any applicable overpayment of income tax related to the Transmission Provider's Interconnection Facilities.

The intent of this provision is to leave both parties, to the extent practicable, in the event that no taxes are due with respect to any payment for Interconnection Facilities and Network Upgrades hereunder, in the same position they would have been in had no such tax payments been made.

5.17.9 Taxes Other Than Income Taxes. Upon the timely request by Interconnection Customer, and at Interconnection Customer's sole expense, Transmission Provider shall appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against Transmission Provider for which Interconnection Customer may be required to reimburse Transmission Provider under the terms of this LGIA. Interconnection Customer and Transmission Provider shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by Interconnection Customer to Transmission Provider for such taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the

event that a tax payment is withheld and ultimately due and payable after appeal, Interconnection Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by Transmission Provider.

- 5.17.10 Transmission Owners Who Are Not Transmission Providers. If the Transmission Provider is not the same entity as the Transmission Owner, then (i) all references in this Article 5.17 to Transmission Provider shall be deemed also to refer to and to include the Transmission Owner, as appropriate, and (ii) this LGIA shall not become effective until such Transmission Owner shall have agreed in writing to assume all of the duties and obligations of the Transmission Provider under this Article 5.17 of this LGIA.
- 5.18 Tax Status. Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this LGIA is intended to adversely affect any Transmission Provider's tax exempt status with respect to the issuance of bonds including, but not limited to, Local Furnishing Bonds.

### 5.19 Modification.

- 5.19.1 General. Either Party may undertake modifications to its facilities. If a Party plans to undertake a modification that reasonably may be expected to affect the other Party's facilities, that Party shall provide to the other Party sufficient information regarding such modification so that the other Party may evaluate the potential impact of such modification prior to commencement of the work. Such information shall be deemed to be confidential hereunder and shall include information concerning the timing of such modifications and whether such modifications are expected to interrupt the flow of electricity from the Large Generating Facility. The Party desiring to perform such work shall provide the relevant drawings, plans, and specifications to the other Party at least ninety (90) Calendar Days in advance of the commencement of the work or such shorter period upon which the Parties may agree, which agreement shall not unreasonably be withheld, conditioned or delayed. In the case of Large Generating Facility modifications that do not require Interconnection Customer to submit an Interconnection Request, Transmission Provider shall provide, within thirty (30) Calendar Days (or such other time as the Parties may agree), an estimate of any additional modifications to the Transmission System, Transmission Provider's Interconnection Facilities or Network Upgrades necessitated by such Interconnection Customer modification and a good faith estimate of the costs thereof.
- 5.19.2 Standards. Any additions, modifications, or replacements made to a Party's facilities shall be designed, constructed and operated in accordance with this LGIA and Good Utility Practice.
- 5.19.3 Modification Costs. Interconnection Customer shall not be directly assigned for the costs of any additions, modifications, or replacements that Transmission Provider makes to the Transmission Provider's Interconnection Facilities or the Transmission System to facilitate the interconnection of a third party to the Transmission Provider's Interconnection Facilities or the Transmission System, or to provide transmission service under the Transmission Provider's Tariff. Interconnection Customer shall be responsible for the costs of any additions, modifications, or replacements to the Interconnection Customer Interconnection Facilities that may be necessary to maintain or upgrade such Interconnection Customer Interconnection Facilities consistent with Applicable Laws and Regulations, Applicable Reliability Standards or Good Utility Practice.

# ARTICLE 6. TESTING AND INSPECTION

6.1 Pre-Commercial Operation Date Testing and Modifications. Prior to the Commercial Operation Date, the Transmission Provider shall test the Transmission Provider's Interconnection Facilities and Network Upgrades and Interconnection Customer shall test the Large Generating Facility and the Interconnection Customer Interconnection Facilities to ensure their safe and reliable operation. Similar testing may be required after initial operation. Each Party shall make any modifications to its facilities that are found to be necessary as a result of such testing. Interconnection Customer shall bear the cost of all such testing and

modifications. Interconnection Customer shall generate test energy at the Large Generating Facility only if it has arranged for the delivery of such test energy.

- 6.2 Post-Commercial Operation Date Testing and Modifications. Each Party shall at its own expense perform routine inspection and testing of its facilities and equipment in accordance with Good Utility Practice as may be necessary to ensure the continued interconnection of the Large Generating Facility with the Transmission System in a safe and reliable manner. Each Party shall have the right, upon advance written notice, to require reasonable additional testing of the other Party's facilities, at the requesting Party's expense, as may be in accordance with Good Utility Practice.
- 6.3 Right to Observe Testing. Each Party shall notify the other Party in advance of its performance of tests of its Interconnection Facilities. The other Party has the right, at its own expense, to observe such testing.
- 6.4 Right to Inspect. Each Party shall have the right, but shall have no obligation to: (i) observe the other Party's tests and/ or inspection of any of its System Protection Facilities and other protective equipment, including Power System Stabilizers; (ii) review the settings of the other Party's System Protection Facilities and other protective equipment; and (iii) review the other Party's maintenance records relative to the Interconnection Facilities, the System Protection Facilities and other protective equipment. A Party may exercise these rights from time to time as it deems necessary upon reasonable notice to the other Party. The exercise or non-exercise by a Party of any such rights shall not be construed as an endorsement or confirmation of any element or condition of the Interconnection Facilities or the System Protection Facilities or other protective equipment or the operation thereof, or as a warranty as to the fitness, safety, desirability, or reliability of same. Any information that Transmission Provider obtains through the exercise of any of its rights under this Article 6.4 shall be deemed to be confidential hereunder.

### **ARTICLE 7. METERING**

- 7.1 General. Each Party shall comply with the Applicable Reliability Council requirements. Unless otherwise agreed by the Parties, Transmission Provider shall install Metering Equipment at the Point of Interconnection prior to any operation of the Large Generating Facility and shall own, operate, test and maintain such Metering Equipment. Power flows to and from the Large Generating Facility shall be measured at or, at Transmission Provider's option, compensated to, the Point of Interconnection. Transmission Provider shall provide metering quantities, in analog and/or digital form, to Interconnection Customer upon request. Interconnection Customer shall bear all reasonable documented costs associated with the purchase, installation, operation, testing and maintenance of the Metering Equipment.
- 7.2 Check Meters. Interconnection Customer, at its option and expense, may install and operate, on its premises and on its side of the Point of Interconnection, one or more check meters to check Transmission Provider's meters. Such check meters shall be for check purposes only and shall not be used for the measurement of power flows for purposes of this LGIA, except as provided in Article 7.4 below. The check meters shall be subject at all reasonable times to inspection and examination by Transmission Provider or its designee. The installation, operation and maintenance thereof shall be performed entirely by Interconnection Customer in accordance with Good Utility Practice.
- 7.3 Standards. Transmission Provider shall install, calibrate, and test revenue quality Metering Equipment in accordance with applicable ANSI standards.
- 7.4 Testing of Metering Equipment. Transmission Provider shall inspect and test all Transmission Provider-owned Metering Equipment upon installation and at least once every two (2) years thereafter. If requested to do so by Interconnection Customer, Transmission Provider shall, at Interconnection Customer's expense, inspect or test Metering Equipment more frequently than every two (2) years. Transmission Provider shall give reasonable notice of the time when any inspection or test shall take place, and Interconnection Customer may have representatives present at the test or inspection. If at any time Metering Equipment is found to be inaccurate or defective, it shall be adjusted, repaired or replaced at Interconnection Customer's expense, in order to provide accurate metering, unless the inaccuracy or defect is due to Transmission Provider's failure to maintain, then

Transmission Provider shall pay. If Metering Equipment fails to register, or if the measurement made by Metering Equipment during a test varies by more than two percent from the measurement made by the standard meter used in the test, Transmission Provider shall adjust the measurements by correcting all measurements for the period during which Metering Equipment was in error by using Interconnection Customer's check meters, if installed. If no such check meters are installed or if the period cannot be reasonably ascertained, the adjustment shall be for the period immediately preceding the test of the Metering Equipment equal to one-half the time from the date of the last previous test of the Metering Equipment.

7.5 Metering Data. At Interconnection Customer's expense, the metered data shall be telemetered to one or more locations designated by Transmission Provider and one or more locations designated by Interconnection Customer. Such telemetered data shall be used, under normal operating conditions, as the official measurement of the amount of energy delivered from the Large Generating Facility to the Point of Interconnection.

### **ARTICLE 8. COMMUNICATIONS**

- 8.1 Interconnection Customer Obligations. Interconnection Customer shall maintain satisfactory operating communications with Transmission Provider's Transmission System dispatcher or representative designated by Transmission Provider. Interconnection Customer shall provide standard voice line, dedicated voice line and facsimile communications at its Large Generating Facility control room or central dispatch facility through use of either the public telephone system, or a voice communications system that does not rely on the public telephone system. Interconnection Customer shall also provide the dedicated data circuit(s) necessary to provide Interconnection Customer data to Transmission Provider as set forth in Appendix D, Security Arrangements Details. The data circuit(s) shall extend from the Large Generating Facility to the location(s) specified by Transmission Provider. Any required maintenance of such communications equipment shall be performed by Interconnection Customer. Operational communications shall be activated and maintained under, but not be limited to, the following events: system paralleling or separation, scheduled and unscheduled shutdowns, equipment clearances, and hourly and daily load data.
- 8.2 Remote Terminal Unit. Prior to the Initial Synchronization Date of the Large Generating Facility, a Remote Terminal Unit, or equivalent data collection and transfer equipment acceptable to both Parties, shall be installed by Interconnection Customer, or by Transmission Provider at Interconnection Customer's expense, to gather accumulated and instantaneous data to be telemetered to the location(s) designated by Transmission Provider through use of a dedicated point-to-point data circuit(s) as indicated in Article 8.1. The communication protocol for the data circuit(s) shall be specified by Transmission Provider. Instantaneous bi-directional analog real power and reactive power flow information must be telemetered directly to the location(s) specified by Transmission Provider.

Each Party will promptly advise the other Party if it detects or otherwise learns of any metering, telemetry or communications equipment errors or malfunctions that require the attention and/or correction by the other Party. The Party owning such equipment shall correct such error or malfunction as soon as reasonably feasible.

8.3 No Annexation. Any and all equipment placed on the premises of a Party shall be and remain the property of the Party providing such equipment regardless of the mode and manner of annexation or attachment to real property, unless otherwise mutually agreed by the Parties.

### ARTICLE 9. OPERATIONS

- 9.1 General. Each Party shall comply with the Applicable Reliability Council requirements. Each Party shall provide to the other Party all information that may reasonably be required by the other Party to comply with Applicable Laws and Regulations and Applicable Reliability Standards.
- 9.2 Control Area Notification. At least three months before Initial Synchronization Date, the Interconnection Customer shall notify the Transmission Provider in writing of the Control Area in which the Large Generating Facility will be located. If the

Interconnection Customer elects to locate the Large Generating Facility in a Control Area other than the Control Area in which the Large Generating Facility is physically located, and if permitted to do so by the relevant transmission tariffs, all necessary arrangements, including but not limited to those set forth in Article 7 and Article 8 of this LGIA, and remote Control Area generator interchange agreements, if applicable, and the appropriate measures under such agreements, shall be executed and implemented prior to the placement of the Large Generating Facility in the other Control Area.

- 9.3 Transmission Provider Obligations. Transmission Provider shall cause the Transmission System and the Transmission Provider's Interconnection Facilities to be operated, maintained and controlled in a safe and reliable manner and in accordance with this LGIA. Transmission Provider may provide operating instructions to Interconnection Customer consistent with this LGIA and Transmission Provider's operating protocols and procedures as they may change from time to time. Transmission Provider will consider changes to its operating protocols and procedures proposed by Interconnection Customer.
- 9.4 Interconnection Customer Obligations. Interconnection Customer shall at its own expense operate, maintain and control the Large Generating Facility and the Interconnection Customer Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA. Interconnection Customer shall operate the Large Generating Facility and the Interconnection Customer Interconnection Facilities in accordance with all applicable requirements of the Control Area of which it is part, as such requirements are set forth in Appendix C, Interconnection Details, of this LGIA. Appendix C, Interconnection Details, will be modified to reflect changes to the requirements as they may change from time to time. Either Party may request that the other Party provide copies of the requirements set forth in Appendix C, Interconnection Details, of this LGIA.
- 9.5 Start-Up and Synchronization. Consistent with the Parties' mutually acceptable procedures, the Interconnection Customer is responsible for the proper synchronization of the Large Generating Facility to the Transmission Provider's Transmission System.

#### 9.6 Reactive Power.

- 9.6.1 Power Factor Design Criteria. Interconnection Customer shall design the Large Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor within the range of 0.95 leading to 0.95 lagging, unless Transmission Provider has established different requirements that apply to all generators in the Control Area on a comparable basis.
- 9.6.2 Voltage Schedules. Once the Interconnection Customer has synchronized the Large Generating Facility with the Transmission System, Transmission Provider shall require Interconnection Customer to operate the Large Generating Facility to produce or absorb reactive power within the design limitations of the Large Generating Facility set forth in Article 9.6.1 (Power Factor Design Criteria). Transmission Provider's voltage schedules shall treat all sources of reactive power in the Control Area in an equitable and not unduly discriminatory manner. Transmission Provider shall exercise Reasonable Efforts to provide Interconnection Customer with such schedules at least one (1) day in advance, and may make changes to such schedules as necessary to maintain the reliability of the Transmission System. Interconnection Customer shall operate the Large Generating Facility to maintain the specified output voltage or power factor at the Point of Interconnection within the design limitations of the Large Generating Facility set forth in Article 9.6.1 (Power Factor Design Criteria). If Interconnection Customer is unable to maintain the specified voltage or power factor, it shall promptly notify the System Operator.
- 9.6.2.1 Governors and Regulators. Whenever the Large Generating Facility is operated in parallel with the Transmission System and the speed governors (if installed on the generating unit pursuant to Good Utility Practice) and voltage regulators are capable of operation, Interconnection Customer shall operate the Large Generating Facility with its speed governors and voltage regulators in automatic operation. If the Large Generating Facility's speed governors and voltage regulators are not capable of such automatic operation, the Interconnection Customer shall immediately notify Transmission Provider's system operator, or its designated representative, and ensure that such Large Generating Facility's reactive power production or absorption (measured in MVARs) are within the design capability of the Large Generating Facility's generating unit(s) and steady state stability limits. Interconnection Customer shall not cause its Large Generating Facility to disconnect automatically or instantaneously from the Transmission System or trip any generating unit comprising the Large Generating Facility for an under or over frequency

condition unless the abnormal frequency condition persists for a time period beyond the limits set forth in ANSI/IEEE Standard C37.106, or such other standard as applied to other generators in the Control Area on a comparable basis.

- 9.6.3 Payment for Reactive Power. Transmission Provider is required to pay Interconnection Customer for reactive power that Interconnection Customer provides or absorbs from the Large Generating Facility only in those instances where the Transmission Provider requests the Interconnection Customer to operate its Large Generating Facility outside the agreed upon dead band. Payments shall be pursuant to Article 11.6 or such other agreement to which the Parties have otherwise agreed.
- 9.7 Outages and Interruptions.
- 9.7.1 Outages.
- 9.7.1.1 Outage Authority and Coordination. Each Party may in accordance with Good Utility Practice in coordination with the other Party remove from service any of its respective Interconnection Facilities or Network Upgrades that may impact the other Party's facilities as necessary to perform maintenance or testing or to install or replace equipment. Absent an Emergency Condition, the Party scheduling a removal of such facility(ies) from service will use Reasonable Efforts to schedule such removal on a date and time mutually acceptable to both Parties. In all circumstances any Party planning to remove such facility(ies) from service shall use Reasonable Efforts to minimize the effect on the other Party of such removal.
- 9.7.1.2 Outage Schedules. The Transmission Provider shall post scheduled outages of its transmission facilities on the OASIS. Interconnection Customer shall submit its planned maintenance schedules for the Large Generating Facility to Transmission Provider for a minimum of a rolling twenty-four month period. Interconnection Customer shall update its planned maintenance schedules as necessary. Transmission Provider may request Interconnection Customer to reschedule its maintenance as necessary to maintain the reliability of the Transmission System; provided, however, adequacy of generation supply shall not be a criterion in determining Transmission System reliability. Transmission Provider shall compensate Interconnection Customer for any additional direct costs that the Interconnection Customer incurs as a result of having to reschedule maintenance, including any additional overtime, breaking of maintenance contracts or other costs above and beyond the cost the Interconnection Customer would have incurred absent the Transmission Provider's request to reschedule maintenance. Interconnection Customer will not be eligible to receive compensation, if during the twelve (12) months prior to the date of the scheduled maintenance, the Interconnection Customer had modified its schedule of maintenance activities.
- 9.7.1.3 Outage Restoration. If an outage on a Party's Interconnection Facilities or Network Upgrades adversely affects the other Party's operations or facilities, the Party that owns or controls the facility that is out of service shall use Reasonable Efforts to promptly restore such facility(ies) to a normal operating condition consistent with the nature of the outage. The Party that owns or controls the facility that is out of service shall provide the other Party, to the extent such information is known, information on the nature of the Emergency Condition, an estimated time of restoration, and any corrective actions required. Initial verbal notice shall be followed up as soon as practicable with written notice explaining the nature of the outage.
- 9.7.2 Interruption of Service. If required by Good Utility Practice to do so, Transmission Provider may require Interconnection Customer to interrupt or reduce deliveries of electricity if such delivery of electricity could adversely affect Transmission Provider's ability to perform such activities as are necessary to safely and reliably operate and maintain the Transmission System. The following provisions shall apply to any interruption or reduction permitted under this Article 9.7.2:
- 9.7.2.1 The interruption or reduction shall continue only for so long as reasonably necessary under Good Utility Practice;
- 9.7.2.2 Any such interruption or reduction shall be made on an equitable, non-discriminatory basis with respect to all Generating Facilities directly connected to the Transmission System;

- 9.7.2.3 When the interruption or reduction must be made under circumstances which do not allow for advance notice, Transmission Provider shall notify Interconnection Customer by telephone as soon as practicable of the reasons for the curtailment, interruption, or reduction, and, if known, its expected duration. Telephone notification shall be followed by written notification as soon as practicable;
- 9.7.2.4 Except during the existence of an Emergency Condition, when the interruption or reduction can be scheduled without advance notice, Transmission Provider shall notify Interconnection Customer in advance regarding the timing of such scheduling and further notify Interconnection Customer of the expected duration. Transmission Provider shall coordinate with the Interconnection Customer using Good Utility Practice to schedule the interruption or reduction during periods of least impact to the Interconnection Customer and the Transmission Provider;
- 9.7.2.5 The Parties shall cooperate and coordinate with each other to the extent necessary in order to restore the Large Generating Facility, Interconnection Facilities, and the Transmission System to their normal operating state, consistent with system conditions and Good Utility Practice.
- 9.7.3 Under-Frequency and Over Frequency Conditions. The Transmission System is designed to automatically activate a load-shed program as required by the Applicable Reliability Council in the event of an under-frequency system disturbance. Interconnection Customer shall implement under-frequency and over-frequency relay set points for the Large Generating Facility as required by the Applicable Reliability Council to ensure "ride through" capability of the Transmission System. Large Generating Facility response to frequency deviations of pre-determined magnitudes, both under-frequency and over-frequency deviations, shall be studied and coordinated with the Transmission Provider in accordance with Good Utility Practice. The term "ride through" as used herein shall mean the ability of a Generating Facility to stay connected to and synchronized with the Transmission System during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice.
- 9.7.4 System Protection and Other Control Requirements.
- 9.7.4.1 System Protection Facilities. Interconnection Customer shall, at its expense, install, operate and maintain System Protection Facilities as a part of the Large Generating Facility or the Interconnection Customer Interconnection Facilities. Transmission Provider shall install at Interconnection Customer's expense any System Protection Facilities that may be required on the Transmission Provider Interconnection Facilities or the Transmission System as a result of the interconnection of the Large Generating Facility and the Interconnection Customer Interconnection Facilities.
- 9.7.4.2 Each Party's protection facilities shall be designed and coordinated with other systems in accordance with Good Utility Practice.
- 9.7.4.3 Each Party shall be responsible for protection of its facilities consistent with Good Utility Practice.
- 9.7.4.4 Each Party's protective relay design shall incorporate the necessary test switches to perform the tests required in Article 6. The required test switches will be placed such that they allow operation of lockout relays while preventing breaker failure schemes from operating and causing unnecessary breaker operations and/or the tripping of the Interconnection Customer's units.
- 9.7.4.5 Each Party will test, operate and maintain System Protection Facilities in accordance with Good Utility Practice.
- 9.7.4.6 Prior to the In-Service Date, and again prior to the Commercial Operation Date, each Party or its agent shall perform a complete calibration test and functional trip test of the System Protection Facilities. At intervals suggested by Good Utility Practice and following any apparent malfunction of the System Protection Facilities, each Party shall perform both calibration and functional trip tests of its System Protection Facilities. These tests do not require the tripping of any in-service generation unit. These tests do, however, require that all protective relays and lockout contacts be activated.

9.7.5 Requirements for Protection. In compliance with Good Utility Practice, Interconnection Customer shall provide, install, own, and maintain relays, circuit breakers and all other devices necessary to remove any fault contribution of the Large Generating Facility to any short circuit occurring on the Transmission System not otherwise isolated by Transmission Provider's equipment, such that the removal of the fault contribution shall be coordinated with the protective requirements of the Transmission System. Such protective equipment shall include, without limitation, a disconnecting device or switch with load-interrupting capability located between the Large Generating Facility and the Transmission System at a site selected upon mutual agreement (not to be unreasonably withheld, conditioned or delayed) of the Parties. Interconnection Customer shall be responsible for protection of the Large Generating Facility and Interconnection Customer's other equipment from such conditions as negative sequence currents, over- or under-frequency, sudden load rejection, over- or under-voltage, and generator loss-of-field. Interconnection Customer shall be solely responsible to disconnect the Large Generating Facility and Interconnection Customer's other equipment if conditions on the Transmission System could adversely affect the Large Generating Facility.

9.7.6 Power Quality. Neither Party's facilities shall cause excessive voltage flicker nor introduce excessive distortion to the sinusoidal voltage or current waves as defined by ANSI Standard C84.1-1989, in accordance with IEEE Standard 519, or any applicable superseding electric industry standard. In the event of a conflict between ANSI Standard C84.1-1989, or any applicable superseding electric industry standard, ANSI Standard C84.1-1989, or the applicable superseding electric industry standard, shall control.

9.8 Switching and Tagging Rules. Each Party shall provide the other Party a copy of its switching and tagging rules that are applicable to the other Party's activities. Such switching and tagging rules shall be developed on a non-discriminatory basis. The Parties shall comply with applicable switching and tagging rules, as amended from time to time, in obtaining clearances for work or for switching operations on equipment.

9.9 Use of Interconnection Facilities by Third Parties.

9.9.1 Purpose of Interconnection Facilities. Except as may be required by Applicable Laws and Regulations, or as otherwise agreed to among the Parties, the Interconnection Facilities shall be constructed for the sole purpose of interconnecting the Large Generating Facility to the Transmission System and shall be used for no other purpose.

9.9.2 Third Party Users. If required by Applicable Laws and Regulations or if the Parties mutually agree, such agreement not to be unreasonably withheld, to allow one or more third parties to use the Transmission Provider's Interconnection Facilities, or any part thereof, Interconnection Customer will be entitled to compensation for the capital expenses it incurred in connection with the Interconnection Facilities based upon the pro rata use of the Interconnection Facilities by Transmission Provider, all third party users, and Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually-agreed upon methodology. In addition, cost responsibility for ongoing costs, including operation and maintenance costs associated with the Interconnection Facilities, will be allocated between Interconnection Customer and any third party users based upon the pro rata use of the Interconnection Facilities by Transmission Provider, all third party users, and Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually agreed upon methodology. If the issue of such compensation or allocation cannot be resolved through such negotiations, it shall be submitted to FERC for resolution.

9.10 Disturbance Analysis Data Exchange. The Parties will cooperate with one another in the analysis of disturbances to either the Large Generating Facility or the Transmission Provider's Transmission System by gathering and providing access to any information relating to any disturbance, including information from oscillography, protective relay targets, breaker operations and sequence of events records, and any disturbance information required by Good Utility Practice.

### ARTICLE 10. MAINTENANCE

- 10.1 Transmission Provider Obligations. Transmission Provider shall maintain the Transmission System and the Transmission Provider's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA.
- 10.2 Interconnection Customer Obligations. Interconnection Customer shall maintain the Large Generating Facility and the Interconnection Customer Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA.
- 10.3 Coordination. The Parties shall confer regularly to coordinate the planning, scheduling and performance of preventive and corrective maintenance on the Large Generating Facility and the Interconnection Facilities.
- 10.4 Secondary Systems. Each Party shall cooperate with the other in the inspection, maintenance, and testing of control or power circuits that operate below 600 volts, AC or DC, including, but not limited to, any hardware, control or protective devices, cables, conductors, electric raceways, secondary equipment panels, transducers, batteries, chargers, and voltage and current transformers that directly affect the operation of a Party's facilities and equipment which may reasonably be expected to impact the other Party. Each Party shall provide advance notice to the other Party before undertaking any work on such circuits, especially on electrical circuits involving circuit breaker trip and close contacts, current transformers, or potential transformers.
- 10.5 Operating and Maintenance Expenses. Subject to the provisions herein addressing the use of facilities by others, and except for operations and maintenance expenses associated with modifications made for providing interconnection or transmission service to a third party and such third party pays for such expenses, Interconnection Customer shall be responsible for all reasonable expenses including overheads, associated with: (1) owning, operating, maintaining, repairing, and replacing Interconnection Customer Interconnection Facilities; and (2) operation, maintenance, repair and replacement of Transmission Provider's Interconnection Facilities.

### ARTICLE 11. PERFORMANCE OBLIGATION

- 11.1 Interconnection Customer Interconnection Facilities. Interconnection Customer shall design, procure, construct, install, own and/or control the Interconnection Customer Interconnection Facilities described in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades, at its sole expense.
- 11.2 Transmission Provider's Interconnection Facilities. Transmission Provider or Transmission Owner shall design, procure, construct, install, own and/or control the Transmission Provider's Interconnection Facilities described in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades, at the sole expense of the Interconnection Customer.
- 11.3 Network Upgrades and Distribution Upgrades. Transmission Provider or Transmission Owner shall design, procure, construct, install, and own the Network Upgrades and Distribution Upgrades described in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades. The Interconnection Customer shall be responsible for all costs related to Distribution Upgrades. Unless the Transmission Provider or Transmission Owner elects to fund the capital for the Network Upgrades, they shall be solely funded by the Interconnection Customer.
- 11.4 Transmission Credits.
- 11.4.1 Refund of Amounts Advanced for Network Upgrades. Interconnection Customer shall be entitled to a cash refund, equal to the total amount paid to Transmission Provider and Affected System Operator, if any, for the Network Upgrades, including any tax gross-up or other tax-related payments, and not refunded to Interconnection Customer pursuant to Article 5.17.8 or otherwise, to be paid to Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Transmission Provider's Tariff and Affected System's Tariff for transmission services with respect to the Large Generating Facility.

Notwithstanding the foregoing, Interconnection Customer, Transmission Provider, and Affected System Operator may adopt any alternative payment schedule that is mutually agreeable so long as Transmission Provider and Affected System Operator refund all amounts paid by Interconnection Customer for the Network Upgrades, together with interest, within five (5) years from the Commercial Operation Date. Transmission Provider and Affected System Operator shall provide refunds to Interconnection Customer only after commercial operation of the Large Generating Facility has been demonstrated.

If the Large Generating Facility fails to achieve commercial operation, but it or another Generating Facility is later constructed and makes use of the Network Upgrades, Transmission Provider and Affected System Operator shall at that time provide refunds to Interconnection Customer for the amounts advanced for the Network Upgrades. Any refund shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. \$35.19a(a)(2)(ii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a refund of such payment pursuant to this subparagraph. Interconnection Customer may assign such refund rights to any person.

11.4.2 Special Provisions for Affected Systems. Unless the Transmission Provider provides, under the LGIA, for the payment of refunds for amounts advanced to Affected System Operator for Network Upgrades, the Interconnection Customer and Affected System Operator shall enter into an agreement that provides for such payment. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to the Affected System Operator as well as the payment of refunds by the Affected System Operator.

Refunds are to be paid without regard to whether the Interconnection Customer contracts for transmission service on the Affected System. If the Interconnection Customer does not contract for transmission service, and in the absence of another mutually agreeable payment schedule, refunds shall be established at a level equal to the Affected System's rate for firm point-to-point transmission service multiplied by the output of the Large Generating Facility assumed in the Interconnection Facilities Study. All refunds must be paid within five years of the Commercial Operation Date.

- 11.4.3 Notwithstanding any other provision of this LGIA, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer, shall be entitled to, now or in the future under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain refunds or transmission credits for transmission service that is not associated with the Large Generating Facility.
- 11.5 Provision of Security. At least thirty (30) Calendar Days prior to the commencement of the procurement, installation, or construction of a discrete portion of a Transmission Provider's Interconnection Facilities, Network Upgrades, or Distribution Upgrades, Interconnection Customer shall provide Transmission Provider, at Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to Transmission Provider and is consistent with the Uniform Commercial Code of the jurisdiction identified in Article 14.2.1. Such security for payment shall be in an amount sufficient to cover the costs for constructing, procuring and installing the applicable portion of Transmission Provider's Interconnection Facilities, Network Upgrades, or Distribution Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to Transmission Provider under this LGIA during its term.

  In addition:
- 11.5.1 The guarantee must be made by an entity that meets the creditworthiness requirements of Transmission Provider, and contain terms and conditions that guarantee payment of any amount that may be due from Interconnection Customer, up to an agreed-to maximum amount.
- 11.5.2 The letter of credit must be issued by a financial institution reasonably acceptable to Transmission Provider and must specify a reasonable expiration date.

- 11.5.3 The surety bond must be issued by an insurer reasonably acceptable to Transmission Provider and must specify a reasonable expiration date.
- 11.6 Interconnection Customer Compensation. If Transmission Provider requests or directs Interconnection Customer to provide a service pursuant to Articles 9.6.3 (Payment for Reactive Power), or 13.5.1 of this LGIA, Transmission Provider shall compensate Interconnection Customer in accordance with Interconnection Customer's applicable rate schedule then in effect unless the provision of such service(s) is subject to an RTO or ISO FERC-approved rate schedule. Interconnection Customer shall serve Transmission Provider or RTO or ISO with any filing of a proposed rate schedule at the time of such filing with FERC. To the extent that no rate schedule is in effect at the time the Interconnection Customer is required to provide or absorb any Reactive Power under this LGIA, the Transmission Provider agrees to compensate the Interconnection Customer in such amount as would have been due the Interconnection Customer had the rate schedule been in effect at the time service commenced; provided, however, that such rate schedule must be filed at FERC or other appropriate Governmental Authority within sixty (60) Calendar Days of the commencement of service.
- 11.6.1 Interconnection Customer Compensation for Actions During Emergency Condition. Transmission Provider or RTO or ISO shall compensate Interconnection Customer for its provision of real and reactive power and other Emergency Condition services that Interconnection Customer provides to support the Transmission System during an Emergency Condition in accordance with Article 11.6.

#### ARTICLE 12. INVOICE

- 12.1 General. Each Party shall submit to the other Party, on a monthly basis, invoices of amounts due for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other Party under this LGIA, including interest payments or credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party.
- 12.2 Final Invoice. Within six months after completion of the construction of the Transmission Provider's Interconnection Facilities and the Network Upgrades, Transmission Provider shall provide an invoice of the final cost of the construction of the Transmission Provider's Interconnection Facilities and the Network Upgrades and shall set forth such costs in sufficient detail to enable Interconnection Customer to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates. Transmission Provider shall refund to Interconnection Customer any amount by which the actual payment by Interconnection Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice.
- 12.3 Payment. Invoices shall be rendered to the paying Party at the address specified in Appendix F. The Party receiving the invoice shall pay the invoice within thirty (30) Calendar Days of receipt. All payments shall be made in immediately available funds payable to the other Party, or by wire transfer to a bank named and account designated by the invoicing Party. Payment of invoices by Interconnection Customer will not constitute a waiver of any rights or claims Interconnection Customer may have under this LGIA.
- 12.4 Disputes. In the event of a billing dispute between Transmission Provider and Interconnection Customer, Transmission Provider shall continue to provide Interconnection Service under this LGIA as long as Interconnection Customer: (i) continues to make all payments not in dispute; and (ii) pays to Transmission Provider or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If Interconnection Customer fails to meet these two requirements for continuation of service, then Transmission Provider may provide notice to Interconnection Customer of a Default pursuant to Article 17. Within thirty (30) Calendar Days after the resolution of the dispute, the Party that owes money to the other Party

shall pay the amount due with interest calculated in accord with the methodology set forth in FERC's Regulations at 18 C.F.R.. § 35.19a(a)(2)(ii).

#### ARTICLE 13. EMERGENCIES

- 13.1 Definition. "Emergency Condition" shall mean a condition or situation: (i) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (ii) that, in the case of Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the Transmission System, the Transmission Provider's Interconnection Facilities or the Transmission Systems of others to which the Transmission System is directly connected; or (iii) that, in the case of Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Large Generating Facility or the Interconnection Customer Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions; provided, that Interconnection Customer is not obligated by this LGIA to possess black start capability.
- 13.2 Obligations. Each Party shall comply with the Emergency Condition procedures of the applicable ISO/RTO, NERC, the Applicable Reliability Council, Applicable Laws and Regulations, and any emergency procedures agreed to by the Joint Operating Committee.
- 13.3 Notice. Transmission Provider shall notify Interconnection Customer promptly when it becomes aware of an Emergency Condition that affects the Transmission Provider's Interconnection Facilities or the Transmission System that may reasonably be expected to affect Interconnection Customer's operation of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall notify Transmission Provider promptly when it becomes aware of an Emergency Condition that affects the Large Generating Facility or the Interconnection Customer Interconnection Facilities that may reasonably be expected to affect the Transmission System or the Transmission Provider's Interconnection Facilities. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of Interconnection Customer's or Transmission Provider's facilities and operations, its anticipated duration and the corrective action taken and/or to be taken. The initial notice shall be followed as soon as practicable with written notice.
- 13.4 Immediate Action. Unless, in Interconnection Customer's reasonable judgment, immediate action is required, Interconnection Customer shall obtain the consent of Transmission Provider, such consent to not be unreasonably withheld, prior to performing any manual switching operations at the Large Generating Facility or the Interconnection Customer Interconnection Facilities in response to an Emergency Condition either declared by the Transmission Provider or otherwise regarding the Transmission System.
- 13.5 Transmission Provider Authority.
- 13.5.1 General. Transmission Provider may take whatever actions or inactions with regard to the Transmission System or the Transmission Provider's Interconnection Facilities it deems necessary during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the Transmission System or the Transmission Provider's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service.

Transmission Provider shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Large Generating Facility or the Interconnection Customer Interconnection Facilities. Transmission Provider may, on the basis of technical considerations, require the Large Generating Facility to mitigate an Emergency Condition by taking actions necessary and limited in scope to remedy the Emergency Condition, including, but not limited to, directing Interconnection Customer to shutdown, start-up, increase or decrease the real or reactive power output of the Large Generating Facility; implementing a reduction or disconnection pursuant to Article 13.5.2; directing the Interconnection Customer to assist with blackstart (if available) or restoration efforts; or altering the outage schedules of the Large Generating Facility and the Interconnection Customer Interconnection Facilities. Interconnection Customer shall comply with all of Transmission Provider's operating instructions concerning Large Generating Facility real power and reactive power output within the manufacturer's design limitations of the

Large Generating Facility's equipment that is in service and physically available for operation at the time, in compliance with Applicable Laws and Regulations.

13.5.2 Reduction and Disconnection. Transmission Provider may reduce Interconnection Service or disconnect the Large Generating Facility or the Interconnection Customer Interconnection Facilities, when such, reduction or disconnection is necessary under Good Utility Practice due to Emergency Conditions. These rights are separate and distinct from any right of curtailment of the Transmission Provider pursuant to the Transmission Provider's Tariff. When the Transmission Provider can schedule the reduction or disconnection in advance, Transmission Provider shall notify Interconnection Customer of the reasons, timing and expected duration of the reduction or disconnection. Transmission Provider shall coordinate with the Interconnection Customer using Good Utility Practice to schedule the reduction or disconnection during periods of least impact to the Interconnection Customer and the Transmission Provider. Any reduction or disconnection shall continue only for so long as reasonably necessary under Good Utility Practice. The Parties shall cooperate with each other to restore the Large Generating Facility, the Interconnection Facilities, and the Transmission System to their normal operating state as soon as practicable consistent with Good Utility Practice.

13.6 Interconnection Customer Authority. Consistent with Good Utility Practice and the LGIA and the LGIP, the Interconnection Customer may take whatever actions or inactions with regard to the Large Generating Facility or the Interconnection Customer Interconnection Facilities during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the Large Generating Facility or the Interconnection Customer Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service. Interconnection Customer shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Transmission System and the Transmission Provider's Interconnection Facilities. Transmission Provider shall use Reasonable Efforts to assist Interconnection Customer in such actions. Interconnection Customer shall not be obligated to follow Transmission Provider's instructions to the extent the instruction would have a material adverse impact on the safe and reliable operation of Interconnection Customer's Large Generating Facility. Upon request, Interconnection Customer shall provide Transmission Provider with documentation of any such alleged material adverse impact.

13.7 Limited Liability. Except as otherwise provided in Article 11.6.1 of this LGIA, neither Party shall be liable to the other for any action it takes in responding to an Emergency Condition so long as such action is made in good faith and is consistent with Good Utility Practice.

### ARTICLE 14. REGULATORY REQUIREMENTS AND GOVERNING LAW

14.1 Regulatory Requirements. Each Party's obligations under this LGIA shall be subject to its receipt of any required approval or certificate from one or more Governmental Authorities in the form and substance satisfactory to the applying Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek and use its Reasonable Efforts to obtain such other approvals. Nothing in this LGIA shall require Interconnection Customer to take any action that could result in its inability to obtain, or its loss of, status or exemption under the Federal Power Act or the Public Utility Holding Company Act of 1935, as amended.

### 14.2 Governing Law.

- 14.2.1 The validity, interpretation and performance of this LGIA and each of its provisions shall be governed by the laws of the state where the Point of Interconnection is located, without regard to its conflicts of law principles.
- 14.2.2 This LGIA is subject to all Applicable Laws and Regulations.

14.2.3 Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, rules, or regulations of a Governmental Authority.

### **ARTICLE 15. NOTICES**

- 15.1 General. Unless otherwise provided in this LGIA, any notice, demand or request required or permitted to be given by either Party to the other and any instrument required or permitted to be tendered or delivered by either Party in writing to the other shall be effective when delivered and may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered mail, addressed to the Party, or personally delivered to the Party, at the address set out in Appendix F, Addresses for Delivery of Notices and Billings. Either Party may change the notice information in this LGIA by giving five (5) Business Days written notice prior to the effective date of the change.
- 15.2 Billings and Payments. Billings and payments shall be sent to the addresses set out in Appendix F.
- 15.3 Alternative Forms of Notice. Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone, facsimile or email to the telephone numbers and email addresses set out in Appendix F.
- 15.4 Operations and Maintenance Notice. Each Party shall notify the other Party in writing of the identity of the person(s) that it designates as the point(s) of contact with respect to the implementation of Articles 9 and 10.

### ARTICLE 16. FORCE MAJEURE

- 16.1 Force Majeure.
- 16.1.1 Economic hardship is not considered a Force Majeure event.
- 16.1.2 Neither Party shall be considered to be in Default with respect to any obligation hereunder, (including obligations under Article 4), other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other Party in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this Article shall be confirmed in writing as soon as reasonably possible and shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred and when the Force Majeure is reasonably expected to cease. The Party affected shall exercise due diligence to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

### **ARTICLE 17. DEFAULT**

### 17.1 Default

17.1.1 General. No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of Force Majeure as defined in this LGIA or the result of an act or omission of the other Party. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in Article 17.1.2, the defaulting Party shall have thirty (30) Calendar Days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within thirty (30) Calendar Days, the defaulting Party shall commence such cure within thirty (30) Calendar Days after notice and continuously and diligently complete such cure within ninety (90)

Calendar Days from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

17.1.2 Right to Terminate. If a Default is not cured as provided in this Article, or if a Default is not capable of being cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this LGIA by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this LGIA, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this Article will survive termination of this LGIA.

### ARTICLE 18. INDEMNITY, CONSEQUENTIAL DAMAGES AND INSURANCE

18.1 Indemnity. The Parties shall at all times indemnify, defend, and save the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or inactions of its obligations under this LGIA on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

18.1.1 Indemnified Person. If an Indemnified Person is entitled to indemnification under this Article 18 as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 18.1, to assume the defense of such claim, such Indemnified Person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgement with respect to, or pay in full, such claim.

18.1.2 Indemnifying Party. If an Indemnifying Party is obligated to indemnify and hold any Indemnified Person harmless under this Article 18, the amount owing to the Indemnified Person shall be the amount of such Indemnified Person's actual Loss, net of any insurance or other recovery.

18.1.3 Indemnity Procedures. Promptly after receipt by an Indemnified Person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 18.1 may apply, the Indemnified Person shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party. The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Person. If the defendants in any such action include one or more Indemnified Persons and the Indemnifying Party and if the Indemnified Person reasonably concludes that there may be legal defenses available to it and/or other Indemnified Persons which are different from or additional to those available to the Indemnifying Party, the Indemnified Person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Person or Indemnified Persons having such differing or additional legal defenses.

The Indemnified Person shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the Indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Person and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Person, or there exists a conflict or adversity of interest between the Indemnified Person and the Indemnifying Party, in such event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Person, and (ii) shall not settle or consent to the entry of any judgement in any action, suit or proceeding without the consent of the Indemnified Person, which shall not be reasonably withheld, conditioned or delayed.

- 18.2 Consequential Damages. Other than the Liquidated Damages heretofore described, in no event shall either Party be liable under any provision of this LGIA for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.
- 18.3 Insurance. Each party shall, at its own expense, maintain in force throughout the period of this LGIA, and until released by the other Party, the following minimum insurance coverages, with insurers authorized to do business in the state where the Point of Interconnection is located:
- 18.3.1 Employers' Liability and Workers' Compensation Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located. The minimum limits for the Employers' Liability insurance shall be One Million Dollars (\$1,000,000) each accident bodily injury by accident, One Million Dollars (\$1,000,000) each employee bodily injury by disease, and One Million Dollars (\$1,000,000) policy limit bodily injury by disease.
- 18.3.2 Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability endorsement, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate combined single limit for personal injury, bodily injury, including death and property damage.
- 18.3.3 Comprehensive Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage.
- 18.3.4 Excess Public Liability Insurance over and above the Employers' Liability Commercial General Liability and Comprehensive Automobile Liability Insurance coverage, with a minimum combined single limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate.
- 18.3.5 The Commercial General Liability Insurance, Comprehensive Automobile Insurance and Excess Public Liability Insurance polies shall name the other Party, its parent, associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this LGIA against the Other Party Group and provide thirty (30) days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition.
- 18.3.6 The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies shall contain provisions that specify that the polices are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issues to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Party shall be responsible for its respective deductibles or retentions.
- 18.3.7 The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this LGIA, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed by the Parties.

- 18.3.8 The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this LGIA.
- 18.3.9 Within ten (10) days following execution of this LGIA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) days thereafter, each Party shall provide certification of all insurance required in this LGIA, executed by each insurer or by an authorized representative of each insurer.
- 18.3.10 Notwithstanding the foregoing, each Party may self-insure to the extent it maintains a self-insurance program; provided that, such Party's senior secured debt is rated at investment grade, or better, by Standard & Poor's. For any period of time that a Party's senior secured debt is unrated by Standard & Poor's or is rated at less than investment grade by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.1 through 18.3.9. In the event that a Party is permitted to self-insure pursuant to this Article 18.3.10, it shall not be required to comply with the insurance requirements applicable to it under Articles 18.3.1 through 18.3.9.
- 18.3.11 The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this LGIA.

### **ARTICLE 19. ASSIGNMENT**

19.1 Assignment. This LGIA may be assigned by either Party only with the written consent of the other; provided that either Party may assign this LGIA without the consent of the other Party to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this LGIA; and provided further that the Interconnection Customer shall have the right to assign this LGIA, without the consent of the Transmission Provider, for collateral security purposes to aid in providing financing for the Large Generating Facility, provided that the Interconnection Customer will require any secured party, trustee or mortgagee to notify the Transmission Provider of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the Transmission Provider of the date and particulars of any such exercise of assignment right(s). Any attempted assignment that violates this Article is void and ineffective. Any assignment under this LGIA shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

### **ARTICLE 20. SEVERABILITY**

20.1 Severability. If any provision in this LGIA is finally determined to be invalid, void or unenforceable by any court or other Governmental Authority having jurisdiction, such determination shall not invalidate, void or make unenforceable any other provision, agreement or covenant of this LGIA; provided that if the Interconnection Customer (or any third party, but only if such third party is not acting at the direction of the Transmission Provider) seeks and obtains such a final determination with respect to any provision of the Alternate Option (Article 5.1.2), or the Negotiated Option (Article 5.1.4), then none of these provisions shall thereafter have any force or effect and the Parties' rights and obligations shall be governed solely by the Standard Option (Article 5.1.1).

### **ARTICLE 21. COMPARABILITY**

21.1 Comparability. The Parties will comply with all applicable comparability and code of conduct laws, rules and regulations, as amended from time to time.

### **ARTICLE 22. CONFIDENTIALITY**

22.1 Confidentiality. Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by either of the Parties to the other prior to the execution of this LGIA.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential.

If requested by either Party, the other Party shall provide in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

- 22.1.1 Term. During the term of this LGIA, and for a period of three (3) years after the expiration or termination of this LGIA, except as otherwise provided in this Article 22, each Party shall hold in confidence and shall not disclose to any person Confidential Information.
- 22.1.2 Scope. Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of this LGIA; or (6) is required, in accordance with Article 22.1.7 of the LGIA, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this LGIA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Party that it no longer is confidential.
- 22.1.3 Release of Confidential Information. Neither Party shall release or disclose Confidential Information to any other person, except to its employees, consultants, or to parties who may be or considering providing financing to or equity participation with Interconnection Customer, or to potential purchasers or assignees of Interconnection Customer, on a need-to-know basis in connection with this LGIA, unless such person has first been advised of the confidentiality provisions of this Article 22 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 22.
- 22.1.4 Rights. Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Party. The disclosure by each Party to the other Party of Confidential Information shall not be deemed a waiver by either Party or any other person or entity of the right to protect the Confidential Information from public disclosure.
- 22.1.5 No Warranties. By providing Confidential Information, neither Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, neither Party obligates itself to provide any particular information or Confidential Information to the other Party nor to enter into any further agreements or proceed with any other relationship or joint venture.
- 22.1.6 Standard of Care. Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Party under this LGIA or its regulatory requirements. 22.1.7 Order of Disclosure. If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests

or requires either Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Party with prompt notice of such request(s) or requirement(s) so that the other Party may seek an appropriate protective order or waive compliance with the terms of this LGIA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

- 22.1.8 Termination of Agreement. Upon termination of this LGIA for any reason, each Party shall, within ten (10) Calendar Days of receipt of a written request from the other Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the other Party) or return to the other Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the other Party.
- 22.1.9 Remedies. The Parties agree that monetary damages would be inadequate to compensate a Party for the other Party's Breach of its obligations under this Article 22. Each Party accordingly agrees that the other Party shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Article 22, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 22, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 22. 22.1.10 Disclosure to FERC or its Staff. Notwithstanding anything in this Article 22 to the contrary, and pursuant to 18 C.F.R. section 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this LGIA, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. section 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party to this LGIA prior to the release of the Confidential Information to the Commission or its staff. The Party shall notify the other Party to the LGIA when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. section 388.112.
- 22.1.11 Subject to the exception in Article 22.1.10, any information that a Party claims is competitively sensitive, commercial or financial information under this LGIA ("Confidential Information") shall not be disclosed by the other Party to any person not employed or retained by the other Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Party, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this LGIA or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. The Party asserting confidentiality shall notify the other Party in writing of the information it claims is confidential. Prior to any disclosures of the other Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.
- 22.1.12 This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a Breach of this provision).

### ARTICLE 23. ENVIRONMENTAL RELEASES

23.1 Each Party shall notify the other Party, first orally and then in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Large Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall: (i) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than twenty-four hours after such Party becomes aware of the occurrence; and (ii) promptly furnish to the other Party copies of any publicly available reports filed with any Governmental Authorities addressing such events.

## **ARTICLE 24. INFORMATION REQUIREMENTS**

- 24.1 Information Acquisition. Transmission Provider and the Interconnection Customer shall submit specific information regarding the electrical characteristics of their respective facilities to each other as described below and in accordance with Applicable Reliability Standards.
- 24.2 Information Submission by Transmission Provider. The initial information submission by Transmission Provider shall occur no later than one hundred eighty (180) Calendar Days prior to Trial Operation and shall include Transmission System information necessary to allow the Interconnection Customer to select equipment and meet any system protection and stability requirements, unless otherwise mutually agreed to by both Parties. On a monthly basis Transmission Provider shall provide Interconnection Customer a status report on the construction and installation of Transmission Provider's Interconnection Facilities and Network Upgrades, including, but not limited to, the following information: (1) progress to date; (2) a description of the activities since the last report" (3) a description of the action items for the next period; and (4) the delivery status of equipment ordered.
- 24.3 Updated Information Submission by Interconnection Customer. The updated information submission by the Interconnection Customer, including manufacturer information, shall occur no later than one hundred eighty (180) Calendar Days prior to the Trial Operation. Interconnection Customer shall submit a completed copy of the Large Generating Facility data requirements contained in Appendix 1 to the LGIP. It shall also include any additional information provided to Transmission Provider for the Feasibility and Facilities Study. Information in this submission shall be the most current Large Generating Facility design or expected performance data. Information submitted for stability models shall be compatible with Transmission Provider standard models. If there is no compatible model, the Interconnection Customer will work with a consultant mutually agreed to by the Parties to develop and supply a standard model and associated information.

If the Interconnection Customer's data is materially different from what was originally provided to Transmission Provider pursuant to the Interconnection Study Agreement between Transmission Provider and Interconnection Customer, then Transmission Provider will conduct appropriate studies to determine the impact on the Transmission Provider Transmission System based on the actual data submitted pursuant to this Article 24.3. The Interconnection Customer shall not begin Trial Operation until such studies are completed.

24.4 Information Supplementation. Prior to the Operation Date, the Parties shall supplement their information submissions described above in this Article 24 with any and all "as-built" Large Generating Facility information or "as-tested" performance information that differs from the initial submissions or, alternatively, written confirmation that no such differences exist. The Interconnection Customer shall conduct tests on the Large Generating Facility as required by Good Utility Practice such as an open circuit "step voltage" test on the Large Generating Facility to verify proper operation of the Large Generating Facility's automatic voltage regulator.

Unless otherwise agreed, the test conditions shall include: (1) Large Generating Facility at synchronous speed; (2) automatic voltage regulator on and in voltage control mode; and (3) a five percent (5 percent) change in Large Generating Facility terminal voltage initiated by a change in the voltage regulators reference voltage. Interconnection Customer shall provide validated test recordings showing the responses of Large Generating Facility terminal and field voltages. In the event that direct recordings of these voltages is impractical, recordings of other voltages or currents that mirror the response of the Large Generating Facility's

terminal or field voltage are acceptable if information necessary to translate these alternate quantities to actual Large Generating Facility terminal or field voltages is provided. Large Generating Facility testing shall be conducted and results provided to the Transmission Provider for each individual generating unit in a station.

Subsequent to the Operation Date, the Interconnection Customer shall provide Transmission Provider any information changes due to equipment replacement, repair, or adjustment. Transmission Provider shall provide the Interconnection Customer any information changes due to equipment replacement, repair or adjustment in the directly connected substation or any adjacent Transmission Provider-owned substation that may affect the Interconnection Customer Interconnection Facilities equipment ratings, protection or operating requirements. The Parties shall provide such information no later than thirty (30) Calendar Days after the date of the equipment replacement, repair or adjustment.

### ARTICLE 25. INFORMATION ACCESS AND AUDIT RIGHTS

- 25.1 Information Access. Each Party (the "disclosing Party") shall make available to the other Party information that is in the possession of the disclosing Party and is necessary in order for the other Party to: (i) verify the costs incurred by the disclosing Party for which the other Party is responsible under this LGIA; and (ii) carry out its obligations and responsibilities under this LGIA. The Parties shall not use such information for purposes other than those set forth in this Article 25.1 and to enforce their rights under this LGIA.
- 25.2 Reporting of Non-Force Majeure Events. Each Party (the "notifying Party") shall notify the other Party when the notifying Party becomes aware of its inability to comply with the provisions of this LGIA for a reason other than a Force Majeure event. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this Article shall not entitle the Party receiving such notification to allege a cause for anticipatory breach of this LGIA.
- 25.3 Audit Rights. Subject to the requirements of confidentiality under Article 22 of this LGIA, each Party shall have the right, during normal business hours, and upon prior reasonable notice to the other Party, to audit at its own expense the other Party's accounts and records pertaining to either Party's performance or either Party's satisfaction of obligations under this LGIA. Such audit rights shall include audits of the other Party's costs, calculation of invoiced amounts, the Transmission Provider's efforts to allocate responsibility for the provision of reactive support to the Transmission System, the Transmission Provider's efforts to allocate responsibility for interruption or reduction of generation on the Transmission System, and each Party's actions in an Emergency Condition. Any audit authorized by this Article shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to each Party's performance and satisfaction of obligations under this LGIA. Each Party shall keep such accounts and records for a period equivalent to the audit rights periods described in Article 25.4.

### 25.4 Audit Rights Periods.

- 25.4.1 Audit Rights Period for Construction-Related Accounts and Records. Accounts and records related to the design, engineering, procurement, and construction of Transmission Provider's Interconnection Facilities and Network Upgrades shall be subject to audit for a period of twenty-four months following Transmission Provider's issuance of a final invoice in accordance with Article 12.2.
- 25.4.2 Audit Rights Period for All Other Accounts and Records. Accounts and records related to either Party's performance or satisfaction of all obligations under this LGIA other than those described in Article 25.4.1 shall be subject to audit as follows: (i) for an audit relating to cost obligations, the applicable audit rights period shall be twenty-four months after the auditing Party's receipt of an invoice giving rise to such cost obligations; and (ii) for an audit relating to all other obligations, the applicable audit rights period shall be twenty-four months after the event for which the audit is sought.

25.5 Audit Results. If an audit by a Party determines that an overpayment or an underpayment has occurred, a notice of such overpayment or underpayment shall be given to the other Party together with those records from the audit which support such determination.

### **ARTICLE 26. SUBCONTRACTORS**

- 26.1 General. Nothing in this LGIA shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this LGIA; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this LGIA in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.
- 26.2 Responsibility of Principal. The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this LGIA. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Transmission Provider be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under Article 5 of this LGIA. Any applicable obligation imposed by this LGIA upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.
- 26.3 No Limitation by Insurance. The obligations under this Article 26 will not be limited in any way by any limitation of subcontractor's insurance.

### **ARTICLE 27. DISPUTES**

- 27.1 Submission In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with this LGIA or its performance, such Party (the "disputing Party") shall provide the other Party with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party's receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this LGIA.
- 27.2 External Arbitration Procedures. Any arbitration initiated under this LGIA shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) Calendar Days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules") and any applicable FERC regulations or RTO rules; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Article 27, the terms of this Article 27 shall prevail.
- 27.3 Arbitration Decisions. Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons therefor. The arbitrator(s) shall be authorized only to interpret and apply the provisions of this LGIA and shall have no power to modify or change any

provision of this Agreement in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

27.4 Costs. Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

### ARTICLE 28. REPRESENTATIONS, WARRANTIES AND COVENANTS

- 28.1 General. Each Party makes the following representations, warranties and covenants:
- 28.1.1 Good Standing. Such Party is duly organized, validly existing and in good standing under the laws of the state in which it is organized, formed, or incorporated, as applicable; that it is qualified to do business in the state or states in which the Large Generating Facility, Interconnection Facilities and Network Upgrades owned by such Party, as applicable, are located; and that it has the corporate power and authority to own its properties, to carry on its business as now being conducted and to enter into this LGIA and carry out the transactions contemplated hereby and perform and carry out all covenants and obligations on its part to be performed under and pursuant to this LGIA.
- 28.1.2 Authority. Such Party has the right, power and authority to enter into this LGIA, to become a party hereto and to perform its obligations hereunder. This LGIA is a legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).
- 28.1.3 No Conflict. The execution, delivery and performance of this LGIA does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Party, or any judgment, license, permit, order, material agreement or instrument applicable to or binding upon such Party or any of its assets
- 28.1.4 Consent and Approval. Such Party has sought or obtained, or, in accordance with this LGIA will seek or obtain, each consent, approval, authorization, order, or acceptance by any Governmental Authority in connection with the execution, delivery and performance of this LGIA, and it will provide to any Governmental Authority notice of any actions under this LGIA that are required by Applicable Laws and Regulations.

### **ARTICLE 29. JOINT OPERATING COMMITTEE**

29.1 Joint Operating Committee. Except in the case of ISOs and RTOs, Transmission Provider shall constitute a Joint Operating Committee to coordinate operating and technical considerations of Interconnection Service. At least six (6) months prior to the expected Initial Synchronization Date, Interconnection Customer and Transmission Provider shall each appoint one representative and one alternate to the Joint Operating Committee. Each Interconnection Customer shall notify the Transmission Provider of its appointment in writing. Such appointments may be changed at any time by similar notice. The Joint Operating Committee shall meet as necessary, but not less than once each calendar year, to carry out the duties set forth herein. The Joint Operating Committee shall hold a meeting at the request of either Party, at a time and place agreed upon by the representatives. The Joint Operating Committee shall perform all of its duties consistent with the provisions of this LGIA. Each Party shall cooperate in providing to the Joint Operating Committee all information required in the performance of the Joint Operating Committee's duties. All decisions and agreements, if any, made by the Joint Operating Committee shall be evidenced in writing The duties of the Joint Operating Committee shall include the following:

- 29.1.1 Establish data requirements and operating record requirements.
- 29.1.2 Review the requirements, standards, and procedures for data acquisition equipment, protective equipment, and any other equipment or software.
- 29.1.3 Annually review the one (1) year forecast of maintenance and planned outage schedules of Transmission Provider's and Interconnection Customer's facilities at the Point of Interconnection.
- 29.1.4 Coordinate the scheduling of maintenance and planned outages on the Interconnection Facilities, the Large Generating Facility and other facilities that impact the normal operation of the interconnection of the Large Generating Facility to the Transmission System.
- 29.1.5 Ensure that information is being provided by each Party regarding equipment availability.
- 29.1.6 Perform such other duties as may be conferred upon it by mutual agreement of the Parties.

### ARTICLE 30. MISCELLANEOUS

- 30.1 Binding Effect. This LGIA and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- 30.2 Conflicts. In the event of a conflict between the body of this LGIA and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this LGIA shall prevail and be deemed the final intent of the Parties.
- 30.3 Rules of Interpretation. This LGIA, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this LGIA, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this LGIA), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any Applicable Laws and Regulations means such Applicable Laws and Regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article of this LGIA or such Appendix to this LGIA, or such Section to the LGIP or such Appendix to the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this LGIA as a whole and not to any particular Article or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".
- 30.4 Entire Agreement. This LGIA, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this LGIA. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this LGIA.
- 30.5 No Third Party Beneficiaries. This LGIA is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.

30.6 Waiver. The failure of a Party to this LGIA to insist, on any occasion, upon strict performance of any provision of this LGIA will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this LGIA shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this LGIA. Termination or Default of this LGIA for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this LGIA shall, if requested, be provided in writing.

30.7 Headings. The descriptive headings of the various Articles of this LGIA have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this LGIA.

30.8 Multiple Counterparts. This LGIA may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

30.9 Amendment. The Parties may by mutual agreement amend this LGIA by a written instrument duly executed by both of the Parties.

30.10 Modification by the Parties. The Parties may by mutual agreement amend the Appendices to this LGIA by a written instrument duly executed by both of the Parties. Such amendment shall become effective and a part of this LGIA upon satisfaction of all Applicable Laws and Regulations.

30.11 Reservation of Rights. Transmission Provider shall have the right to make a unilateral filing with FERC to modify this LGIA with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this LGIA pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this LGIA shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

30.12 No Partnership. This LGIA shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

IN WITNESS WHEREOF, the Parties have executed this LGIA in duplicate originals, each of which shall constitute and be an original effective Agreement between the Parties.

[Insert name of Transmission Provider or Transmission Owner, if applicable]

By:	By:
Title:	Title:
Date:	Date:

- (a) [insert Interconnection Customer's Interconnection Facilities]:
- (b) [insert Transmission Provider's Interconnection Facilities]:
- 2. Network Upgrades:
- (a) [insert Stand Alone Network Upgrades]:

(b) [insert Other Network Upgrades]:
3. Distribution Upgrades:
Appendix B
To LGIA
Milestones
Appendix C
To LGIA
Interconnection Details
Appendix D
To LGIA
Security Arrangements Details
Infrastructure security of Transmission System equipment and operations and control hardware and software is essential to ensure day-to-day Transmission System reliability and operational security. The Commission will expect all Transmission Providers, market participants, and Interconnection Customers interconnected to the Transmission System to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.
Appendix E
To LGIA
Commercial Operation Date
This Appendix E is a part of the LGIA between Transmission Provider and Interconnection Customer. [Date]
[Transmission Provider Address]
Re: Large Generating Facility
Dear:
On [Date] [Interconnection Customer] has completed Trial Operation of Unit No This letter confirms that [Interconnection Customer] commenced commercial operation of Unit No. at the Large Generating Facility, effective as of [Date plus one day].

Standardization of Generator Interconnection Agreements..., 104 FERC P 61103...

Standardization of Generator Interconnection Agreements..., 104 FERC P 61103...

Appendix C to the Small

**Generator Interconnection Preamble** 

### STANDARD SMALL GENERATOR

# INTERCONNECTION PROCEDURES (SGIP)

# including

### STANDARD SMALL GENERATOR

# INTERCONNECTION AGREEMENT (SGIA)

(Applicable to Generating Facilities no larger than 20 MW)

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- Appendix 4 Interconnection System Impact Study Agreement
- Appendix 5 Interconnection Facilities Study Agreement
- Appendix 6 Small Generating Facility Interconnection Request (Application Form)
- Appendix 7 Standard Small Generator Interconnection Agreement

### **Section 1. Definitions**

When used with initial capitalization, the following terms shall have the meanings specified or referred to below. Terms used in this document with initial capitalization that are not defined below shall have the meanings specified in the section in which they are used or as specified in the Transmission Provider's Open Access Transmission Tariff (OATT), as may be amended from time to time.

**Additional Review** shall mean a technical evaluation by the Transmission Provider of a proposed interconnection that has failed to pass the Super-Expedited Screening Criteria. The review will determine whether minor modifications to the Transmission Provider's Transmission System (e.g., changing meters, fuses, relay settings) can be performed in order to enable the interconnection to be made safely and reliably.

**Adverse System Impact** shall mean the negative effects due to technical or operational limits on conductors or equipment being exceeded that may compromise the safety and reliability of the electric system.

**Affected System** shall mean an electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

**Affiliate** shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Applicable Laws and Regulations** shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of the Standard Small Generator Interconnection Agreement.

Breaching Party shall mean a Party that is in Breach of the Standard Small Generator Interconnection Agreement.

Business Day shall mean Monday through Friday, excluding Federal Holidays.

Calendar Day shall mean any day including Saturday, Sunday or a Federal Holiday.

**Commercial Operation Date** of a unit shall mean the date on which the Interconnection Customer commences commercial operation of the unit at the Generating Facility after testing of such unit has been completed.

Confidential Information shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise.

**Control Area** shall mean an electrical system or systems bounded by interconnection metering and telemetry, capable of controlling generation to maintain its interchange schedule with other Control Areas and contributing to frequency regulation of the interconnection. A Control Area must be certified by NERC.

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 6.17 of the Standard Small Generator Interconnection Agreement.

**Dispute Resolution** shall mean the procedure for resolution of a dispute between the Parties in which they will first attempt to resolve the dispute on an informal basis.

**Distribution System** shall mean the Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility and render the

transmission service necessary to effect Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Effective Date** shall mean the date on which the Standard Small Generator Interconnection Agreement becomes effective upon execution by the Parties subject to acceptance by the Commission, or if filed unexecuted, upon the date specified by the Commission.

**Emergency Condition** shall mean a condition or situation: (1) that in the judgement of the Party making the claim is imminently likely to endanger life or property, or (2) that, in the case of a Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to Transmission Provider's Transmission System, Transmission Provider's Interconnection Facilities or the electric systems of others to which the Transmission Provider's Transmission System is directly connected, or (3) that, in the case of Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer's Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions; <u>provided</u>, that the Interconnection Customer is not obligated by the Standard Small Generator Interconnection Agreement to possess black start capability.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**Expedited Procedures** shall mean the process described in the Standard Small Generator Interconnection Procedures for (1) a Generating Facility no larger than 10 MW interconnecting with a Transmission Provider's Low-Voltage Transmission System, and (2) a Generating Facility failing the Super-Expedited Procedures. The Expedited Procedures use the Expedited Screening Criteria to determine whether the Small Generating Facility can be interconnected without any further Interconnection Studies.

**Expedited Screening Criteria** shall mean the technical variables that are employed in the Expedited Procedures for evaluating the impact of interconnecting the Small Generating Facility to the Transmission Provider's Transmission System as it exists at the time of the analysis.

**Fault Current** shall mean the current that is produced by an electrical fault, such as single-phase to ground, double-phase to ground, three-phase to ground, phase-to-phase, and three-phase. The Fault Current is several times larger in magnitude than the current that normally flows through a circuit. A protective device must be able to interrupt this Fault Current within a few cycles. The Fault Current increases when a new generator is interconnected.

Federal Power Act shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a et seq.

FERC shall mean the (Commission) or its successor.

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include an act of negligence or intentional wrongdoing.

**Generating Facility** shall mean Interconnection Customer's device for the production of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Generating Facility Capacity** shall mean the net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple energy production devices.

Good Utility Practice shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

Governmental Authority shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include Interconnection Customer, Transmission Provider, or any Affiliate thereof.

**Hazardous Substances** shall mean any chemicals, materials or substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "hazardous constituents," "restricted hazardous materials," "extremely hazardous substances," "toxic substances," "radioactive substances," "contaminants," "pollutants," "toxic pollutants" or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**High-Voltage** shall mean voltage levels at or above 69 kV.

**IEEE** shall mean the Institute of Electrical and Electronics Engineers.

**Initial Review** shall mean the Transmission Provider's review of the Interconnection Customer's Interconnection Request using the Super-Expedited Screening Criteria described in Section 3 of the Standard Small Generator Interconnection Procedures.

**In-Service Date** shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Transmission Provider's Interconnection Facilities to obtain back feed power.

**Interconnection Customer** shall mean any entity, including the Transmission Provider, Transmission Owner or any of the Affiliates or subsidiaries of either, that proposes to interconnect its Generating Facility with the Transmission Provider's Transmission System.

Interconnection Customer's Interconnection Facilities shall mean all facilities and equipment, as identified in Appendix 2 of the Standard Small Generator Interconnection Agreement, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Transmission Provider's Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

**Interconnection Facilities Study** shall mean a study conducted by the Transmission Provider or a third party consultant for the Interconnection Customer to determine a list of facilities (including Transmission Provider's Interconnection Facilities and Network Upgrades as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required

to interconnect the Generating Facility with the Transmission Provider's Transmission System. The scope of the study is defined the Standard Small Generator Interconnection Procedures.

**Interconnection Facilities Study Agreement** shall mean the form of agreement contained in Appendix 5 of the Standard Small Generator Interconnection Procedures for conducting the Interconnection Facilities Study.

**Interconnection Feasibility Study** shall mean a preliminary evaluation of the system impact and cost of interconnecting the Generating Facility to the Transmission Provider's Transmission System, the scope of which is described in the Standard Small Generator Interconnection Procedures.

**Interconnection Feasibility Study Agreement** shall mean the form of agreement contained in Appendix 3 of the Standard Small Generator Interconnection Procedures for conducting the Interconnection Feasibility Study.

**Interconnection Request** shall mean an Interconnection Customer's request, in the form of Appendix 6 to the Standard Small Generator Interconnection Procedures, in accordance with the Tariff, to interconnect a new Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Generating Facility that is interconnected with the Transmission Provider's Transmission System.

**Interconnection Service** shall mean the service provided by the Transmission Provider associated with interconnecting the Interconnection Customer's Generating Facility to the Transmission Provider's Transmission System and enabling it to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Standard Small Generator Interconnection Agreement and, if applicable, the Transmission Provider's Tariff.

**Interconnection Study** shall mean any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, and the Interconnection Facilities Study described in the Standard Small Generator Interconnection Procedures.

**Interconnection System Impact Study** shall mean an engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of Transmission Provider's Transmission System and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility were interconnected without project modifications or system modifications, focusing on the Adverse System Impacts identified in the Interconnection Feasibility Study, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Standard Small Generator Interconnection Procedures.

**Interconnection System Impact Study Agreement** shall mean the form of agreement contained in Appendix 4 of the Standard Small Generator Interconnection Procedures for conducting the Interconnection System Impact Study.

Large Generating Facility shall mean a Generating Facility having a Generating Facility Capacity of more than 20 MW.

**Low-Voltage** shall mean voltage levels below 69 kV.

**Material Modification** shall mean a modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Milestones** shall mean the events and associated dates listed in Appendix 3 of the Standard Small Generator Interconnection Agreement. The Milestones describe events that are to be met by either Party as the Generating Facility proceeds to interconnection and Parallel Operation.

MW shall mean the abbreviation for megawatts, which is used to describe the capacity of a generating facility.

**NERC** shall mean the North American Electric Reliability Council or its successor organization.

**Network Upgrades** shall mean the additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Interconnection Customer interconnects to the Transmission Provider's Transmission System to accommodate the interconnection of the Generating Facility to the Transmission Provider's Transmission System.

**Operating Requirements** shall mean any operating and technical requirements that may be applicable due to Regional Transmission Organization, Independent System Operator, Control Area, or Transmission Provider requirements, including those set forth in Appendix 4 of the Standard Small Generator Interconnection Agreement.

**Parallel Operation** shall mean the two-way flow of power between a generator and a Transmission System. Generators that operate in parallel with a Transmission System require additional protection and control devices. This may be contrasted with a stand-alone generator that operates isolated from the utility company's electric system.

**Party or Parties** shall mean Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Change of Ownership** shall mean the point, as set forth in Appendix 2 of the Standard Small Generator Interconnection Agreement, where the Interconnection Customer's Interconnection Facilities connect to the Transmission Provider's Interconnection Facilities.

**Point of Common Coupling** shall mean the point in the interconnection of the Generating Facility with Transmission Provider's Transmission System at which the harmonic limits are applied.

**Point of Interconnection** shall mean the point, as set forth in Appendix 2 of the Standard Small Generator Interconnection Agreement, where the Interconnection Facilities connect to the Transmission Provider's Transmission System.

**Precertified** shall describe a Generating Facility if an identical sample of the manufacturer's model has been submitted to a national testing laboratory and found, after appropriate testing, to be in compliance with applicable consensus industry operational and safety standards.

**Queue Position** shall mean the order of a valid Interconnection Request, relative to all other pending valid Interconnection Requests, that is established based upon the date and time of receipt of the valid Interconnection Request by the Transmission Provider.

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under the Standard Small Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

Rules shall mean the rules promulgated by FERC relating to the interconnection of generators.

**Scoping Meeting** shall mean the meeting between representatives of the Interconnection Customer and Transmission Provider conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.

**Secondary Network** shall mean a type of Low-Voltage electric system that is generally used in large metropolitan areas that are densely populated in order to provide high reliability of service (also known as secondary grid network or area network).

**Site Control** shall mean documentation reasonably demonstrating: (1) ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Generating Facility, (2) an option to purchase or acquire a leasehold site for such purpose, or (3) an exclusivity or other business relationship between the Interconnection Customer and the entity having the right to sell, lease or grant the Interconnection Customer the right to possess or occupy a site for such purpose.

Small Generating Facility shall mean a Generating Facility having a Generating Facility Capacity of no more than 20 MW.

**Standard Small Generator Interconnection Agreement (SGIA)** shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to a Small Generating Facility, that is included in the Transmission Provider's Tariff.

**Standard Small Generator Interconnection Procedures (SGIP)** shall mean the interconnection procedures applicable to an Interconnection Request pertaining to a Small Generating Facility that are included in the Transmission Provider's Tariff.

**Spot Network** shall mean a type of Low-Voltage system found within modern commercial buildings to provide high reliability of service. Spot Networks generally use 12 kV to 480/277 volt vaults on site.

**Super-Expedited Procedures** shall mean the process described in Section 3 of the Standard Small Generator Interconnection Procedures for Generating Facilities no larger than 2 MW interconnecting with Transmission Provider's Low-Voltage Transmission System. The Super-Expedited Procedures use the Super-Expedited Screening Criteria to determine whether the proposed interconnection may cause an Adverse System Impact on Transmission Provider's Transmission System.

**Super-Expedited Screening Criteria** shall mean the technical variables that are employed in the Super-Expedited Procedures for evaluating the interconnection of a Small Generating Facility no larger than 2 MW to a Transmission Provider's Low-Voltage Transmission System.

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) the Transmission Provider's Transmission System from faults or other electrical disturbances occurring at the Generating Facility and (2) the Generating Facility from faults or other electrical system disturbances occurring on the Transmission Provider's Transmission System or on other delivery systems or other generating systems to which the Transmission Provider's Transmission System is directly connected.

**Tariff** shall mean the Transmission Provider's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the FERC, and as amended or supplemented from time to time, or any successor tariff.

**Technical Master** shall mean a person, as described in Article 8 of the Standard Small Generator Interconnection Agreement, with relevant technical experience selected to adjudicate disputes between the Parties.

Term shall mean the duration of the Standard Small Generator Interconnection Agreement.

**Transmission Owner** shall mean an entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the Standard Small Generator Interconnection Agreement to the extent necessary.

**Transmission Provider** shall mean the public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under

the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from the Transmission Provider.

**Transmission Provider's Interconnection Facilities** shall mean 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 2 of the Standard Small Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. The Transmission Provider's Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

**Transmission System** shall mean the facilities owned, controlled or operated by the Transmission Provider or Transmission Owner that are used to provide transmission service under the Tariff.

**Upgrades** shall mean the required additions and modifications to the Transmission Provider's Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

### **Section 2. General Provisions**

- **2.1** An Interconnection Request to interconnect a Generating Facility no larger than 2 MW with Transmission Provider's Low-Voltage Transmission System shall be evaluated under the Super-Expedited Procedures set forth in Section 3 of these Procedures. If the Generating Facility fails to pass the procedures set forth in Section 3, it may then be evaluated pursuant to Section 4 of these Procedures.
- **2.2** An Interconnection Request to interconnect: (1) a Generating Facility larger than 2 MW but no larger than 20 MW with Transmission Provider's Low-Voltage Transmission System, or (2) a Generating Facility with Transmission Provider's High-Voltage Transmission System, or (3) a Generating Facility that does not pass the Super-Expedited Procedures as set forth in Section 3 of these Procedures, shall be evaluated pursuant to Section 4 of these Procedures.
- **2.3** If the Interconnection Request is for a Generating Facility that includes multiple energy production devices at a site for which Interconnection Customer seeks a single Point of Interconnection, the Interconnection Request shall be evaluated on the basis of the aggregate capacity of the multiple devices.
- **2.4** If the Interconnection Request is for an increase in capacity for an existing Generating Facility, the Interconnection Request shall be evaluated on the basis of the new total capacity of the Generating Facility.
- **2.5** Transmission Provider shall maintain records of all Interconnection Requests received, the times required to complete Interconnection Request approvals and disapprovals, and justifications for the actions taken on the Interconnection Requests. Transmission Provider shall keep such records on file for three years.
- 2.6 To assist a prospective Interconnection Customer, Transmission Provider shall designate a contact person from whom information on the Interconnection Request and about Transmission Provider's Transmission System can be obtained through informal requests regarding a proposed project. Such information should include studies and other materials useful to an understanding of the feasibility of an interconnection at a particular point on Transmission Provider's Transmission System, except to the extent providing such materials would violate security requirements or confidentiality agreements, or be contrary to law or the Commission's Regulations. Transmission Provider shall comply with reasonable requests for access to or copies of such studies.
- 2.7 Transmission Provider shall coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems and include those results in the applicable study within the time frame specified in these

procedures. Transmission Provider shall include Affected System representatives in all meetings held with Interconnection Customer as required by these procedures. Interconnection Customer shall cooperate with Transmission Provider in all matters related to the conduct of studies and the determination of modifications to Affected Systems. An Affected System that is a Transmission Provider itself shall cooperate with Transmission Provider in all matters related to the conduct of studies and the determination of modifications to Affected Systems. In no instance shall the processing of the Interconnection Request be delayed as a result of inaction by an Affected System.

- **2.8** Once an Interconnection Request is deemed complete, any Material Modification to the proposed Generating Facility, Interconnection Customer's Interconnection Facilities, or site of the interconnection not agreed to in writing by Transmission Provider, shall require submission of a new Interconnection Request.
- 2.9 Proof of Site Control for the Generating Facility shall be submitted with the Interconnection Request.
- **2.10** Transmission Provider may propose to interconnect more than one Generating Facility at a single Point of Interconnection in order to minimize costs. However, an Interconnection Customer may elect to pay the entire cost of separate Interconnection Facilities.
- **2.11** The following articles from the Standard Small Generator Interconnection Agreement are incorporated in these procedures by reference: Article 6.12 (Security Arrangements), Article 7 (Confidentiality), and Article 8 (Dispute Resolution).

# Section 3. Super-Expedited Procedures for Interconnecting a Small Generating Facility No Larger than 2 MW to a Low-Voltage Transmission System

- **3.1 Precertification.** In order to qualify for the Super-Expedited Procedures described in this section, Interconnection Customer's Generating Facility must be precertified. The Generating Facility shall be considered precertified if an identical sample of the manufacturer's model has been submitted to a national testing laboratory and found, after appropriate testing, to be in compliance with applicable consensus industry operational and safety standards. No further design review, testing or additional equipment shall be required to meet the precertification requirements of this section.
- **3.2 Interconnection Request.** Interconnection Customer shall submit to Transmission Provider an Interconnection Request (Application Form) in the form specified in Appendix 6 of these procedures. Transmission Provider shall notify Interconnection Customer within three Business Days of receipt of the Interconnection Request and inform Interconnection Customer of the date and time when it was received. Within ten Business Days from the date of receipt of the Interconnection Request, Transmission Provider shall notify Interconnection Customer whether the request is complete. If the Interconnection Request is not complete, Transmission Provider shall at the same time provide Interconnection Customer in writing a list detailing all information that must be provided to complete the Interconnection Request. The Interconnection Request shall be deemed complete when the required information has been provided by Interconnection Customer, or the Parties have agreed that Interconnection Customer may provide additional information at a later time, as specified in Section 7 of the Interconnection Request.
- **3.3 Initial Review.** Within 20 Calendar Days after Transmission Provider notifies Interconnection Customer it has received a completed Interconnection Request, Transmission Provider shall: (1) evaluate the Interconnection Request using the Super-Expedited Screening Criteria in Appendix 1 of these procedures, (2) review Interconnection Customer's analysis using the same criteria (if provided by Interconnection Customer), and (3) provide Interconnection Customer with its evaluation, including a comparison of the results of its own analyses with those of Interconnection Customer (if applicable).

If Transmission Provider determines that the Interconnection Request: (1) passes the Super-Expedited Screening Criteria, or (2) fails one or more of the Super-Expedited Screening Criteria but determines that the Generating Facility can be interconnected

safely and reliably, it shall provide Interconnection Customer a Standard Small Generator Interconnection Agreement within five Business Days after such determination.

- **3.4 Additional Review.** If Transmission Provider determines that the Interconnection Request fails the Super-Expedited Screening Criteria and cannot determine that the Generating Facility may be interconnected safely and reliably with its Transmission System, Interconnection Customer may offer to pay for an expedited Additional Review of the interconnection. The Additional Review shall not exceed six hours of Transmission Provider's engineering time (to be paid for by Interconnection Customer) and shall be completed within ten Business Days of the request. The review will determine whether minor modifications to Transmission Provider's Transmission System (e.g., changing meters, fuses, relay settings) can be performed in order to enable the interconnection to be made safely and reliably. Transmission Provider shall provide Interconnection Customer with a copy of the review. If the Additional Review indicates that the interconnection can be made safely and reliably with minor modifications and Interconnection Customer agrees to pay these additional costs, Transmission Provider shall provide Interconnection Customer a Standard Small Generator Interconnection Agreement within five Business Days after such determination. If the review indicates that the interconnection cannot be made safely and reliably with minor modifications, the Interconnection Request shall be processed under Section 4 of these Procedures.
- **3.5 Interconnection of the Generating Facility.** After the Standard Small Generator Interconnection Agreement is signed by the Parties, interconnection of the Generating Facility will proceed according to the Milestones agreed to by the Parties in Appendix 3 of the Standard Small Generator Interconnection Agreement.

# Section 4. Procedures for Interconnecting a Small Generating Facility to a High-Voltage Transmission System and a Small Generating Facility Larger than 2 MW to a Low-Voltage Transmission System

- **4.1 General.** An Interconnection Request to interconnect: (1) a Generating Facility larger than 2 MW but no larger than 20 MW with Transmission Provider's Low-Voltage Transmission System, or (2) a Generating Facility with Transmission Provider's High-Voltage Transmission System. Generating Facilities larger than 2 MW but no larger than 10 MW and Generating Facilities no larger than 2 MW that do not pass the Super-Expedited Procedures, that are to be interconnected with Transmission Provider's Low-Voltage Transmission System, shall be processed pursuant to the Expedited Procedures found in Section 4.3 of this section.
- **4.2 Interconnection Request.** Interconnection Customer shall submit to Transmission Provider an Interconnection Request (Application Form) in the form specified in Appendix 6 of these procedures. Transmission Provider shall notify Interconnection Customer within three Business Days of receipt of the Interconnection Request and inform Interconnection Customer of the date and time when it was received. Within ten Business Days from the date of receipt of the Interconnection Request, Transmission Provider shall notify Interconnection Customer whether the request is complete. If the Interconnection Request is not complete, Transmission Provider shall at the same time provide Interconnection Customer in writing a list detailing all information that must be provided to complete the Interconnection Request. The Interconnection Request shall be deemed complete when the required information has been provided by Interconnection Customer, or the Parties have agreed that Interconnection Customer may provide additional information at a later time, as specified in Section 7 of the Interconnection Request.
- 4.3 Expedited Procedures for a Small Generating Facility No Larger than 10 MW Interconnecting with Transmission Provider's Low-Voltage Transmission System and a Small Generating Facility Failing the Super-Expedited Procedures. An Interconnection Customer may request that Transmission Provider use the Expedited Screening Criteria contained in Appendix 2 of these procedures to evaluate the Interconnection Request.
- **4.3.1** If Transmission Provider determines that the Generating Facility can be interconnected safely and reliably based upon its analysis using the Expedited Screening Criteria, it shall provide Interconnection Customer a Standard Small Generator Interconnection Agreement within five Business Days after such determination.

If the Generating Facility passes the Expedited Screening Criteria, but Transmission Provider determines that the Generating Facility cannot be interconnected safely and reliably, the Parties shall conduct a Scoping Meeting. If at the Scoping Meeting the Parties conclude that an Interconnection Feasibility Study is required, and the study indicates no Adverse System Impact to Transmission Provider's Transmission System, the cost of the study shall be borne by Transmission Provider and no Interconnection System Impact Study shall be required. If the results of the Interconnection Feasibility Study indicate an Adverse System Impact to Transmission Provider's Transmission System, the cost of the study shall be borne by Interconnection Customer and an Interconnection System Impact Study shall be performed.

- **4.4 Queuing Priority.** Transmission Provider shall assign a Queue Position based upon the date and time the Interconnection Request is deemed complete. The Queue Position of each Interconnection Request will be used to determine the cost responsibility for the facilities necessary to accommodate the interconnection.
- **4.5 Scoping Meeting.** A Scoping Meeting will be held within ten Business Days, or as agreed to by the Parties, after Transmission Provider has notified Interconnection Customer that the Interconnection Request is deemed complete. The purpose of the meeting shall be to review the Interconnection Request, existing studies relevant to the Interconnection Request, and the results of the application of the Super-Expedited and/or Expedited Screening Criteria. Parties are expected to bring to the meeting personnel, including system engineers and other resources as may be reasonably required to accomplish the purpose of the meeting.
- **4.5.1** If the Parties agree at the Scoping Meeting that an Interconnection Feasibility Study needs to be performed, Transmission Provider shall provide Interconnection Customer, no later than five Business Days after the Scoping Meeting, an Interconnection Feasibility Study Agreement including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study.
- **4.5.2** If the Parties agree at the Scoping Meeting that an Interconnection Feasibility Study does not need to be performed, Transmission Provider shall provide Interconnection Customer, no later than five Business Days after the Scoping Meeting, an Interconnection Facilities Study Agreement including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study.
- 4.6 Interconnection Feasibility Study. An Interconnection Feasibility Study will include the following analyses for the purpose of identifying a potential Adverse System Impact to Transmission Provider's Transmission System that would result from the interconnection: (1) initial identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection, (2) initial identification of any thermal overload or voltage limit violations resulting from the interconnection, (3) initial review of grounding requirements and system protection, and (4) description and non-binding estimated cost of facilities required to interconnect the Generating Facility to Transmission Provider's Transmission System in a safe and reliable manner.
- **4.6.1** If Interconnection Customer asks that the Interconnection Feasibility Study evaluate multiple potential points of interconnection, additional evaluations may need to be performed. All such evaluations are to be paid by Interconnection Customer.
- **4.6.2** An Interconnection System Impact Study shall not be required if the Interconnection Feasibility Study indicates no Adverse System Impact or if it identifies an Adverse System Impact, but Transmission Provider is able to identify a remedy without the need for an Interconnection System Impact Study. Otherwise an Interconnection System Impact Study shall be required.
- 4.7 Interconnection System Impact Study. The Interconnection System Impact Study shall evaluate the impact of the proposed interconnection on the safety and reliability of Transmission Provider's Transmission System and, if applicable, Affected Systems. The study shall identify and detail the system impacts that would result if the Generating

Facility were interconnected without project modifications or system modifications, focusing on the Adverse System Impacts identified in the Interconnection Feasibility Study, or to study potential impacts, including but not limited to those identified in the Scoping Meeting. The study will consider all generating facilities that, on the date the Interconnection System Impact Study is commenced: (1) are directly interconnected with Transmission Provider's Transmission System, (2) are interconnected with Affected Systems and may have an impact on the proposed interconnection, and (3) have a signed Interconnection Agreement to interconnect with Transmission Provider's Transmission System.

- **4.7.1 General.** The Interconnection System Impact Study will consider, as appropriate, a short circuit analysis, a stability analysis, a power flow analysis, voltage drop and flicker studies, protection and set point coordination studies, and grounding reviews. The Interconnection System Impact Study will state the underlying assumptions of the study, show the results of the analyses, and list any potential impediments to providing the requested interconnection service. The study will indicate required Upgrades and a non-binding good faith estimate of cost and time to construct.
- **4.7.2 Distribution Interconnection System Impact Study.** A distribution Interconnection System Impact Study shall be performed if a potential Distribution System Adverse System Impact is identified in the Interconnection Feasibility Study. Transmission Provider shall send Interconnection Customer an Interconnection System Impact Study Agreement within five Business Days of transmittal of the Interconnection Feasibility Study report, including an outline of the scope of the study and a good faith estimate of the cost to perform the study. The study shall incorporate a load flow study, an analysis of equipment interrupting ratings, protection coordination study, voltage drop and flicker studies, protection and set point coordination studies, and grounding reviews, and the impact on system operation, as necessary.
- **4.7.3 Transmission Interconnection System Impact Study.** Where the Interconnection Feasibility Study or a distribution Interconnection System Impact Study shows a potential Transmission System Adverse System Impact, within five Business Days following transmittal of the Interconnection Feasibility Study report and/or distribution Interconnection System Impact Study Report, Transmission Provider shall notify any Affected Systems in accordance with the procedures provided for in Transmission Provider's Tariff on file with FERC. Transmission Provider shall also send Interconnection Customer an Interconnection System Impact Study Agreement, including an outline of the scope of the study and a good faith estimate of the cost to perform the study.
- **4.7.4 Coordinated Transmission and Distribution System Impact Studies.** Where transmission and distribution facilities are owned by different entities (such as in the case of transmission-dependent utilities (TDUs)) and no single entity is in a position to conduct an Interconnection System Impact Study covering both transmission and distribution electric systems, Transmission Provider, as applicable, shall conduct the Interconnection System Impact Study. Affected Systems shall participate in the study and provide all information necessary to prepare the study.
- **4.7.5 Interconnection System Impact Study Cost Sharing.** Affected transmission and distribution providers may participate in the preparation of the Interconnection System Impact Study, with a division of costs among such entities as they may agree. All affected parties shall be afforded an opportunity to review and comment upon an Interconnection System Impact Study that covers potential Adverse System Impacts on their systems, and Transmission Provider has thirty additional Calendar Days to complete an Interconnection System Impact Study requiring review by Affected Systems.

#### 4.8 Interconnection Facilities Study.

- **4.8.1** Within five Business Days of completion of the Interconnection System Impact Study, a report will be prepared and transmitted to Interconnection Customer along with an Interconnection Facilities Study Agreement, which shall include an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study.
- **4.8.2** The Interconnection Facilities Study shall specify and estimate the cost of the equipment, engineering, procurement and construction work (including overheads) needed to implement the conclusions of the Interconnection Feasibility Study and

Interconnection System Impact Study to interconnect the Generating Facility. The Interconnection Facilities Study shall also identify: (1) the electrical switching configuration of the equipment, including, without limitation, transformer, switchgear, meters, and other station equipment, (2) the nature and estimated cost of Transmission Provider's Interconnection Facilities and Upgrades necessary to accomplish the interconnection, and (3) an estimate of the time required to complete the construction and installation of such facilities.

- **4.8.3** Parties may agree to permit Interconnection Customer to separately arrange for a third party to design and construct the required Interconnection Facilities. In such cases, Transmission Provider may review the design of the facilities, under the provisions of the Interconnection Facilities Study Agreement. If the Parties agree to separately arrange for design and construction, and comply with any security and confidentiality requirements, Transmission Provider shall make all relevant information available to Interconnection Customer in order to permit Interconnection Customer to obtain an independent design and cost estimate for the facilities.
- **4.8.4** Upon completion of the Interconnection Facilities Study, and with the agreement of Interconnection Customer to pay for Interconnection Facilities and Upgrades identified in the Interconnection Facilities Study, Transmission Provider shall provide Interconnection Customer a Standard Small Generator Interconnection Agreement within five Business Days.
- **4.9 Interconnection of the Generating Facility.** After the Standard Small Generator Interconnection Agreement is signed by the Parties, interconnection of the Generating Facility will proceed according to the Milestones agreed to by the Parties in Appendix 3 of the Standard Small Generator Interconnection Agreement.

#### Chart 1

Diagram of a Typical Small Generating Facility Installation Chart 2

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

Flow Chart of Super-Expedited Procedures for Interconnecting a Small Generating Facility No Larger than 2 MW to a Low-Voltage Transmission System

## Chart 3

Flow Chart of Procedures for Interconnecting a Small Generating Facility to a High-Voltage Transmission System and a Small Generating Facility Larger than 2 MW to a Low-Voltage Transmission System

TABULAR OR GRAPHIC MATERIAL SET FORTH AT THIS POINT IS NOT DISPLAYABLE

#### Appendix 1

#### **Super-Expedited Screening Criteria**

(Applicable to Generating Facilities No Larger than 2 MW)

**1.1** For interconnection of the Generating Facility to a radial Low-Voltage circuit, the aggregate new generation capacity on the circuit shall not exceed five percent of the total circuit annual peak load as most recently measured at the substation.

- **1.2** For interconnection of the Generating Facility to the load side of Spot Network protectors, the Generating Facility must utilize an inverter-based equipment package and, together with other inverter-based generation, shall not exceed the smaller of five percent of a Spot Network's maximum load or 50 kW.
- 1.3 The Generating Facility, in aggregation with other generation on the Low-Voltage circuit, shall not contribute more than ten percent to the circuit's maximum Fault Current on the High-Voltage (primary) level nearest the proposed Point of Common Coupling.
- **1.4** The Generating Facility, in aggregate with other generation on the Low-Voltage circuit, shall not cause any protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or customer equipment on the system to exceed 85 percent of the short circuit interrupting capability; nor is the interconnection proposed for a circuit that already exceeds 85 percent of the short circuit interrupting capability.
- **1.5** The Generating Facility, in aggregate with other generation interconnected to the Low-Voltage side of the substation transformer feeding the circuit where the Generating Facility proposes to interconnect, shall not exceed 10 MW in an area where there are known or posted transient stability limitations to generating units located in the general electrical vicinity (<u>e.g.</u>, three or four High-Voltage busses from the point of interconnection).
- **1.6** For interconnection of a single-phase generator where the primary Low-Voltage electric system is three-phase, four-wire, the Generating Facility shall be connected line-to-neutral. For interconnection of a single-phase generator where the primary Low-Voltage electric system is three-phase, three-wire, the Generating Facility shall be connected line-to-line.
- 1.7 For interconnection of a proposed three-phase generator to a three-phase, four-wire Low-Voltage circuit or a Low-Voltage circuit having mixed three-wire and four-wire sections, the aggregate generation capacity including the Generating Facility shall not exceed ten percent of line section peak load.
- **1.8** If the Generating Facility is to be interconnected on single-phase shared secondary, the aggregate new generation capacity on the shared secondary shall not exceed 20 kVA.
- **1.9** If the Generating Facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 20 percent of nameplate rating of the service transformer.
- **1.10** The Generating Facility's Point of Common Coupling shall be on a Low-Voltage electric system.

## Appendix 2

## **Expedited Screening Criteria**

#### (Applicable to Generating Facilities No Larger than 10 MW)

1.1 For interconnection of the Generating Facility to a radial Low-Voltage circuit, the Generating Facility's capacity in aggregate with other generation on the circuit shall not exceed 15 percent of total circuit annual peak load as most recently measured at the substation; nor shall it exceed 15 percent of a Low-Voltage circuit line section design capacity. A line section is defined as that section of the Low-Voltage electric system between two sectionalizing devices.

- 1.2 The Generating Facility, in aggregation with other generation on the Low-Voltage circuit, shall not contribute more than ten percent to the Low-Voltage circuit's maximum Fault Current at the point on the primary level nearest the proposed Point of Common Coupling.
- 1.3 Interconnection of the Generating Facility in aggregate with other generation on the Low-Voltage circuit shall not cause any equipment, protective devices (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or customer equipment on the system to exceed 90 percent of their short circuit interrupting capability; nor may the interconnection be proposed for a circuit that already exceeds the 90 percent capability limit.
- 1.4 The Generating Facility's Point of Common Coupling shall not be on a Low-Voltage secondary or Spot Network.
- **1.5** The Generating Facility, in aggregate with other generation interconnected to the Low-Voltage side of the substation transformer feeding the Low-Voltage circuit where the Generating Facility proposes to interconnect, shall not exceed 10 MW in an area where there are known or posted transient stability limitations to generating units located in the general electrical vicinity (e.g., three or four High-Voltage level busses from the point of interconnection).

### Appendix 3

## **Interconnection Feasibility Study Agreement**

THIS	AGREEMENT	is	made	and	entered	into	this	day	of		20	by	and
between	1							, a			org	ganize	d and
existing	under the laws of t	he Sta	ate of							, ("Interconne	ction Custo	omer,"	) and
							_, a			_ existing under	the laws	of the	State
of					, ("Tra	ansmiss	ion Provi	der "). l	Interco	onnection Custo	mer and Tr	ansmi	ssion
Provide	r each may be refer	red to	as a "Pa	arty," o	r collective	ely as tl	he "Partie	es."					

## RECITALS

WHEREAS, Interconnection Customer is proposing to develop a Small Generating Facility or generating capacity addition to an existing Small Generating Facility consistent with the Interconnection Request completed by Interconnection Customer on \_\_\_\_\_; and

**WHEREAS**, Interconnection Customer desires to interconnect the Generating Facility with Transmission Provider's Transmission System; and

**WHEREAS**, Interconnection Customer has requested Transmission Provider to perform an Interconnection Feasibility Study to assess the feasibility of interconnecting the proposed Generating Facility to Transmission Provider's Transmission System, and of any Affected Systems;

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows: **1.0** When used in this agreement, with initial capitalization, the terms specified shall have the meanings indicated. Terms used in this agreement with initial capitalization but not defined in this agreement shall have the meanings specified in Section 1 of the Standard Small Generator Interconnection Procedures.

**2.0** Interconnection Customer elects and Transmission Provider shall cause to be performed an Interconnection Feasibility Study consistent with Section 4.6 of the Standard Small Generator Interconnection Procedures in accordance with the Tariff.

- 3.0 The scope of the Interconnection Feasibility Study shall be subject to the assumptions set forth in Attachment A to this agreement.
- 4.0 The Interconnection Feasibility Study shall be based on the technical information provided by Interconnection Customer in the Interconnection Request, as may be modified as the result of the Scoping Meeting. Transmission Provider reserves the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection Feasibility Study and as designated in accordance with Section 4.5 (Scoping Meeting) of the Standard Small Generator Interconnection Procedures. If Interconnection Customer modifies its Interconnection Request, the time to complete the Interconnection Feasibility Study may be extended by agreement of the Parties.
- 5.0 In performing the study, Transmission Provider shall rely, to the extent reasonably practicable, on existing studies of recent vintage. The Interconnection Customer will not be charged for such existing studies; however, Interconnection Customer shall be responsible for charges associated with any new study or modifications to existing studies that are reasonably necessary to perform the Interconnection Feasibility Study.
- **6.0** The Interconnection Feasibility Study report shall provide the following information:
- preliminary identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection,
- preliminary identification of any thermal overload or voltage limit violations resulting from the interconnection, and
- preliminary description and non-bonding estimated cost of facilities required to interconnect the Generating Facility to Transmission Provider's Transmission System and to address the identified short circuit and power flow issues.
- 7.0 Transmission Provider may require a study deposit of the lesser of 100 percent of estimated non-binding good faith study costs or \$1,000.
- 8.0 The Interconnection Feasibility Study shall be completed and the results shall be transmitted to Interconnection Customer within thirty Calendar Days after this agreement is signed by the Parties.
- 9.0 Study fees shall be based on actual costs and will be invoiced to Interconnection Customer after the study is transmitted to Interconnection Customer. The invoice shall include an itemized listing of employee time and costs expended on the study.
- 10.0 Interconnection Customer shall pay any actual study costs that exceed the deposit without interest within thirty Calendar Days on receipt of the invoice. Transmission Provider shall refund any excess amount without interest within thirty Calendar Days of the invoice.

IN WITNESS WHEREOF, the Parties have caused this agreement to be duly executed by their duly authorized officers of agents on the day and year first above written.
[Insert name of Transmission Provider]
[Insert name of Interconnection Customer]

Signed
Signed
Name (Printed):
Name (Printed):
Title Title
Attachment A to Interconnection
Feasibility Study Agreement
Assumptions Used in Conducting the Interconnection Feasibility Study
The Interconnection Feasibility Study will be based upon the information set forth in the Interconnection Request and agree upon in the Scoping Meeting held on:
1) Designation of Point of Interconnection and configuration to be studied.
2) Designation of alternative Points of Interconnection and configuration.
1) and 2) are to be completed by Interconnection Customer. Other assumptions (listed below) are to be provided by Interconnection Customer and Transmission Provider. <b>Appendix 4</b>
Interconnection System Impact Study Agreement
THIS AGREEMENT is made and entered into thisday of 20 by an entered between, a organized and
existing under the laws of the State of, ("Interconnection Customer,") and
Provider each may be referred to as a "Party," or collectively as the "Parties."
RECITALS

Standardization of Generator Interconnection Agreements..., 104 FERC P 61103...

WHEREAS, Interconnection Customer is proposing to develop a Small Generating Facility or generating capacity addition to an existing Small Generating Facility consistent with the Interconnection Request completed by Interconnection Customer on: and

**WHEREAS**, Interconnection Customer desires to interconnect the Generating Facility with Transmission Provider's Transmission System;

**WHEREAS**, Transmission Provider has completed an Interconnection Feasibility Study and provided the results of said study to Interconnection Customer (This recital to be omitted if the Parties have agreed to forego the Interconnection Feasibility Study.); and

**WHEREAS**, Interconnection Customer has requested Transmission Provider to perform an Interconnection System Impact Study to assess the impact of interconnecting the Generating Facility to Transmission Provider's Transmission System, and of any Affected Systems;

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows: **1.0** When used in this agreement, with initial capitalization, the terms specified shall have the meanings indicated. Terms used in this agreement with initial capitalization but not defined in this agreement shall have the meanings specified in Section 1 of the Standard Small Generator Interconnection Procedures.

- **2.0** Interconnection Customer elects and Transmission Provider shall cause to be performed an Interconnection System Impact Study consistent with Section 4.7 of the Standard Small Generator Interconnection Procedures in accordance with the Tariff.
- **3.0** The scope of the Interconnection System Impact Study shall be subject to the assumptions set forth in Attachment A to this agreement.
- **4.0** The Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study and the technical information provided by Interconnection Customer in the Interconnection Request. Transmission Provider reserves the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection System Impact Study. If Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the time to complete the Interconnection System Impact Study may be extended.
- **5.0** The Interconnection System Impact Study report shall provide the following information:
- identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection,
- identification of any thermal overload or voltage limit violations resulting from the interconnection,
- identification of any instability or inadequately damped response to system disturbances resulting from the interconnection and
- description and non-binding, good faith estimated cost of facilities required to interconnect the Generating Facility to Transmission Provider's Transmission System and to address the identified short circuit, instability, and power flow issues.
- **6.0** Transmission Provider may require a study deposit of the lesser of 50 percent of estimated non-binding good faith study costs or \$3,000.
- **7.0** The distribution Interconnection System Impact Study, if required, shall be completed and the results transmitted to Interconnection Customer within thirty Calendar Days after this agreement is signed by the Parties. The transmission

Interconnection System Impact Study, if required, shall be completed and the results transmitted to Interconnection Customer within forty-five Calendar Days after this agreement is signed by the Parties, or in accordance with Transmission Provider's queuing procedures.

**8.0** Study fees shall be based on actual costs and will be invoiced to Interconnection Customer after the study is transmitted to Interconnection Customer. The invoice shall include an itemized listing of employee time and costs expended on the study.

**9.0** Interconnection Customer shall pay any actual study costs that exceed the deposit without interest within 30 Calendar Days on receipt of the invoice. Transmission Provider shall refund any excess amount without interest within thirty Calendar Days of the invoice.

**IN WITNESS THEREOF**, the Parties have caused this agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[Insert name of	Transmission Provider]		
[Insert name of	Interconnection Customer]		
Signed			
Signed			
		Name (Printed):	
		Name (Printed):	
		Title	

**Attachment A to Interconnection System** 

**Impact Study Agreement** 

Assumptions Used in Conducting the Interconnection System Impact Study

The Interconnection System Impact Study shall be based upon the results of the Interconnection Feasibility Study, subject to any modifications in accordance with Section 4.7 of the Standard Small Generator Interconnection Procedures, and the following assumptions:

- 1) Designation of Point of Interconnection and configuration to be studied.
- 2) Designation of alternative Points of Interconnection and configuration.
- 1) and 2) are to be completed by Interconnection Customer. Other assumptions (listed below) are to be provided by Interconnection Customer and Transmission Provider.

## Appendix 5

## **Interconnection Facilities Study Agreement**

THIS	<b>AGREEMENT</b>	is	made	and	entered	into	this	day	of_		20	by	and
between	<u> </u>							_, a			org	ganize	d and
existing	existing under the laws of the State of, ("Interconnection Customer,") and												
							_, a			_ existing under	the laws	of the	State
of					, ("Tra	ansmiss	ion Prov	vider "). l	Interc	onnection Custo	mer and Ti	ransmi	ission
Provide	r each may be refer	red to	as a "Pa	arty," o	r collectiv	ely as t	he "Part	ies."					

#### RECITALS

WHEREAS, Interconnection Customer is proposing to develop a Small Generating Facility or generating capacity addition to an existing Small Generating Facility consistent with the Interconnection Request completed by Interconnection Customer on; and

**WHEREAS**, Interconnection Customer desires to interconnect the Generating Facility with Transmission Provider's Transmission System;

WHEREAS, Transmission Provider has completed an Interconnection System Impact Study and provided the results of said study to Interconnection Customer; and

WHEREAS, Interconnection Customer has requested Transmission Provider to perform an Interconnection Facilities Study to specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Interconnection System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Generating Facility to Transmission Provider's Transmission System.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows: **1.0** When used in this agreement, with initial capitalization, the terms specified shall have the meanings indicated. Terms used in this agreement with initial capitalization but not defined in this agreement shall have the meanings specified in Section 1 of the Standard Small Generator Interconnection Procedures.

- **2.0** Interconnection Customer elects and Transmission Provider shall cause an Interconnection Facilities Study consistent with Section 4.8 of the Standard Small Generator Interconnection Procedures to be performed in accordance with the Tariff.
- 3.0 The scope of the Interconnection Facilities Study shall be subject to data provided in Attachment A to this agreement.

- **4.0** An Interconnection Facilities Study report (1) shall provide a description, estimated cost of (consistent with Attachment A), schedule for required facilities to interconnect the Generating Facility to Transmission Provider's Transmission System and (2) shall address the short circuit, instability, and power flow issues identified in the Interconnection System Impact Study.
- **5.0** Transmission Provider may require a study deposit of the lesser of 50 percent of estimated non-binding good faith study costs or \$10,000.
- **6.0** In cases where no Upgrades are required, the Interconnection Facilities Study shall be completed and the results shall be transmitted to Interconnection Customer within thirty Calendar Days after this agreement is signed by the Parties. In cases where Upgrades are required, the Interconnection Facilities Study shall be completed and the results shall be transmitted to Interconnection Customer within forty-five Calendar Days after this agreement is signed by the Parties.
- **7.0** Study fees shall be based on actual costs and will be invoiced to Interconnection Customer after the study is transmitted to Interconnection Customer. The invoice shall include an itemized listing of employee time and costs expended on the study.
- **8.0** Interconnection Customer shall pay any actual study costs that exceed the deposit without interest within 30 Calendar Days on receipt of the invoice. Transmission Provider shall refund any excess amount without interest within thirty Calendar Days of the invoice.

**IN WITNESS WHEREOF**, the Parties have caused this agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[Insert name of Transmission Provider]	
[Insert name of Interconnection Customer]	
Signed	
Signed	
	Name (Printed):
	Name (Printed):

Title _			
Title			

## Attachment A to Interconnection

## **Facilities Study Agreement**

Data to Be Provided by Interconnection Customer with the Interconnection Facilities Study Agreement
Provide location plan and simplified one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.
On the one-line diagram, indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)
On the one-line diagram, indicate the location of auxiliary power. (Minimum load on CT/PT) Amps
One set of metering is required for each generation connection to the new ring bus or existing Transmission Provider station.  Number of generation connections:
Will an alternate source of auxiliary power be available during CT/PT maintenance?
Yes No
Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? Yes No
(Please indicate on the one-line diagram).
What type of control system or PLC will be located at the Generating Facility?
What protocol does the control system or PLC use?
Please provide a 7.5-minute quadrangle map of the site. Indicate the plant, station, transmission line, and property lines.
Physical dimensions of the proposed interconnection station:
Bus length from generation to interconnection station:

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 $Line\ length\ from\ interconnection\ station\ to\ Transmission\ Provider's\ Transmission\ System.$ 

_	
Tower number observed in the field. (Painted on tower leg)*:	
Number of third party easements required for transmission lin	es*:
* To be completed in coordination with Transmission Provide	er.
Is the Generating Facility located in Transmission Provider's s	service area?
Yes No If No, please pr	ovide name of local provider:
Please provide the following proposed schedule dates:	
Begin Construction receive	
Generator step-up transformers back feed powe	
Generation Testing	
Commercial Operation	

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## Appendix 6

## **Small Generating Facility Interconnection Request**

## (Application Form)

#### **Instructions**

Interconnection Customer declares its intention to sell electricity at wholesale in interstate commerce. Interconnection customer submits this request to interconnect its Small Generating Facility with the Transmission Provider's Transmission System pursuant to a Tariff.

In order for the Generating Facility to be considered for interconnection to Transmission Provider's Transmission System, Interconnection Customer must submit to Transmission Provider (1) a completed Interconnection Request (The Interconnection Request shall be deemed complete when the required information has been provided by Interconnection Customer, or the Parties have agreed that Interconnection Customer may provide additional information at a later time, as specified in Section 7 below), and (2) the appropriate non-refundable processing fee.

If requested information is not applicable, indicate by using "N/A".

process proceeds.
Processing Fee
Indicate the amount of processing fee enclosed: \$
Processing Fee for Small Generating Facilities No Larger than 2 MW: The greater of:
\$0.50/nameplate KVA rating, or
\$100 for single phase generators no larger than 25 KVA, or
\$500 for three phase generators and single phase generators larger than 25 KVA
Processing Fee for Small Generating Facilities Larger than 2 MW but No Larger than 20 MW: \$1,000 for generators no larger than 10 MW
\$2,000 for generators larger than 10 MW
Indicate whether Interconnection Customer intends to participate as:
Interconnection Decreek (Application Form)
Interconnection Request (Application Form)
Network Resource Energy-Only Resource
Network Resource Energy-Only Resource
Network Resource Energy-Only Resource Non-Exporting Resource Participating in a Wholesale Market
Network Resource Energy-Only Resource Non-Exporting Resource Participating in a Wholesale Market Other (Describe:)
Network Resource Energy-Only Resource Non-Exporting Resource Participating in a Wholesale Market Other (Describe:) Indicate Generating Facility size:
Network ResourceEnergy-Only ResourceNon-Exporting Resource Participating in a Wholesale MarketOther (Describe:)  Indicate Generating Facility size:0-2.00 MW 2.01-10.00 MW 10.01-20.00 MW
Network ResourceEnergy-Only ResourceNon-Exporting Resource Participating in a Wholesale MarketOther (Describe:)  Indicate Generating Facility size:0-2.00 MW2.01-10.00 MW10.01-20.00 MW  Application is for:New Generating FacilityCapacity addition to Existing Generating Facility
Network ResourceEnergy-Only ResourceNon-Exporting Resource Participating in a Wholesale MarketOther (Describe:)  Indicate Generating Facility size:0-2.00 MW2.01-10.00 MW10.01-20.00 MW  Application is for:New Generating FacilityCapacity addition to Existing Generating Facility  If capacity addition to existing facility, please describe:
Network ResourceEnergy-Only ResourceNon-Exporting Resource Participating in a Wholesale MarketOther (Describe:)  Indicate Generating Facility size:0-2.00 MW 2.01-10.00 MW 10.01-20.00 MW  Application is for:New Generating FacilityCapacity addition to Existing Generating Facility  If capacity addition to existing facility, please describe:  Legal Name of Interconnection Customer (or, if an Individual, Individual's Name)

Additional information to evaluate an Interconnection Request may be required by Transmission Provider as the application

Generating Facility Location (if diffe	erent from above):
Telephone:	
Daytime:	Evening:
Fax:	
E-Mail Address:	
Alternative Contact Information (If d	lifferent from Interconnection Customer information above)
Contact Name:	
Title:	
Address:	
Telephone:	
Daytime:	Evening:
Fax:	
E-Mail Address:	
For generators installed at locations v provide:	with existing electric service to which the proposed Generating Facility will interconnect,
(Local Electric Service Provider Nan	ne*)
(Current Account Numb	per*)
(*To be provided by Interconnection	Customer if the local electric service provider is different from Transmission Provider)
Contact Name:	
Contact Title: Ad	dress:
Telephone:	
Daytime:	Evening:
Fax:	
E-Mail Address:	

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Section 2. Generator Qualifications				
Energy Source:Hydro [Specify Type ( <u>e.g.</u> , FNatural Gas Fuel OilOther (Specify				Diese
Type of Generator:				
SynchronousInductionDC Generator or	r Solar with Inverter			
Generator Nameplate Rating:kW (Ty	pical)			
Generator Nameplate KVA:				
Interconnection Customer or Customer-Site Load:	kW (if none, so state) (Typical)			
(Reactive Load, if known)				
Maximum physical export capability requested:	kW			
List components of the Generating Facility that are	Precertified:			
Equipment Type	Precertifying Entity			
<del></del>				
Section 3. Generator Technical Information				
Small Generating Facility (or solar collector) manu	facturer, model name, number, and vers	ion:		
Nameplate output power rating in kW: (Summer)_	(Winter)			
Nameplate output power rating in KVA: (Summer)	(Winter)	_		
Individual generator power factor:				

Rated power factor leading: \_\_\_\_\_

Number of generators t	to be interconnected pursuant	t to this Interconnection Request:
Elevation:	Single Phase	Three Phase
Inverter manufacturer,	model name, number, and ve	ersion:
List of adjustable setpo	ints for the protective equipr	nent or software:
Note: A completed Go Interconnection Reques	= -	ower Systems Load Flow (PSLF) data sheet must be supplied with the
Small Generating Facil	ity Characteristic Data (for r	otating machines) Synchronous and Induction Generators:
Direct Axis Transient F	Reactance, X'd: P.U	
Direct Axis Unsaturate	d Transient Reactance, X'di:	P.U.
Direct Axis Subtransie	nt Reactance, X" <sub>d</sub> :	P.U.
Generator Saturation C	onstant (1.0):	_
Generation Saturation (	Constant (1.2):	_
Negative Sequence Rea	actance: P.U.	
Zero Sequence Reactar	nce: P.U.	
KVA Base:		
RPM Frequency:		
Induction Generators:		
(*) Field Volts:		
(*) Field Amperes:		
(*) Motoring Power (k'	W):	
(*) Neutral Grounding	Resistor (If Applicable):	

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(*) I <sub>2</sub> <sup>2</sup> t or K (Heating Time Constant):
(*) Rotor Resistance:
(*) Stator Resistance:
(*) Stator Reactance:
(*) Rotor Reactance:
(*) Magnetizing Reactance:
(*) Short Circuit Reactance:
(*) Exciting Current:
(*) Temperature Rise:
(*) Frame Size:
(*) Design Letter:
(*) Reactive Power Required In Vars (No Load):
(*) Reactive Power Required In Vars (Full Load):
(*) Total Rotating Inertia, H:Per Unit on KVA Base
Note: Please consult Transmission Provider prior to submitting the Interconnection Request to determine if the information designated by (*) is required.
Excitation and Governor System Data for Synchronous Generators Only
If determined to be required, provide appropriate IEEE model block diagram of excitation system, governor system, and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be substituted.
Section 4. Interconnecting Equipment Technical Data Information
Will a transformer be used between the Small Generating Facility and the Point of Interconnection?Yes No
Will the transformer be provided by Interconnection Customer?Yes No

<u>Transformer Data for Interconnection Customer-Owned Transformer (if applicable)</u>

The transformer is: \_\_\_\_single phase \_\_\_\_three phase Size: \_\_\_\_ KVA

Transformer impedance: \_\_\_\_\_\_% on \_\_\_\_\_ KVA Base

If Three Phase:					
Transformer Pri	mary:	Volts	_Delta	Wye	Wye Grounded
Transformer Sec	condary:	Volts	Delta _	Wye _	Wye Grounded
Transformer fus	se data for Inte	erconnection	n Customer	owned fus	e (if applicable):
Note: Please atta	ach a copy of	fuse manufa	acturer's mi	inimum me	lt and total clearing time-current curves
Fuse Manufactu	ırer:				-
Type:	Size:	:	Speed:		
		<u>Int</u>	erconnecti	ing Circuit	Breaker (if applicable)
Manufacturer: _					
Type:	Load Rating (	(Amps):	Interru	upting Ratin	ng(Amps):
Trip Speed (Cyc	cles):	_			
		Inte	erconnectio	on Protecti	ve Relays (if applicable)
Note: Please atta	ach a copy of	any propose	ed time-ove	ercurrent co	ordination curves
Manufacturer: _					_
Type:	Style/Cata	alog No.:		Proposed Se	etting:
Manufacturer: _					_
Туре:	Style/Cata	alog No.:		Proposed So	etting:
Manufacturer: _					_
Туре:	Style/Cata	alog No.:		Proposed So	etting:
Manufacturer: _					_
Туре:	Style/Cata	alog No.:		Proposed So	etting:
Manufacturer: _					_
Type:	Style/Cata	alog No ·		Proposed Se	etting:

## **Current Transformer Data (if applicable)**

Note: Please attach a copy of manufacturer's excitation & ratio correction curves
Manufacturer:
Type: Accuracy Class: Proposed Ratio Connection:/5
Manufacturer:
Type: Accuracy Class: Proposed Ratio Connection:/5
Potential Transformer Data (if applicable)
Manufacturer:
Type: Accuracy Class: Proposed Ratio Connection:/5
Manufacturer:
Type: Accuracy Class: Proposed Ratio Connection:/5
Section 5. General Information
Requested Point of Interconnection:
Proposed In-Service Date:
Please attach a one-line diagram showing the configuration of all generating facility equipment, current and potential circuits, and protection and control schemes.
Is a one line diagram attached? Yes No
Please attach any site documentation that indicates the precise physical location of the proposed generating facility (e.g., USGS topographic map or other diagram or documentation).
Is site documentation attached? Yes No
Please attach any documentation that describes and details the operation of the protection and control schemes.
Is protection and control scheme documentation attached? Yes No
Proposed location of protective interface equipment on property (Include address if different from Interconnection Customer's address):

Standardization of Generator Interconnection Agreements..., 104 FERC P 61103... Please attach copies of schematic drawings for all protection and control circuits, relay current circuits, relay potential circuits, and alarm/monitoring circuits (if applicable). Are schematic drawings attached? \_\_\_\_\_ Yes \_\_\_\_\_ No Please attach Site Control documentation. Is Site Control documentation attached? \_\_\_\_\_ Yes \_\_\_\_\_ No Does Interconnection Customer currently have control of the site? \_\_\_\_\_ Yes \_\_\_\_\_ No **Section 6. Signatures** I hereby certify that, to the best of my knowledge, all the information provided in this Interconnection Request is true and correct. For Interconnection Customer (Printed): Signature:\_\_\_\_\_ I hereby determine that on the date and time specified below, Interconnection Customer has provided or agreed to provide per Section 7 all required information, and the Interconnection Request is considered complete. For Transmission Provider (Printed): Date: \_\_\_\_\_Time: \_\_\_\_---TIMEMAG----Section 7. Agreement to Provide Data if Not Included With Initial Interconnection Request **Data Item** Date to be Provided

Standardization of Generator Intercon	nection Agreements, 104 FERC P 61103	
Agreed to by:		
For Transmission Provider Date		
Early Later and the Contains Date		
For Interconnection Customer Date		
Appendix 7 to the Standard Small		
<b>Generator Interconnection Procedure</b>	es	
	STANDARD SMALL GENERATOR	
	INTERCONNECTION AGREEMENT	
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Appendix 1 - Description and Costs of Generating Facility, Interconnection Facilities, and Metering Equipment

Appendix 2 - One-line Diagram Depicting Generating Facility, InterconnectionFacilities, Metering Equipment, and Upgrades

Appendix 3 - Milestones

Appendix 4 - Additional Operating Requirements for Interconnection Provider's Transmission System and Affected Systems Needed to Support the Interconnection Customer's Needs

Appendix 5 - Transmission Provider's Description of Transmission System Upgrades and Best Estimate of Upgrade Costs

#### **Identification of Parties and Recitals**

This agreement is made and entered into this day of 20, by, a organized and existing under the laws of the State/Commonwealth of and having its principal place of business in , ("Transmission Provider") and, a organized and existing under the laws of the State/Commonwealth of and having its principal place of business in , ("Interconnection Customer").

**WHEREAS**, Interconnection Customer desires to engage in the interconnected operation of its Generating Facility with Transmission Provider's Transmission System;

WHEREAS, Interconnection Customer has applied for and been approved by Transmission Provider for interconnection pursuant to Transmission Provider's Small Generating Facility interconnection process and in accordance with the Standard Small Generator Interconnection Procedures; and

WHEREAS, Parties agree that interconnection of the Generating Facility will be expedited to the greatest extent possible.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein, it is agreed:**Article 1. Definitions** 

When used with initial capitalization, the following terms shall have the meanings specified or referred to below. Terms used in this document with initial capitalization that are not defined below shall have the meanings specified in the section in which they are used or as specified in the Transmission Provider's Open Access Transmission Tariff (OATT), as may be amended from time to time.

Additional Review shall mean a technical evaluation by the Transmission Provider of a proposed interconnection that has failed to pass the Super-Expedited Screening Criteria. The review will determine whether minor modifications to the

Transmission Provider's Transmission System (e.g., changing meters, fuses, relay settings) can be performed in order to enable the interconnection to be made safely and reliably.

**Adverse System Impact** shall mean the negative effects due to technical or operational limits on conductors or equipment being exceeded that may compromise the safety and reliability of the electric system.

**Affected System** shall mean an electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

**Affiliate** shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Applicable Laws and Regulations** shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of the Standard Small Generator Interconnection Agreement.

Breaching Party shall mean a Party that is in Breach of the Standard Small Generator Interconnection Agreement.

**Business Day** shall mean Monday through Friday, excluding Federal Holidays.**Calendar Day** shall mean any day including Saturday, Sunday or a Federal Holiday.

**Commercial Operation Date** of a unit shall mean the date on which the Interconnection Customer commences commercial operation of the unit at the Generating Facility after testing of such unit has been completed.

**Confidential Information** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise.

**Control Area** shall mean an electrical system or systems bounded by interconnection metering and telemetry, capable of controlling generation to maintain its interchange schedule with other Control Areas and contributing to frequency regulation of the interconnection. A Control Area must be certified by NERC.

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 6.17 of the Standard Small Generator Interconnection Agreement.

**Dispute Resolution** shall mean the procedure for resolution of a dispute between the Parties in which they will first attempt to resolve the dispute on an informal basis.

**Distribution System** shall mean the Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility and render the transmission service necessary to effect Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.**Effective Date** shall mean the date on which the Standard Small Generator Interconnection Agreement becomes effective upon execution by the Parties subject to acceptance by the Commission, or if filed unexecuted, upon the date specified by the Commission.

Emergency Condition shall mean a condition or situation: (1) that in the judgement of the Party making the claim is imminently likely to endanger life or property, or (2) that, in the case of a Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to Transmission Provider's Transmission System, Transmission Provider's Interconnection Facilities or the electric systems of others to which the Transmission Provider's Transmission System is directly connected, or (3) that, in the case of Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer's Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions; provided, that the Interconnection Customer is not obligated by the Standard Small Generator Interconnection Agreement to possess black start capability.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**Expedited Procedures** shall mean the process described in the Standard Small Generator Interconnection Procedures for (1) a Generating Facility no larger than 10 MW interconnecting with a Transmission Provider's Low-Voltage Transmission System, and (2) a Generating Facility failing the Super-Expedited Procedures. The Expedited Procedures use the Expedited Screening Criteria to determine whether the Small Generating Facility can be interconnected without any further Interconnection Studies.

**Expedited Screening Criteria** shall mean the technical variables that are employed in the Expedited Procedures for evaluating the impact of interconnecting the Small Generating Facility to the Transmission Provider's Transmission System as it exists at the time of the analysis.

**Fault Current** shall mean the current that is produced by an electrical fault, such as single-phase to ground, double-phase to ground, three-phase to ground, phase-to-phase, and three-phase. The Fault Current is several times larger in magnitude than the current that normally flows through a circuit. A protective device must be able to interrupt this Fault Current within a few cycles. The Fault Current increases when a new generator is interconnected.

**Federal Power Act** shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a et seq.**FERC** shall mean the (Commission) or its successor.

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include an act of negligence or intentional wrongdoing.

**Generating Facility** shall mean Interconnection Customer's device for the production of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Generating Facility Capacity** shall mean the net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple energy production devices.

Good Utility Practice shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

Governmental Authority shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include Interconnection Customer, Transmission Provider, or any Affiliate thereof. Hazardous Substances shall mean any chemicals, materials or substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "extremely hazardous substances," "toxic substances," "radioactive substances," "contaminants," "pollutants," "toxic pollutants" or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

High-Voltage shall mean voltage levels at or above 69 kV.

**IEEE** shall mean the Institute of Electrical and Electronics Engineers.

**Initial Review** shall mean the Transmission Provider's review of the Interconnection Customer's Interconnection Request using the Super-Expedited Screening Criteria described in Section 3 of the Standard Small Generator Interconnection Procedures.

**In-Service Date** shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Transmission Provider's Interconnection Facilities to obtain back feed power.

**Interconnection Customer** shall mean any entity, including the Transmission Provider, Transmission Owner or any of the Affiliates or subsidiaries of either, that proposes to interconnect its Generating Facility with the Transmission Provider's Transmission System.

**Interconnection Customer's Interconnection Facilities** shall mean all facilities and equipment, as identified in Appendix 2 of the Standard Small Generator Interconnection Agreement, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Transmission Provider's Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

Interconnection Facilities shall mean the Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades. Interconnection Facilities Study shall mean a study conducted by the Transmission Provider or a third party consultant for the Interconnection Customer to determine a list of facilities (including Transmission Provider's Interconnection Facilities and Network Upgrades as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Generating Facility with the Transmission Provider's Transmission System. The scope of the study is defined the Standard Small Generator Interconnection Procedures.

**Interconnection Facilities Study Agreement** shall mean the form of agreement contained in Appendix 5 of the Standard Small Generator Interconnection Procedures for conducting the Interconnection Facilities Study.

**Interconnection Feasibility Study** shall mean a preliminary evaluation of the system impact and cost of interconnecting the Generating Facility to the Transmission Provider's Transmission System, the scope of which is described in the Standard Small Generator Interconnection Procedures.

**Interconnection Feasibility Study Agreement** shall mean the form of agreement contained in Appendix 3 of the Standard Small Generator Interconnection Procedures for conducting the Interconnection Feasibility Study.

**Interconnection Request** shall mean an Interconnection Customer's request, in the form of Appendix 6 to the Standard Small Generator Interconnection Procedures, in accordance with the Tariff, to interconnect a new Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Generating Facility that is interconnected with the Transmission Provider's Transmission System.

**Interconnection Service** shall mean the service provided by the Transmission Provider associated with interconnecting the Interconnection Customer's Generating Facility to the Transmission Provider's Transmission System and enabling it to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Standard Small Generator Interconnection Agreement and, if applicable, the Transmission Provider's Tariff.

Interconnection Study shall mean any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, and the Interconnection Facilities Study described in the Standard Small Generator Interconnection Procedures.Interconnection System Impact Study shall mean an engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of Transmission Provider's Transmission System and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility were interconnected without project modifications or system modifications, focusing on the Adverse System Impacts identified in the Interconnection Feasibility Study, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Standard Small Generator Interconnection Procedures.

**Interconnection System Impact Study Agreement** shall mean the form of agreement contained in Appendix 4 of the Standard Small Generator Interconnection Procedures for conducting the Interconnection System Impact Study.

Large Generating Facility shall mean a Generating Facility having a Generating Facility Capacity of more than 20 MW.

Low-Voltage shall mean voltage levels below 69 kV.

**Material Modification** shall mean a modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Milestones** shall mean the events and associated dates listed in Appendix 3 of the Standard Small Generator Interconnection Agreement. The Milestones describe events that are to be met by either Party as the Generating Facility proceeds to interconnection and Parallel Operation.

MW shall mean the abbreviation for megawatts, which is used to describe the capacity of a generating facility.

NERC shall mean the North American Electric Reliability Council or its successor organization.

**Network Upgrades** shall mean the additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Interconnection Customer interconnects to the Transmission Provider's

Transmission System to accommodate the interconnection of the Generating Facility to the Transmission Provider's Transmission System. **Operating Requirements** shall mean any operating and technical requirements that may be applicable due to Regional Transmission Organization, Independent System Operator, Control Area, or Transmission Provider requirements, including those set forth in Appendix 4 of the Standard Small Generator Interconnection Agreement.

**Parallel Operation** shall mean the two-way flow of power between a generator and a Transmission System. Generators that operate in parallel with a Transmission System require additional protection and control devices. This may be contrasted with a stand-alone generator that operates isolated from the utility company's electric system.

**Party or Parties** shall mean Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Change of Ownership** shall mean the point, as set forth in Appendix 2 of the Standard Small Generator Interconnection Agreement, where the Interconnection Customer's Interconnection Facilities connect to the Transmission Provider's Interconnection Facilities.

**Point of Common Coupling** shall mean the point in the interconnection of the Generating Facility with Transmission Provider's Transmission System at which the harmonic limits are applied.

**Point of Interconnection** shall mean the point, as set forth in Appendix 2 of the Standard Small Generator Interconnection Agreement, where the Interconnection Facilities connect to the Transmission Provider's Transmission System.

**Precertified** shall describe a Generating Facility if an identical sample of the manufacturer's model has been submitted to a national testing laboratory and found, after appropriate testing, to be in compliance with applicable consensus industry operational and safety standards.

**Queue Position** shall mean the order of a valid Interconnection Request, relative to all other pending valid Interconnection Requests, that is established based upon the date and time of receipt of the valid Interconnection Request by the Transmission Provider.

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under the Standard Small Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests. **Rules** shall mean the rules promulgated by FERC relating to the interconnection of generators.

**Scoping Meeting** shall mean the meeting between representatives of the Interconnection Customer and Transmission Provider conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.

**Secondary Network** shall mean a type of Low-Voltage electric system that is generally used in large metropolitan areas that are densely populated in order to provide high reliability of service (also known as secondary grid network or area network).

**Site Control** shall mean documentation reasonably demonstrating: (1) ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Generating Facility, (2) an option to purchase or acquire a leasehold site for such purpose, or (3) an exclusivity or other business relationship between the Interconnection Customer and the entity having the right to sell, lease or grant the Interconnection Customer the right to possess or occupy a site for such purpose.

Small Generating Facility shall mean a Generating Facility having a Generating Facility Capacity of no more than 20 MW.

**Standard Small Generator Interconnection Agreement (SGIA)** shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to a Small Generating Facility, that is included in the Transmission Provider's Tariff.

**Standard Small Generator Interconnection Procedures (SGIP)** shall mean the interconnection procedures applicable to an Interconnection Request pertaining to a Small Generating Facility that are included in the Transmission Provider's Tariff.

**Spot Network** shall mean a type of Low-Voltage system found within modern commercial buildings to provide high reliability of service. Spot Networks generally use 12 kV to 480/277 volt vaults on site. **Super-Expedited Procedures** shall mean the process described in Section 3 of the Standard Small Generator Interconnection Procedures for Generating Facilities no larger than 2 MW interconnecting with Transmission Provider's Low-Voltage Transmission System. The Super-Expedited Procedures use the Super-Expedited Screening Criteria to determine whether the proposed interconnection may cause an Adverse System Impact on Transmission Provider's Transmission System.

**Super-Expedited Screening Criteria** shall mean the technical variables that are employed in the Super-Expedited Procedures for evaluating the interconnection of a Small Generating Facility no larger than 2 MW to a Transmission Provider's Low-Voltage Transmission System.

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) the Transmission Provider's Transmission System from faults or other electrical disturbances occurring at the Generating Facility and (2) the Generating Facility from faults or other electrical system disturbances occurring on the Transmission Provider's Transmission System or on other delivery systems or other generating systems to which the Transmission Provider's Transmission System is directly connected.

**Tariff** shall mean the Transmission Provider's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the FERC, and as amended or supplemented from time to time, or any successor tariff.

**Technical Master** shall mean a person, as described in Article 8 of the Standard Small Generator Interconnection Agreement, with relevant technical experience selected to adjudicate disputes between the Parties.

Term shall mean the duration of the Standard Small Generator Interconnection Agreement.

**Transmission Owner** shall mean an entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the Standard Small Generator Interconnection Agreement to the extent necessary.

**Transmission Provider** shall mean the public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from the Transmission Provider. **Transmission Provider's Interconnection Facilities** shall mean 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 2 of the Standard Small Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. The Transmission Provider's Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

**Transmission System** shall mean the facilities owned, controlled or operated by the Transmission Provider or Transmission Owner that are used to provide transmission service under the Tariff.

**Upgrades** shall mean the required additions and modifications to the Transmission Provider's Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

## Article 2. Scope and Limitations of Agreement

2.1Scope and Limitations of Agreement. Transmission Provider and Interconnection Customer agree to interconnect the Generating Facility at the location described in Appendices 1 and 2 to this agreement, in accordance with this agreement. This agreement governs the facilities required to interconnect the Generating Facility to Transmission Provider's Transmission System and contains the terms and conditions under which Interconnection Customer may interconnect the Generating Facility, as described in Appendices 1 and 2, and to operate in parallel with Transmission Provider's Transmission System. This agreement does not authorize Interconnection Customer to export power or constitute an agreement to purchase or wheel Interconnection Customer's power. The export, purchase, or wheeling of power and other services that Interconnection Customer may require from Transmission Provider will be covered under separate agreements and nothing in this agreement is intended to affect any other agreement between Transmission Provider and Interconnection Customer. Interconnection Customer will be responsible for separately making all necessary arrangements (including scheduling) for delivery of electricity with Transmission Provider, distribution provider, Independent System Operator, or Regional Transmission Organization (as applicable).

## 2.2Responsibilities of the Parties.

- **2.2.1** The Parties shall perform all obligations of this agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.
- **2.2.2** Interconnection Customer shall construct, interconnect, operate and maintain its Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, in compliance with all aspects of the Rules, in accordance with this agreement, and with Good Utility Practice.
- **2.2.3** Transmission Provider shall construct, operate, and maintain its Transmission System and Interconnection Facilities in compliance with all aspects of the Rules, in accordance with this agreement, and with Good Utility Practice.
- **2.2.4** Interconnection Customer agrees to cause its facilities or systems to be constructed in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. Interconnection Customer agrees to design, install, maintain, and operate, or cause the design, installation, maintenance, and operation of the Generating Facility so as to reasonably minimize the likelihood of a disturbance, originating on the system or equipment affecting or impairing the system or equipment of Transmission Provider, or Affected Systems.
- **2.2.5** Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own unless otherwise specified in Appendices 1 and 2 of this agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the Point of Change of Ownership. Transmission Provider and Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect Transmission Provider's Transmission System, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in Appendices 1, 2, 4, and 5 of this agreement.
- **2.2.6** Transmission Provider shall negotiate with all Affected Systems in support of Interconnection Customer's interconnection needs. **2.3Parallel Operation Obligations.** Once the Generating Facility has been authorized to commence Parallel Operation, Interconnection Customer shall abide by all rules and procedures pertaining to the Parallel Operation of the Generating Facility

in the applicable Control Area, including, but not limited to, the rules and procedures concerning the operation of generation set forth in the Tariff or by the system operator for Transmission Provider's Transmission System and the Operating Requirements set forth in Appendix 4 of this agreement.

**2.4 Metering.** Interconnection Customer will be responsible for Transmission Provider's reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment specified in Appendices 1 and 2 of this agreement. Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and operating requirements.

## Article 3. Inspection, Testing, Authorization, and Right of Access

## 3.1Equipment Testing and Inspection.

- **3.1.1** Interconnection Customer shall perform operational testing and inspection of the Generating Facility and Interconnection Facilities prior to interconnection. No fewer than five Business Days (or as may be agreed to by the Parties) prior to such testing and inspection, Interconnection Customer shall notify Transmission Provider of such activities. Testing and inspection shall occur on a Business Day. Transmission Provider may send qualified personnel to the Generating Facility site to inspect the interconnection and observe the Generating Facility's testing. Interconnection Customer shall provide Transmission Provider a written test report when such testing and inspection is completed.
- **3.1.2** Upon completion of such operational testing and inspection and receipt of the written report, Transmission Provider shall provide to Interconnection Customer written acknowledgment that it has received Interconnection Customer's written report; provided, however, any such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by Transmission Provider of the safety, durability, suitability, or reliability of the Generating Facility or any associated control, protective, and safety devices owned or controlled by Interconnection Customer or the quality of power produced by the Generating Facility.
- **3.2** Authorization Required Prior To Parallel Operation. Transmission Provider will use its best efforts to identify any requirements applicable to safe and reliable Parallel Operation and to notify Interconnection Customer of any changed or additional requirements as soon as they are known. Transmission Provider will cooperate with Interconnection Customer in addressing and meeting such requirements (including information and study requirements), and to obtain appropriate notifications that such requirements are met. Interconnection Customer will notify Transmission Provider once it has complied with all such requirements. Upon such notification, Transmission Provider will provide Interconnection Customer with written authorization to operate the Generating Facility in parallel with Transmission Provider's Transmission System. Such authorization shall not be unreasonably withheld, conditioned or delayed.
- **3.3 Right of Access.** Upon reasonable notice, and subject to any required or necessary regulatory approvals, Interconnection Customer shall furnish to Transmission Provider at no cost, and as agreed upon by all Parties, any rights of use, licenses, rights of way, or easements with respect to lands owned or controlled by Interconnection Customer and its agents that are necessary to enable Transmission Provider to obtain ingress and egress to construct, operate, maintain, repair, test (or witness testing), inspect, replace or remove facilities and equipment to: (1) interconnect the Generating Facility with Transmission Provider's Transmission System, (2) operate and maintain the Generating Facility, Interconnection Facilities (if required), and Transmission Provider's Transmission System, and (3) disconnect or remove Interconnection Customer's facilities and equipment upon termination of this agreement. In exercising such licenses, rights of way, and easements, Transmission Provider shall not unreasonably disrupt or interfere with normal operation of Interconnection Customer's property and shall adhere to all applicable safety rules and procedures. In the event of Emergency Conditions or hazardous conditions, Transmission Provider and Interconnection Customer shall exercise all Reasonable Efforts to comply with these provisions.

## Article 4. Effective Date, Term, Termination, and Disconnection

- **4.1 Effective Date.** This agreement shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by FERC. Transmission Provider shall promptly file this agreement with FERC upon execution, if required.
- **4.2 Term of Agreement.** This agreement shall be effective on the Effective Date and shall remain in effect for a period of ten years from the Effective Date or such other longer period as the Parties may agree and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with Article 4.3 of this agreement.
- **4.3 Termination.** No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this agreement (if required), which notice has been accepted for filing by FERC.
- **4.3.1** Interconnection Customer may terminate this agreement at any time by giving Transmission Provider thirty Calendar Days written notice.
- **4.3.2** In the event that there is a material change in Applicable Laws and Regulations that would prevent Transmission Provider from performing its obligations under this agreement or would impose a substantial additional cost upon Transmission Provider to perform its obligations under this agreement, and for which cost Transmission Provider is not reimbursed by Interconnection Customer or any other party, Transmission Provider may terminate this agreement by giving Interconnection Customer at least thirty Calendar Days prior written notice.

## 4.4 Temporary Disconnection.

- **4.4.1 Emergency Conditions.** Under Emergency Conditions, Transmission Provider shall have the right to immediately suspend Interconnection Service and temporarily disconnect the Generating Facility. Transmission Provider shall notify Interconnection Customer promptly when it becomes aware of an Emergency Condition that affects the Generating Facility or Transmission Provider's Transmission System that may reasonably be expected to affect Interconnection Customer's operation of the Generating Facility. Interconnection Customer shall notify Transmission Provider promptly when it becomes aware of an emergency condition that may reasonably be expected to affect Transmission Provider's Transmission System or other Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, or the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.
- **4.4.2 Routine Maintenance, Construction and Repair.** Transmission Provider shall have the right to interrupt Interconnection Service or curtail the output of the Generating Facility and temporarily disconnect the Generating Facility from Transmission Provider's Transmission System when necessary for routine maintenance, construction, and repairs on Transmission Provider's Transmission System. Transmission Provider shall provide Interconnection Customer with five Business Days notice prior to such interruption. Transmission Provider shall use its best efforts to coordinate such reduction or temporary disconnection with Interconnection Customer.
- **4.4.3 Forced Outages.** During any forced outage of Interconnection Customer's facilities, Transmission Provider shall have the right to suspend Interconnection Service to effect immediate repairs on Transmission Provider's Transmission System; provided, however, Transmission Provider shall use its best efforts to provide Interconnection Customer with prior notice. If prior notice is not given, Transmission Provider will provide Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.
- **4.4.4 Adverse Operating Effects.** Transmission Provider shall notify Interconnection Customer that operation of the Generating Facility may cause disruption or deterioration of service to other customers served from the same electric system or

if operating the Generating Facility could cause damage to Transmission Provider's Transmission System or Affected Systems. If, after notice to Interconnection Customer has been provided and a reasonable time to correct such adverse operating effect has elapsed, consistent with the conditions, and Interconnection Customer has failed to make such corrections, Transmission Provider may disconnect the Generating Facility. Transmission Provider shall provide Interconnection Customer with five Business Days notice prior to such disconnection.

- **4.4.5 Modification of the Generating Facility**. Interconnection Customer must receive written authorization from Transmission Provider before making any Material Modification to the Generating Facility. If Interconnection Customer makes such modification without Transmission Provider's prior written authorization, the latter shall have the right to temporarily disconnect the Generating Facility. Such authorization shall not be unreasonably withheld.
- **4.4.6 Reconnection.** The Parties shall cooperate with each other to restore the Generating Facility, Interconnection Facilities, and Transmission Provider's Transmission System to their normal operating state as soon as reasonably practicable following any reduction or temporary disconnection.

# Article 5. Cost Responsibility, Milestones, Billing, and Payment 5.1 Cost Responsibility.

- **5.1.1 Interconnection Facilities**. Interconnection Customer will pay for the cost of Interconnection Facilities itemized in Appendix 1 of this agreement. Transmission Provider will provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of Interconnection Customer, such other entities, and Transmission Provider.
- **5.1.2 Network Upgrades.** Transmission Provider or Transmission Owner shall design, procure, construct, install, and own Network Upgrades described in Appendix 5 of this agreement. Unless Transmission Provider or Transmission Provider elect to initially pay for such facilities, the actual cost of the Network Upgrades, including overheads, shall be borne by Interconnection Customer.
- 5.1.2.1 Refund of Amounts Advanced for Network Upgrades. Interconnection Customer shall be entitled to a refund, equal to the total amount paid to Transmission Provider and Affected Systems, if any, for the Network Upgrades with interest, including any tax gross-up or other tax-related payments, to be paid to Interconnection Customer on a dollar-for-dollar basis, for the non-usage sensitive portion of transmission charges, as payments are made under Transmission Provider's Tariff and Affected Systems' Tariffs. Notwithstanding the foregoing, Interconnection Customer, Transmission Provider, and any Affected Systems may adopt any alternative payment schedule that is mutually agreeable so long as Transmission Provider and any Affected Systems refund all amounts paid by Interconnection Customer, with interest, within five years from the Commercial Operation Date. Transmission Provider and any Affected Systems shall provide refunds to Interconnection Customer only after commercial operation of the Generating Facility has been demonstrated. If the Generating Facility fails to achieve commercial operation, but it or another Generating Facility is later constructed and makes use of the Network Upgrades, Transmission Provider and Affected System Operator shall at that time provide refunds to Interconnection Customer for the amounts advanced for the Network Upgrades. Any refund shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 CFR §35.19a(a)(2)(ii) from the date of any payment for Network Upgrades through the date on which Interconnection Customer receives a refund of such payment pursuant to this subparagraph. Interconnection Customer may assign such refund rights to any person.

Notwithstanding any other provision of this agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that Interconnection Customer shall be entitled to, now or in the future under any other agreement or tariff as a result of,

or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain refunds or transmission credits for transmission service that is not associated with the Generating Facility.

- **5.1.3 Distribution Upgrades.** Transmission Provider or Transmission Provider shall design, procure, construct, install, and own the distribution Upgrades described in Appendix 5 of this agreement. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to Interconnection Customer.
- **5.1.4 Operating and Maintenance Expenses.** Subject to the provisions herein addressing the use of facilities by others, and except for operating and maintenance expenses associated with modifications made for providing service to a third party and such third party pays for such expenses, Interconnection Customer shall be responsible for all reasonable expenses, including overheads, associated with: (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing Transmission Provider's Interconnection Facilities.
- **5.1.5 General.** If the Parties agree that the Generating Facility benefits Transmission Provider's Transmission System, Interconnection Customer's cost responsibility for Transmission Provider's Interconnection Facilities or Upgrades will be reduced commensurate with such benefits must be measurable and verifiable.

Where multiple Interconnection Requests require Upgrades to Transmission Provider's Transmission System, Interconnection Customers will be assigned costs or benefits separately where impacts can be separately attributed to respective projects. Where such attribution is not possible, Interconnection Customers will share costs or benefits in proportion to their projected Generating Facility capacities.

**5.2 Financial Security Arrangements.** At least thirty Calendar Days prior to the commencement of the procurement, installation, or construction of a discrete portion of a Transmission Provider Interconnection Facilities and Upgrades, Interconnection Customer shall provide Transmission Provider, at Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to Transmission Provider and is consistent with the Uniform Commercial Code of the jurisdiction where the Point of Interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for constructing, procuring, and installing the applicable portion of Transmission Provider Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to Transmission Provider under this agreement during its Term. In addition:

The guarantee must be made by an entity that meets the creditworthiness requirements of Transmission Provider, and contain terms and conditions that guarantee payment of any amount that may be due from Interconnection Customer, up to an agreed-to maximum amount.

The letter of credit must be issued by a financial institution reasonably acceptable to Transmission Provider and must specify a reasonable expiration date. The surety bond must be issued by an insurer reasonably acceptable to Transmission Provider and must specify a reasonable expiration date.

- **5.3 Milestones.** Parties shall agree on milestones for which each Party is responsible and list them in Appendix 3 of this agreement. A Party's obligations under this provision may be extended by agreement.
- **5.3.1** If Interconnection Customer fails to meet agreed milestones for which it is responsible, other than for reasons of Force Majeure, its responsibility for costs incurred to that point by Transmission Provider will increase at the rate of interest calculated in accordance with the methodology set forth in FERC's regulations at 18 CFR §35.19a(a)(2)(ii) from the date of failure until the date the Milestone is met.

- **5.3.2** If Transmission Provider fails to meet agreed milestones for which it is responsible, other than for reasons of Force Majeure, Interconnection Customer will be credited interest for costs incurred to that point (including the Interconnection Request processing fee and study costs incurred under the Standard Small Generator Interconnection Procedures) calculated at the rate in accordance with the methodology set forth in FERC's regulations at 18 CFR §35.19a(a)(2)(ii) from the date of failure until the date the Milestone is met.
- **5.4 Billing and Payment.** Billing and payment obligations for services rendered, for which Interconnection Customer is responsible under this agreement shall be performed in accordance with Transmission Provider's Tariff or in accordance with the terms of this agreement.
- **5.4.1 Billing Procedure for Interconnection Facilities Construction.** Transmission Provider shall bill Interconnection Customer for monthly expenditures for the design, engineering and construction of, or for other charges related to, Interconnection Facilities contemplated by this agreement. Interconnection Customer shall pay each bill within thirty Calendar Days after receipt thereof.
- **5.4.2 Final Accounting.** Within forty-five Calendar Days after completion of the construction and installation of Transmission Provider's Interconnection Facilities and/or Upgrades described in Appendices 1, 2, and 5 of this agreement, Transmission Provider shall provide Interconnection Customer with a final accounting report of any difference between: (1) Interconnection Customer's cost responsibility for the actual cost of such facilities under this agreement, and (2) Interconnection Customer's previous aggregate payments to Transmission Provider for such facilities. If Interconnection Customer's cost responsibility under this agreement exceeds its previous aggregate payments, Transmission Provider shall invoice Interconnection Customer and Interconnection Customer shall make payment to Transmission Provider. If Interconnection Customer's previous aggregate payments exceed its cost responsibility under this agreement, Transmission Provider shall refund to Interconnection Customer an amount equal to the difference within forty-five Calendar Days of the provision of such final accounting report.

#### Article 6. Miscellaneous

- **6.1 Governing Law, Regulatory Authority and Rules.** The validity, interpretation and enforcement of this agreement and each of its provisions shall be governed by the laws of the State where the Point of Interconnection is located, without regard to its conflicts of law principles. This agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, Rules, or regulations of a Governmental Authority.
- **6.2 Amendment.** The Parties may by mutual agreement amend this agreement by a written instrument duly executed by both of the Parties.
- **6.3** No Third Party Beneficiaries. This agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.
- **6.4 Waiver.** The failure of a Party to this agreement to insist, on any occasion, upon strict performance of any provision of this agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party. Any waiver at any time by either Party of its rights with respect to this agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this agreement. Termination or Default of this agreement for any reason by Interconnection Customer shall not constitute a waiver of Interconnection Customer's legal rights to obtain an interconnection from Transmission Provider. Any waiver of this agreement shall, if requested, be provided in writing.
- **6.5 Assignment.** This agreement may be assigned by either Party only with the written consent of the other; provided that either Party may assign this agreement without the consent of the other Party to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under

this agreement; and provided further that Interconnection Customer shall have the right to assign this agreement, without the consent of Transmission Provider, for collateral security purposes to aid in providing financing for the Generating Facility, provided that Interconnection Customer will require any secured party, trustee or mortgagee to notify Transmission Provider of any such assignment. Any financing arrangement entered into by Interconnection Customer pursuant to this article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify Transmission Provider of the date and particulars of any such exercise of assignment right(s). Any attempted assignment that violates this article is void and ineffective. Any assignment under this agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

**6.6 Entire Agreement**. This agreement, including all appendices attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this agreement.

**6.7 Notices.** Unless otherwise provided in this agreement, any notice, demand or request required or permitted to be given by either Party to the other and any instrument required or permitted to be tendered or delivered by either Party in writing to the other shall be effective when delivered and may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered mail, addressed to the Party, or personally delivered to the

<ul> <li>6.7.1 Billings and Payments. Billings and payments shall be sent to the addresses set out below:</li> <li>Transmission Provider:</li> <li>Interconnection Customer:</li> <li>6.7.2 Alternative Forms of Notice. Any notice or request required or permitted to be given by either Party to the other and notice.</li> </ul>	Party, at the address set out below:
Either Party may change the notice information by giving five Business Days written notice prior to the effective date of the change.  6.7.1 Billings and Payments. Billings and payments shall be sent to the addresses set out below:  Transmission Provider:  Interconnection Customer:  6.7.2 Alternative Forms of Notice. Any notice or request required or permitted to be given by either Party to the other and not required by this agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone number and e-mail addresses set out below:  Transmission Provider:	Transmission Provider:
6.7.1 Billings and Payments. Billings and payments shall be sent to the addresses set out below: Transmission Provider: Interconnection Customer: 6.7.2 Alternative Forms of Notice. Any notice or request required or permitted to be given by either Party to the other and not required by this agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone number and e-mail addresses set out below: Transmission Provider:	Interconnection Customer:
Transmission Provider:  Interconnection Customer:  6.7.2 Alternative Forms of Notice. Any notice or request required or permitted to be given by either Party to the other and no required by this agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone number and e-mail addresses set out below:  Transmission Provider:	Either Party may change the notice information by giving five Business Days written notice prior to the effective date of the change.
Interconnection Customer:  6.7.2 Alternative Forms of Notice. Any notice or request required or permitted to be given by either Party to the other and not required by this agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone number and e-mail addresses set out below:  Transmission Provider:	<b>6.7.1 Billings and Payments.</b> Billings and payments shall be sent to the addresses set out below:
<b>6.7.2 Alternative Forms of Notice.</b> Any notice or request required or permitted to be given by either Party to the other and not required by this agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone number and e-mail addresses set out below:  Transmission Provider:	Transmission Provider:
required by this agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone number and e-mail addresses set out below:  Transmission Provider:	Interconnection Customer:
	<b>6.7.2 Alternative Forms of Notice.</b> Any notice or request required or permitted to be given by either Party to the other and not required by this agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out below:
Interconnection Customer:	Transmission Provider:
	Interconnection Customer:

**6.7.3 Operations and Maintenance Notice.** Each Party shall notify the other Party in writing of the identity of the person(s) that it designates as the point(s) of contact with respect to operations and maintenance the Party's facilities. **6.8Multiple Counterparts.** This agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

- **6.9 No Partnership.** This agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.
- **6.10 Communications.** Each Party will provide the other Party with the name, title, address and phone numbers of its representative to receive operational communications and to conduct the daily communications which may be necessary or convenient for the administration of this agreement. Such designations, including names, addresses, and phone numbers, may be communicated or revised by one Party's notice to the other in accordance with Article 6.7.
- **6.11 Severability.** If any provision or portion of this agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this agreement shall remain in full force and effect.
- **6.12 Security Arrangements.** Infrastructure security of Transmission System equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. The Commission expects all Transmission Providers, market participants, and Interconnection Customers interconnected to electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.
- **6.13 Indemnity.** The Parties shall at all times indemnify, defend, and save the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or inactions of its obligations under this agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

**Indemnified Person.** If an Indemnified Person is entitled to indemnification under this article as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such Indemnified Person may at the expense of the Indemnifying Party contest, settle or consent to the entry of any judgement with respect to, or pay in full, such claim.

**Indemnifying Party.** If an Indemnifying Party is obligated to indemnify and hold any Indemnified Person harmless under this article, the amount owing to the Indemnified Person shall be the amount of such Indemnified Person's actual Loss, net of any insurance or other recovery.

**Indemnity Procedures.** Promptly after receipt by an Indemnified Person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the Indemnified Person shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Person. If the defendants in any such action include one or more Indemnified Persons and the Indemnifying Party and if the Indemnified Person reasonably concludes that there may be legal defenses available to it and/or other Indemnified Persons which are different from or additional to those available to the Indemnifying Party, the Indemnified Person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Person or Indemnified Persons having

such differing or additional legal defenses. The Indemnified Person shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the Indemnifying Party (1) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Person and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Person, or there exists a conflict or adversity of interest between the Indemnified Person and the Indemnifying Party, in such event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Person, and (2) shall not settle or consent to the entry of any judgement in any action, suit or proceeding without the consent of the Indemnified Person, which shall not be reasonably withheld, conditioned or delayed.

#### **6.14 Force Majeure.** Economic hardship is not considered a Force Majeure event.

Neither Party shall be considered to be in Default with respect to any obligation hereunder other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other Party in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this article shall be confirmed in writing as soon as reasonably possible and shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred and when the Force Majeure is reasonably expected to cease. The Party affected shall exercise due diligence to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance

- **6.15 Environmental Releases.** Each Party shall notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall: (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than twenty-four hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.
- **6.16 Insurance.** Each Party shall, at its own expense, maintain in force throughout the period of the Standard Small Generator Interconnection Agreement, and until released by the other Party, the following minimum insurance coverages, with insurers authorized to do business in the State where the Point of Interconnection is located:
- **6.16.1** Employers' Liability and Workers' Compensation Insurance providing statutory benefits in accordance with the laws and regulations of the State in which the Point of Interconnection is located. The minimum limits for the Employers' Liability insurance shall be (\$—) each accident bodily injury by accident, (\$—) each employee bodily injury by disease, and (\$—) policy limit bodily injury by disease.
- **6.16.2** Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability endorsement, with minimum limits of (\$—) per occurrence/(\$—) aggregate combined single limit for personal injury, bodily injury, including death and property damage.
- **6.16.3** Comprehensive Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of (\$—) per occurrence for bodily injury, including death, and property damage.

- **6.16.4** Excess Public Liability Insurance over and above the Employers' Liability Commercial General Liability and Comprehensive Automobile Liability Insurance coverage, with a minimum combined single limit of (\$—) per occurrence/(\$—) aggregate.
- **6.16.5** The Commercial General Liability Insurance, Comprehensive Automobile Insurance and Excess Public Liability Insurance polies shall name the other Party, its parent, associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of the Standard Small Generator Interconnection Agreement against the Other Party Group and provide thirty days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition.
- **6.16.6** The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies shall contain provisions that specify that the polices are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issues to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Party shall be responsible for its respective deductibles or retentions.
- **6.16.7** The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two years after termination of the Standard Small Generator Interconnection Agreement, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed by the Parties.
- **6.16.8** The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under the Standard Small Generator Interconnection Agreement.
- **6.16.9** Within ten days following execution of the Standard Small Generator Interconnection Agreement, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety days thereafter, each Party shall provide certification of all insurance required in the Standard Small Generator Interconnection Agreement, executed by each insurer or by an authorized representative of each insurer.
- **6.16.10** Notwithstanding the foregoing, each Party may self-insure to the extent it maintains a self-insurance program; provided that, such Party's senior secured debt is rated at investment grade, or better, by Standard & Poor's. For any period of time that a Party's senior secured debt is unrated by Standard & Poor's or is rated at less than investment grade by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 6.16.1 through 6.16.9. In the event that a Party is permitted to self-insure pursuant to this Article 6.16.10, it shall not be required to comply with the insurance requirements applicable to it under Articles 6.16.1 through 6.16.9.
- **6.16.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of the Standard Small Generator Interconnection Agreement.

#### 6.17 Default.

**6.17.1 General.** No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of Force Majeure as defined in this agreement or the result of an act or omission of the other Party. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in Article 6.17.2, the defaulting Party shall have thirty Calendar Days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within thirty Calendar Days, the defaulting Party shall commence such cure

within thirty Calendar Days after notice and continuously and diligently complete such cure within ninety Calendar Days from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

**6.17.2 Right to Terminate.** If a Default is not cured as provided in this article, or if a Default is not capable of being cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this agreement.

#### 6.18 Subcontractors.

**6.18.1 General.** Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

**6.18.2 Responsibility of Principal.** The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Transmission Provider be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under Article 5 of this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

**6.18.3** No Limitation by Insurance. The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

**6.19 Consequential Damages.** Other than as expressly provided for in this agreement, neither Party shall be liable under any provision of this agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

**6.20 Reservation of Rights.** Transmission Provider shall have the right to make a unilateral filing with FERC to modify this LGIA with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this LGIA pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this LGIA shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

#### Article 7. Confidentiality

**7.1 Confidentiality.** Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by either of the Parties to the other prior to the execution of this Agreement.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential.

If requested by either Party, the other Party shall provide in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

- **7.2 Term.** During the term of this agreement, and for a period of three years after the expiration or termination of this agreement, except as otherwise provided in this article, each Party shall hold in confidence and shall not disclose to any person Confidential Information.
- **7.3 Scope.** Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party, (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party, (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential, (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party, (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of this agreement, or (6) is required, in accordance with Article 7.8 (Order of Disclosure) to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this agreement. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Party that it no longer is confidential.
- **7.4 Release of Confidential Information.** Neither Party shall release or disclose Confidential Information to any other person, except to its employees, consultants, or to parties who may be or considering providing financing to or equity participation with Interconnection Customer, or to potential purchasers or assignees of Interconnection Customer, on a need-to-know basis in connection with this agreement, unless such person has first been advised of the confidentiality provisions of this article and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this article.
- **7.5 Rights.** Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Party. The disclosure by each Party to the other Party of Confidential Information shall not be deemed a waiver by either Party or any other person or entity of the right to protect the Confidential Information from public disclosure.
- **7.6 No Warranties.** By providing Confidential Information, neither Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, neither Party obligates itself to provide any particular information or Confidential Information to the other Party nor to enter into any further agreements or proceed with any other relationship or joint venture.
- **7.7 Standard of Care.** Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Party under this agreement or its regulatory requirements.

**7.8 Order of Disclosure.** If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires either Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Party with prompt notice of such request(s) or requirement(s) so that the other Party may seek an appropriate protective order or waive compliance with the terms of this Agreement. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

**7.9 Termination of Agreement.** Upon termination of this agreement for any reason, each Party shall, within ten Calendar Days of receipt of a written request from the other Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the other Party) or return to the other Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the other Party.

**7.10 Remedies.** The Parties agree that monetary damages would be inadequate to compensate a Party for the other Party's Breach of its obligations under this article. Each Party accordingly agrees that the other Party shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this article, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this article, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this article.

7.11 Disclosure to FERC or its Staff. Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR. § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party to this LGIA prior to the release of the Confidential Information to the Commission or its staff. The Party shall notify the other Party to this agreement when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. 7.12Competitively Sensitive, Commercial or Financial Information. Subject to the exception in Article 7.11, any information that a Party claims is competitively sensitive, commercial or financial information under this agreement ("Confidential Information") shall not be disclosed by the other Party to any person not employed or retained by the other Party, except to the extent disclosure is (1) required by law, (2) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute, (3) otherwise permitted by consent of the other Party, such consent not to be unreasonably withheld, or (4) necessary to fulfill its obligations under this agreement or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to the RTO or ISO or to a regional or national reliability organization. The Party asserting confidentiality shall notify the other Party in writing of the information it claims is confidential. Prior to any disclosures of the other Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

**7.13 Information in Public Domain.** This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a Breach of this provision).

#### **Article 8. Disputes**

**8.1 Submission.** In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with this agreement or its performance, such Party (the "Disputing Party") shall provide the other Party with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty Calendar Days of the other Party's receipt of the Notice of Dispute, such claim or dispute may, upon agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this agreement.

8.2 External Arbitration Procedures. Any arbitration initiated under this agreement shall be conducted before a single neutral Arbitrator/Technical Master (herein after referred to as Arbitrator) appointed by the Parties. If the Parties fail to agree upon a single Arbitrator within ten Calendar Days of the submission of the dispute to arbitration, each Party shall choose one Arbitrator who shall sit on a three-member arbitration panel. The two Arbitrators so chosen shall within 20 Calendar Days select a third Arbitrator to chair the arbitration panel. In either case, the Arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The Arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules") and any applicable FERC regulations or Regional Transmission Organization rules; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this article, the terms of this article shall prevail.

**8.3 Arbitration Decisions.** Unless otherwise agreed by the Parties, the Arbitrator(s) shall render a decision within 90 Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons therefor. The Arbitrator(s) shall be authorized only to interpret and apply the provisions of this agreement and shall have no power to modify or change any provision of this agreement in any manner. The decision of the Arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the Arbitrator(s) may be appealed solely on the grounds that the conduct of the Arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the Arbitrator must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Upgrades.

**8.4 Costs.** Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the Arbitrator chosen by the Party to sit on the three-member panel and one half of the cost of the third Arbitrator chosen, or (2) one half the cost of the single Arbitrator jointly chosen by the Parties.

#### Article 9. Signatures

IN WITNESS WHEREOF, Parties have caused this agreement to be executed by their respective duly authorized representatives.

For Transmission Provider

Name:				
Title:				
Date:				
For Transmission Owner (If Appli	<u>cable)</u>			
Name:				
Title:				
Date:				
For Interconnection Customer				
Name:				
Title:				
Date:				
	Appendix 1			
<b>Description and Costs</b>	of Generating Facility, Interconnection Facilities, and Metering Equipment			
Equipment, including the Generating Facility, Interconnection Facilities, and metering equipment shall be itemized and identified as being owned by Interconnection Customer, Transmission Provider, or Transmission Owner. Transmission Provider will provide an best estimate itemized cost, including overheads, of its Interconnection Facilities and metering equipment, and a best estimate itemized cost of the annual operation and maintenance expenses associated with its Interconnection Facilities and metering equipment.				
	Appendix 2			
One-line Diagram Depicting Generating Facility, Interconnection Facilities, Metering Equipment, and Upgrades				
	Appendix 3			
	Milestones			
In-Service Date:				
Critical milestones and responsibi	lity as agreed to by the Parties:			
Milestone/Date	Responsible Party			
(1)				
(2)				

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(3)				
(4)				
(5)				
(6)				
(7)				
(8)	<del></del>			
(9)				
(10)				
Agreed to by:				
For Transmission Provider Date				
For Transmission Owner (If Applicable) Date				
For Interconnection Customer Date				

## Appendix 4

### Additional Operating Requirements for Interconnection Provider's Transmission System and Affected Systems Needed to Support Interconnection Customer's Needs

Transmission Provider shall also provide requirements that must be met by Interconnection Customer prior to initiating Parallel Operation with Transmission Provider's Transmission System.

#### Appendix 5

#### Transmission Provider's Description of Transmission System Upgrades and Best Estimate of Upgrade Costs

Transmission Provider shall describe Upgrades and provide an itemized best estimate of the cost, including overheads, of the Upgrades and annual operation and maintenance expenses associated with such Upgrades. Transmission Provider shall functionalize Upgrade costs and annual expenses as either transmission or distribution related.

#### Footnotes

- Readers may note that provisions of the Final Rule LGIP are referred to as "Sections" whereas provisions of the Final Rule LGIA are referred to as "Articles."
- 2 Such filings must be made within 60 days of publication of this Final Rule in the <u>Federal Register</u>.
- Unless otherwise defined in this Preamble, capitalized terms used in this Final Rule have the meanings specified in Section 1 of the Final Rule LGIP and Article 1 of the Final Rule LGIA. The term Generating Facility means the specific device for which the Interconnection Customer has requested interconnection. The owner of the Generating Facility is referred to as the Interconnection Customer. The entity (or entities) with which the Generating Facility is interconnecting is referred to as the Transmission Provider. The term Large Generator is intended to refer to any energy resource having a capacity of more than 20 megawatts, or the owner of such a resource.

- Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, Order No. 888, 61 FR 21540 (May 10, 1996), FERC Stats. & Regs. ¶ 31,036 (1996), order on reh'g, Order No. 888-A, 62 FR 12274 (Mar. 14, 1997), FERC Stats. & Regs. ¶ 31,048 (1997), order on reh'g, Order No. 888-B, 81 FERC ¶ 61,248 (1997), order on reh'g, Order No. 888-C, 82 FERC ¶ 61,046 (1998), aff'd in relevant part sub nom. Transmission Access Policy Study Group v. FERC, 225 F.3d 667 (D.C. Cir. 2000), aff'd sub nom. New York v. FERC, 535 U.S. 1 (2002).
- New Interconnection Requests include those submitted after the effective date of this Final Rule and include requests to increase the capacity of, or modify the operating characteristics of, an existing Generating Facility that is interconnected with the Transmission Provider's Transmission System.
- Regional Transmission Organizations, Order No. 2000, 65 FR810 (Jan. 6, 2000), FERC Stats. & Regs. ¶ 31,089 (1999), order on reh'g, Order No. 2000-A, 65 FR 12,088 (Mar. 8, 2000), FERC Stats. & Regs. ¶ 31,092 (2000), aff'd sub nom. Public Util. Dist. No. 1 v. FERC, 272 F.3d 607 (D.C. Cir. 2001).
- 7 Tennessee Power Company, 90 FERC ¶ 61,238 (2002).
- 8 See e.g., Commonwealth Edison Co., 91 FERC ¶ 61,083 (2000).
- See e.g., American Electric Power Service Corp., 91 FERC ¶ 61,308 (2000), order denying reh'g and granting clarification, 94 FERC ¶ 61,166, order dismissing request for clarification, 95 FERC ¶ 61,130 (2001), appeal docketed sub nom. Tenaska, Inc. v. FERC, No. 01-1194 (D.C. Cir. Apr. 23, 2001); Southwest Power Pool, Inc., 92 FERC ¶ 61,109 (2000); Carolina Power & Light Co., 93 FERC ¶ 61,032 (2000), reh'g denied, 94 FERC ¶ 61,165 (2001), appeal docketed sub nom. Tenaska, Inc. v. FERC, No. 01-1195 (D.C. Cir. Apr. 23, 2001); Virginia Electric & Power Co., 93 FERC ¶ 61,307 (2000), order on clarification, 94 FERC ¶ 61,045, reh'g denied, 94 FERC ¶ 61,164 (2001), appeal docketed sub nom. Tenaska, Inc. v. FERC, No. 01-1196 (D.C. Cir. Apr. 23, 2001); Consumers Energy Co., 93 FERC ¶ 61,339 (2000), order on reh'g and clarification, 94 FERC ¶ 61,230, order on clarification and denying reh'g, 95 FERC ¶ 61,131 (2001).
- In another rulemaking, the Commission proposes a separate set of procedures and an agreement applicable to Small Generators (any energy resource having a capacity of no larger than 20 MW, or the owner of such a resource) that seek to interconnect to jurisdictional Transmission Providers. See Standardization of Small Generator Interconnection Agreements and Procedures, Notice of Proposed Rulemaking, Docket No. RM02-12-000 (issued concurrently with this Final Rule) 104 FERC ¶ 61,104.
- Standardizing Generator Interconnection Agreements and Procedures, Advance Notice of Proposed Rulemaking, 66 FR 55140 (Nov. 1, 2001), FERC Stats. & Regs. ¶ 35,540 (2001).
- 12 The ERCOT agreement and procedure were appended to the ANOPR as Appendix A.
- Standardization of Generator Interconnection Agreements and Procedures, Notice of Proposed Rulemaking, 67 FR 22250 (May 2, 2002), FERC Stats. & Regs. ¶ 32,560 (2002).
- 14 The Small Generator Interconnection ANOPR proposed adopting two Small Generator Interconnection Procedures documents and two Small Generator Interconnection Agreements, with the distinction between the two sets of documents being the size of the Small Generator.
- 15 <u>See</u> Standardization of Small Generator Interconnection Agreements and Procedures, Advance Notice of Proposed Rulemaking, 67 FR 54749 (Aug. 26, 2002), FERC Stats. & Regs. ¶ 35,544 (2002).
- 16 U.S.C. 824d, 824e (2000).
- Gulf States Utils. Co. v. FPC, 411 U.S. 747, 758-59 (1973); see City of Huntingburg v. FPC, 498 F.2d 778, 783-84 (D.C. Cir. 1974) (noting the Commission's duty to consider the potential anticompetitive effects of a proposed interconnection agreement).
- 18 Order No. 888, FERC Stats. & Regs ¶ 31,036 at 31,679-84; Order No. 888-A, FERC Stats. & Regs ¶ 31,048 at 30,209-10.
- Order No. 888, FERC Stats. & Regs ¶ 31,036 at 31,668-73, 31,676-79; Order No. 888-A, FERC Stats. & Regs ¶ 31,048 at 30,201-12; TAPS v. FERC, 225 F.3d 667, 687-88 (D.C. Cir. 2000).
- 20 New York v. FERC, 535 U.S. 1 (2002).
- 21 See Tennessee Power Co., 90 FERC ¶ 61,238 at 61,761, reh'g dismissed, 91 FERC ¶ 61,271 (2000).
- 22 Entergy Gulf States, Inc., 98 FERC ¶ 61,014 at 61,023, reh'g denied, 99 FERC ¶ 61,095 (2002); see Public Service Co. of Colorado, 59 FERC ¶ 61,311 (1992), reh'g denied, 62 FERC ¶ 61,013 at 61,061 (1993).
- 23 Pacific Gas & Electric Company, et al., 102 FERC ¶ 61,070 (2003).
- 24 <u>See e.g.</u> Illinois Power Co., 103 FERC ¶ 61,032 (2003); American Electric Power Service Corp., 101 FERC ¶ 61,194 (2002).
- 25 Entergy Services, Inc., 101 FERC ¶ 61,289 (2002).
- 26 <u>Id</u>.
- 27 Colton Power, LP, 101 FERC ¶ 61,150 (2002).
- 28 <u>Id</u>.

- 29 Entergy Services, Inc., 101 FERC ¶ 61,016 (2002); Southern Company Services, Inc., 95 FERC ¶ 61,307 at 62,049, order dismissing reh'g, 96 FERC ¶ 61,168 (2001); Tennessee Power Co., 90 FERC ¶ 61,238 at 61,761 (2000).
- 30 See Arizona Public Service Co., 94 FERC ¶ 61,027 at 61,076, order on reh'g, 94 FERC ¶ 61,267 (2001).
- 31 Arizona Public Service Company, 102 FERC ¶ 61,303 (2003).
- An Affected System is an electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.
- The Final Rule LGIP and Final Rule LGIA define Party or Parties as "Transmission Provider, Transmission Owner, Interconnection Customer, or any combination of the above."
- 34 For the convenience of the reader, a flow chart depicting the interconnection process is appended to this preamble as Appendix A.
- Any Transmission Provider with an Interconnection Request outstanding at the time this Final Rule becomes effective shall transition to the Final Rule LGIP within a reasonable period of time. This is further described in Final Rule LGIP Section 5.1.
- 36 The standard form of Interconnection Request is Appendix 1 of the LGIP document.
- For example, the first complete Interconnection Request, assigned an earlier Queue Position, is "higher-queued" relative to the second complete Interconnection Request that is assigned a later Queue Position and is "lower queued." The withdrawal of a complete Interconnection Request causes it to lose its Queue Position and all succeeding complete Interconnection Requests to advance, accordingly.
- 38 Any Interconnection Customer assigned a Queue Position before the effective date of this Final Rule would retain that Queue Position.
- 39 We emphasize that the Final Rule LGIP requires the Transmission Provider, the Transmission Owner, and such entities' officers, employees, and contractors to maintain proper procedures for Confidential Information provided by an Interconnection Customer related to the Interconnection Request, the disclosure of which could harm or prejudice the Interconnection Customer or its business.
- 40 Open Access Same-Time Information System and Standards of Conduct, Order No. 889, 61 FR 21737 (May 10, 1996), FERC Stats. & Regs. ¶ 31,035 at 31,590 (1996), order on reh'g, Order No. 889-A, 62 FR 12484 (Mar. 14, 1997), FERC Stats. & Regs. ¶ 31,049 (1997), reh'g denied, Order No. 889-B, 81 FERC ¶ 61,253 (1997), aff'd in relevant part sub nom. Transmission Access Policy Study Group v. FERC, 225 F.3d 667 (D.C. Cir. 2000), aff'd sub nom. New York v. FERC, 535 U.S. 1 (2002).
- The Scoping Meeting will address technical matters such as facility loadings, general instability issues, general short-circuit issues, general voltage issues, and general reliability issues that would affect the Interconnection Customer's designation of its Point of Interconnection.
- The standard forms of agreement for the Interconnection Feasibility Study, the Interconnection System Impact Study, the Interconnection Facilities Study, and the Optional Interconnection Study, are included at Appendices 2-4 to the Final Rule LGIP, respectively.
- 43 At the Transmission Provider's option, Interconnection System Impact Studies for multiple Generating Facilities may be conducted serially or in clusters.
- These Interconnection Studies are typical of the kinds of studies undertaken by Transmission Providers to evaluate Interconnection Requests. The Interconnection Facilities Studies and Interconnection System Impact Studies also correspond to transmission service studies described in the <a href="mailto:pro-forma">pro-forma</a> open access tariff. <a href="mailto:See">See</a> Order No. 888-A (Tariff Part II, 19 Additional Study Procedures For Firm Point-To-Point Transmission Service Requests; and Tariff Part III, 32 Additional Study Procedures For Network Integration Transmission Service Requests), FERC Stats. & Regs., Regulations Preambles (July 1996-December 2000), ¶ 31,048 at 30,524-26 and 30,535-36.
- An Interconnection Feasibility Restudy must be completed within 45 Calendar Days of such request. Similarly, the Transmission Provider has 60 Calendar Days to complete either an Interconnection System Impact Restudy or an Interconnection Facilities Restudy.
- 46 Upon the completion of each of the Interconnection Studies, a report is prepared which presents the results of the analyses.
- The draft interconnection agreement shall include: Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades; Appendix B, Milestones; Appendix C, Interconnection Details; Appendix D, Security Arrangements Details; Appendix E, Commercial Operation Date; and Appendix F, Addresses for Delivery of Notices and Billings.
- In general, the In-Service Date of an Interconnection Customer's Generating Facility or Generating Facility expansion will determine the sequence of construction of Network Upgrades. An Interconnection Customer, in order to achieve its expected In-Service Date, may request that the Transmission Provider advance the completion of Network Upgrades necessary to support such In-Service Date that would otherwise not be completed pursuant to a contractual obligation of an entity other than the Interconnection Customer. The Transmission Provider will use Reasonable Efforts to advance the construction if the Interconnection Customer reimburses it for any associated expediting costs and the cost of such Network Upgrades. The Interconnection Customer is entitled to transmission credits for the expediting costs that it pays.
- 49 <u>See e.g.</u>, Article 7 (Metering), Article 8 (Communications) and Article 9 (Operations).
- 50 <u>E.g.</u>, Edison Mission, Georgia Transmission, MidAmerican, and SoCal Water District.

- 51 <u>See</u> Entergy Gulf States, Inc., 99 FERC ¶ 61,095 (2002).
- 52 <u>E.g.</u>, Entergy Services, Inc. v. FERC, 319 F.3d 536 (D.C. Cir. 2003); Southern Company Services, Inc., 101 FERC ¶ 61,309 (2002); American Electric Power Service Corp., 101 FERC ¶ 61,194 (2002); Tampa Electric Company, 99 FERC ¶ 61,192 (2002).
- Mirant states that the following language was left out of Section 2.3 of the NOPR LGIP: "and contingency lists upon request subject to confidentiality provisions. Such databases and lists, herein referred to as Base Cases, shall include all (I) generation projects and (ii) transmission projects, including merchant transmission projects that are proposed for a Transmission System for which a transmission expansion plan has been submitted and approved by the applicable authority."
- 54 <u>E.g.</u>, BPA, Central Maine, Cleco, Edison Mission, Georgia Transmission, NYTO, PJM, PJMTO, and Salt River Project.
- 55 <u>E.g.</u>, AEP, Ameren, BPA, Cal ISO, Central Maine, Central Vermont PSC, Cleco, the Construction Issues Coalition, Dairyland Power, Dominion Resources, Entergy, Georgia Transmission, Imperial Irrigation, ISO New England, MidAmerican, the Midwest ISO, National Grid, Nevada Power, NYTO, PGE, PJM, Salt River Project, SoCal Edison, TANC, and TVA.
- See Section 21 of the OATT. See also Tampa Electric Co., 103 FERC ¶ 61,047 (2003), and Nevada Power, 97 FERC ¶ 61,227 (2001), reh'g denied, 99 FERC ¶ 61,347 (2002); but see American Electric Power Service Corporation, 102 FERC ¶ 61,336 (2003).
- 57 Section 21.1 of the OATT states that: "The Transmission Provider will undertake reasonable efforts to assist the Transmission Customer in obtaining such arrangements, including without limitation, provided any information or data required by such other Transmission System pursuant to Good Utility Practice."
- Section 21.2 of the OATT states that: "Transmission Provider shall have the right to coordinate construction on its own system with the construction required by others. The Transmission Provider, after consultation with the Transmission Customer and representatives of such other systems, may defer construction of its new transmission facilities, if the new transmission facilities on another system cannot be completed in a timely manner."
- 59 See Section 21.2 of the OATT.
- <u>See Section 13.2 of the OATT.</u>
- 61 Nevada Power, 97 FERC ¶ 61,227 (2001), reh'g denied, 99 FERC ¶ 61,347 at 62,294 (2002).
- <u>See Section 15.3 of the OATT.</u>
- 63 18 CFR 385.206(b)(9) (2003).
- Disputing parties may retain mediators from outside sources, or they may use the Commission's Dispute Resolution Service or the Commission's settlement judge process.
- For some of the LGIA provisions that the Commission is adopting here, few if any written comments were submitted. Commenters tended to use the 30 pages to which they were limited to explain what they would change. They made statements of support for the rule in general, but did not make article-by-article comments on parts that they supported. As a result, the only comments received on some articles were calls for change, even if a majority of commenters may have indicated general support for the proposed articles that they did not specifically comment on.
- 66 See Part II.B.2Article 5.14.1 (Interconnection Customer Payments Not Taxable).
- 67 18 CFR 35.15(2003).
- 68 <u>E.g.</u>, Central Vermont PSC, Cinergy, El Paso, Exelon, MidAmerican, and PG&E.
- 69 Stand-Alone Network Upgrades are those Network Upgrades that the Interconnection Customer may construct without affecting dayto-day operations of the Transmission System during their construction.
- 70 A typographical error in the NOPR added to the lack of clarity.
- 71 Other comments on this issue are addressed in Part II.C.8.b (Liquidated Damages).
- 72 <u>See Arizona Public Service Company</u>, 102 FERC ¶ 61,303 (2003). We also note that the ownership of Stand Alone Network Upgrades by an Interconnection Customer is discussed further under "Rules Governing the Payment of Credits" in Part C.1 of this Preamble.
- 73 <u>E.g.</u>, Cinergy, Cleco, the Construction Issues Coalition, Duke Energy, National Grid, PJMTO, Salt River Project, SoCal Edison, and Southern.
- 74 An RTO or ISO with participant funding may propose an alternative policy for Commission approval.
- 75 <u>E.g.</u>, EEI, FP&L, MidAmerican, and TXU.
- Subsequent taxable events are discussed in Final Rule LGIAArticle 5.17.6. This discussion retains the article numbers that appeared in the NOPR LGIA.
- A gross-up for income taxes is a dollar amount calculated to determine the Interconnection Customer's estimated tax liability to the Transmission Owner.
- Security will not be available when a Governmental Authority directs a Transmission Provider to report payments of property as income subject to taxation.
- 79 <u>See Part II.A.2- Section 3.5 (Coordination with Affected Systems).</u>

- 80 16 U.S.C. 824, 824d and 824e (2000).
- 81 <u>See e.g.</u>, Mississippi Power & Light v. Mississippi <u>ex rel.</u> Moore, 487 U.S. 354, 371-72 (1988); Nantahala Power & Light Co. v. Thornburg, 476 U.S. 953, 970 (1986) (both applying the same principle to the Commission's jurisdiction over wholesale sales of electric energy).
- 82 See Part II.C.7 (OATT Reciprocity Requirements Applied to the Final Rule LGIP and Final Rule LGIA).
- 83 Order No. 888-A, FERC Stats. & Regs ¶ 31,048 at 30,286.
- 84 Order No. 888 at 31,709-10.
- 85 Pacific Gas and Electric Company, et al., 81 FERC ¶ 61,122 at 61,456 (1997).
- 86 See 18 CFR 35.3 (2003).
- 87 <u>See Part II.C.5</u> (Variations from the Final Rule and Regional Differences).
- 88 "Ride through" means a Generating Facility staying connected to and synchronized with the Transmission System during system disturbances within a range of over- and under-frequency conditions, in accordance with Good Utility Practice.
- 89 NOPR LGIA Article 11.5.1 is identical to Article 11.5 except that the former required the Interconnection Customer to provide the Transmission Provider with a form of security at least 30 Calendar Days prior to the commencement of the procurement, installation, or construction of discrete Transmission Provider Interconnection Facilities or Network Upgrades. The inclusion of both provisions in the NOPR LGIA was an error. As explained below, we are eliminating Article 11.5 in the Final Rule LGIA.
- 90 E.g., BPA, Central Maine, Duke Energy, Exelon, the Financial Security Issues Coalition, Georgia Transmission, NSTAR, and NYTO.
- 91 See Florida Power & Light Company, 98 FERC ¶ 61,226 at 61,893 -94, reh'g granted in part on other grounds, 99 FERC ¶ 61,318 (2002); Florida Power & Light Company, 98 FERC ¶ 61,324 at 62,358 -59 (noting that Florida Power & Light Company's practice of limiting interconnection customers to a letter of credit is unreasonable), reh'g rejected as moot, 100 FERC ¶ 61,094 (2002).
- 92 Southwest Power Pool, Inc., 100 FERC ¶ 61,096 at P 12 (2002).
- El Paso would define Abnormal Condition as "any condition at the [Generating] Facility, on the Interconnection Facilities, on the Transmission System, or on the transmission system of other utilities which is outside normal operating parameters such that facilities are operating outside their normal ratings or reasonable operating limits have been exceeded and would result in an Emergency Condition if these conditions continue. Any condition or situation that results from lack of sufficient planned generating capacity to meet load requirements or that results solely from economic conditions will not, standing alone, constitute an Abnormal Condition."
- 94 See Part II.C.7 (OATT Reciprocity Requirements Applied to the Final Rule LGIP and Final Rule LGIA).
- 95 Order No. 888-A, FERC Stats. & Regs ¶ 31,048 at 30,286.
- 96 E.g., The Coalition for Contract Terms, Monongahela Power, PJMTO, and PSEG.
- 97 <u>E.g.</u>, The Coalition for Contract Terms, Entergy, Mirant, PJMTO, and PSEG.
- 98 <u>E.g.</u>, The Coalition for Contract Terms, Dominion Resources, Mirant, Monongahela Power, and Progress Energy.
- 99 E.g., The Coalition for Contract Terms, Exelon, PSEG, and PJMTO.
- 100 Black's Law Dictionary 772 (7th ed. 1999).
- 101 <u>E.g.</u>, Central Maine, Dominion Resources, Exelon, Monongahela Power, NYTO, and Progress Energy.
- 102 E.g., Central Maine, the Coalition for Contract Terms, Midwest ISO TO, PSEG, Salt River Project, and Southern.
- 103 <u>Citing Avista Corp.</u>, 96 FERC ¶ 61,058 at 61,181 (2002).
- 104 5 U.S.C. 552(a) (2000).
- 105 18 CFR 388.112 (2003).
- American Electric Power Service Corp., 99 FERC ¶ 61,312 at PP 22-24 (2002).
- 107 <u>Id</u>
- The proposed definition also states that the "facilities and equipment are used by and benefit all users of the transmission grid, without distinction or regard as to the purpose of the upgrade (e.g., to relieve overloads, to remedy stability and short circuit problems, to maintain reliability, or to provide protection and service restoration) including the fact that these facilities and equipment are being replaced or upgraded to accommodate the interconnection request."
- Remedying Undue Discrimination Through Open Access Transmission Service and Standard Electricity Market Design, Notice of Proposed Rulemaking, 67 FR 55542 (Aug. 29, 2002), FERC Stats. & Regs. ¶ 32,563 (2002).
- 110 Issues regarding the pricing of Network Resource Interconnection Service are addressed in Part II.C.2 (Interconnection Products and Scope of Service).
- When a Transmission Provider must construct Network Upgrades to provide new or expanded transmission service, the Commission generally allows the Transmission Provider to charge the higher of the embedded costs of the Transmission System with expansion costs rolled in, or incremental expansion costs, but not the sum of the two. Hence, "and" pricing is not permitted.

- The Commission's crediting policy has also withstood judicial review. In an opinion issued February 18, 2003, the D.C. Circuit Court of Appeals affirmed Commission orders requiring a Transmission Provider to provide credits to Interconnection Customers for the cost of short-circuit and stability Network Upgrades. Entergy Services, Inc. v. FERC, 319 F.3d 536 (D.C. Cir. 2003). The court stated that "[t]he Commission's rationale for crediting network upgrades, based on a less cramped view of what constitutes a 'benefit,' reflects its policy determination that a competitive transmission system, with barriers to entry removed or reduced, is in the public interest." Id. at 543-44. The court concluded that "the Commission has reasonably explained that its crediting pricing policy avoids both gold plating and less favorable price signals such that the enlarged transmission system, which it views as a public good, can function reliably and continue to expand." Id. at 544.
- 113 See Cleco Power LLC, et al., 103 FERC ¶ 61,272 (2003); Southern Company Services, Inc., 103 FERC ¶ 61,279 (2003), reh'g pending.
- American Electric Power Service Corporation, 97 FERC ¶ 61,200 (2001) (AEP).
- 115 See e.g., id.; ISO New England, Inc., 91 FERC ¶ 61,311 (2000).
- 116 Cambridge Electric Light Co., et al., (NSTAR), 95 FERC ¶ 61,339 (2001).
- Although Article 11.4.1 of the NOPR LGIA proposed to begin the five year period on the date that the Network Upgrades are placed in service, as the Commission explains below, the Commission concludes that the Interconnection Customer should not be entitled to receive a refund unless the Generating Facility achieves commercial operation. Therefore, the Commission is modifying Article 11.4.1 to specify that the five year period begins with the Generating Facility's Commercial Operation Date.
- As discussed above, an Affected System is a system other than that of the Transmission Provider that may be affected by the proposed interconnection.
- 119 During the ANOPR negotiating sessions EPSA and other Interconnection Customers negotiated to secure these two forms of service.
- 120 Comments of Georgia Transmission at 18.
- 121 Liquidated damages in the LGIP are further discussed in PartII.C.8.b(4).
- 122 See Large Generator Interconnection NOPR, FERC Stats. & Regs. ¶ 32,560 at 34,178 & n.22 (2002).
- 123 <u>E.g.</u>, Consumers, EEI, LADWP, National Grid, the North Carolina Commission, NRECA-APPA, the Public Power Council, and the Wisconsin PSC.
- 124 <u>Citing Order No. 888, FERC Stats. & Regs ¶ 31,036 at 31,673.</u>
- 125 18 CFR 284.224 (2003).
- NARUC comments at 5 (citation omitted) (emphasis added by NARUC).
- 127 16 U.S.C. 824(b)(1) (2000).
- For purposes of this paragraph, the term "Commission-filed OATT" means a tariff that is on file at, and has been approved by, the Commission.
- The Commission will exercise exclusive jurisdiction only over the Commission-jurisdictional service. See Laguna Irrigation District, 95 FERC ¶ 61,305 at 62,039 (2001) aff'd sub nom. Pacific Gas & Electric Co. v. FERC, 44 Fed. Appx. 170 (9th Cir. 2002); Tex-La Electric Cooperative of Texas, Inc., 67 FERC ¶ 61,019 at 61,055 -56, final order, 69 FERC ¶ 61,269 (1994) (both noting that the Commission asserts jurisdiction over the service when the facilities are not purely "transmission" facilities). Accordingly, the Commission will continue to exercise exclusive jurisdiction over the rates, terms, and conditions of the Commission-jurisdictional service provided over the dual use "distribution" facility, but the Commission will not assert jurisdiction over all uses of that facility, because the regulation of "local distribution" of electricity to end users is reserved to the States.
- 130 See Order No. 888, FERC Stats. & Regs ¶ 31,036 at 31,692; Order No. 888-A, FERC Stats. & Regs ¶ 31,048 at 30,219 (urging such public utilities to seek mutually agreeable revisions to their agreements with non-jurisdictional entities to permit third-party access to all, or at least the public utility share, of the facilities, and to file proposed revisions to such contracts with the Commission).
- 131 <u>See</u> 16 U.S.C. 2601 <u>et seq</u>.(2000).
- 132 <u>Citing</u> 18 CFR 292.306, 292.308 (2003).
- Citing Western Massachusetts Electric Co., 61 FERC ¶ 61,182 (1992), aff'd sub nom. Western Massachusetts Electric Co. v. FERC, 165 F.3d 922 (D.C. Cir. 1999).
- 134 18 CFR 292.303, 292.306 (2003).
- The absence of interstate commerce in Alaska, Hawaii, portions of Texas and Maine, and Puerto Rico is not germane to the Commission's jurisdiction over QF matters under PURPA. <u>See</u> 16 U.S.C. 2602 (2000).
- 136 See Western Massachusetts Electric Co., 61 FERC ¶ 61,182 at 61,661 -62 (1992) (Western Massachusetts), aff'd sub nom. Western Massachusetts Electric Co. v. FERC, 165 F.3d. 922, 926 (D.C. Cir. 1999).
- 137 <u>See id.</u> at 61,661-62. The Commission further clarified that the use of facilities for non-jurisdictional services is not dispositive when determining jurisdiction: "The fact that the facilities used to support the jurisdictional service might also be used to provide various

nonjurisdictional services, such as back-up and maintenance power for a QF, does not vest state regulatory authorities with authority to regulate matters subject to the Commission's exclusive jurisdiction." <u>Id</u>. at 61,662.

- 138 18 CFR 292.303 (2003).
- 139 See Order No. 888, FERC Stats. & Regs ¶ 31,036 at 31,770.
- 140 <u>E.g.</u>, Florida RCC, NARUC, the North Carolina Commission, the Public Power Council, and WEPCO.
- 141 <u>See</u> 18 CFR 35.28(d) (2003); Reg. Text 35.28(f)(3), <u>infra</u>.
- Large Generator Interconnection NOPR, FERC Stats. & Regs ¶ 32,560 at 34,184-185. See also Order No. 888, FERC Stats. & Regs. ¶ 31,036 at 31,755.
- 143 See Order No. 888, FERC Stats. & Regs. ¶ 31,036 at 31,760.
- 144 Citing Missouri Basin Municipal Power Authority, 99 FERC ¶ 61,062 at 61,296 (2002).
- 145 See Order No. 888-A, FERC Stats. & Regs ¶ 31,048 at 30,285-86.
- See generally Order No. 888, FERC Stats. & Regs ¶ 31,036 at 31,761; see also Long Island Power Authority, 84 FERC ¶ 61,280 at 62,333 (1998).
- 147 Order No. 888-A, FERC Stats. & Regs ¶ 31,048 at 30,289.
- 148 Id. at 30,286.
- 149 <u>E.g.</u>, American Transmission, APS, Dominion Resources, Dynegy, Entergy, FP&L, National Grid, NiSource, NYTO, Oklahoma G&E, PSNM, and Tucson Electric.
- 150 E.g., El Paso, Idaho Power, PacifiCorp, and WestConnect RTO.
- 151 <u>E.g.</u>, Entergy and SoCal PPA.
- 152 <u>See e.g.</u>, ANR Pipeline Co., 98 FERC ¶ 61,128 at 61,862 (2002).
- 153 LGIA Articles 5.1.2 and 5.1.3.
- 154 E.g., Imperial Irrigation, Lakeland, and LPPC.
- 155 <u>E.g.</u>, APS, Bridger Valley, Cinergy, El Paso, FP&L, Entergy, Idaho Power, LADWP, Monongahela Power, PacifiCorp, PG&E, Tucson Electric, and Western.
- 156 <u>E.g.</u>, Ameren, American Transmission, Cal ISO, the Construction Issues Coalition, MidAmerican, Mirant, National Grid, NSTAR, NYTO, PSNM, Sempra, and SoCal Edison.
- 157 <u>E.g.</u>, APS, Cinergy, Exelon, and Oklahoma G&E.
- 158 <u>E.g.</u>, American Transmission, Construction Issues Coalition, NYTO, NSTAR, SoCal Edison, and WestConnect RTO.
- 159 <u>E.g.</u>, Ameren, Cal ISO, Central Maine, El Paso, Exelon, and WestConnect RTO.
- 160 <u>E.g.</u>, Ameren, the Construction Issues Coalition, Dominion Resources, FP&L, NE Utilities, NSTAR, PG&E, Sempra, SoCal PPA, and Southern.
- 161 In Final Rule LGIA Article 5.1.4, the Parties may negotiate terms under the Negotiated Option.
- 162 <u>E.g.</u>, APS, Bridger Valley, El Paso, Entergy, FP&L, LADWP, LPPC, NYISO, PacifiCorp, PG&E, PGE, PJMTO, PSNM, Southern, WestConnect RTO, and Western.
- 163 <u>E.g.</u>, AEP, American Forest, American Transmission, Cal ISO, Central Maine, Cleco, Duke Energy, National Grid, NE Utilities, NYTO, and Salt River Project.
- 164 E.g., APS, PG&E, and PGE.
- 165 <u>E.g.</u>, American Transmission, Joint Consumer Advocates, and the Midwest ISO.
- 166 Black's Law Dictionary 394 (7th ed. 1999).
- 167 Order No. 888-A, FERC Stats. & Regs ¶ 31,048 at 30,302.
- 168 <u>E.g.</u>, American Transmission, APS, Avista, Central Maine, the Coalition for Contract Terms, Dominion Resources, Duke Energy, FP&L, Mississippi PSC, NYTO, PacifiCorp, Progress Energy, PSNM, RTO West Utilities, Tucson Electric, and WestConnect RTO.
- 169 See Richard J. Pierce, Regional Transmission Organizations: Federal Limitations Needed for Tort Liability, 23 Energy L.J. 63, 67-72 (2002).
- 170 Section 5 of the Final Rule LGIP governs the treatment of Queue Positions established prior to the effective date of the Final Rule. It also provides a transition process for Transmission Providers with Interconnection Requests outstanding when the Final Rule takes effect.
- 171 Revised Public Utility Filing Requirements, Order No. 2001, 67 FR 31043 (May 8, 2002), FERC Stats. & Regs. ¶ 31,127 (2002),; reh'g denied, Order 2001-A, 100 FERC ¶ 61,074 (2002); reconsideration and clarification denied, Order No. 2001-B, 100 FERC ¶ 61,342 (2002); further order, Order No. 2001-C, 101 FERC ¶ 61,314 (2002).

- 172 See Order No. 2001at P 12.
- 173 See id. at P 18.
- 174 See id. at P 249.
- 175 See id. at P 19.
- 176 See id. at P 196.
- 177 <u>See id</u>. at P 200.
- 178 5 CFR 1320.11 (2003).
- 179 44 U.S.C. 3507(d) (2000).
- Regulations Implementing National Environmental Policy Act, Order No. 486, 52 FR 47897 (Dec. 17, 1987), FERC Stats. & Regs. ¶ 30,783 (1987).
- 181 18 CFR 380.4(a)(2)(ii) (2003).
- 182 18 CFR 380.4(a)(5) (2003).
- 183 5 U.S.C. 601 -612 (2000).
- 184 Order No. 888, FERC Stats. & Regs ¶ 31,036 at 31,897.
- 185 <u>See</u> 18 CFR 35.28(d) (2003).
- 186 5 U.S.C. 601 -612 (2000).
- 187 Order No. 888, FERC Stats. & Regs. ¶31,036, at 31,898.
- 5 U.S.C. 601(3) (2000), citing to Section 3 of the Small Business Act, 15 U.S.C. 632 (2000). Section 3 of the Small Business Act defines a "small-business concern" as a business which is independently owned and operated and which is not dominate in its field of operation.
- 189 <u>See</u> 18 CFR 35.28(d) (2003).
- 190 13 CFR 121.61 (Sector 22, Utilities, North American Industry Classification System, NAICS) (2003).
- 191 Maine PSC, Southwest Transmission, and SoCal Water District.
- 192 5 U.S.C. 804(2) (2000).
- 193 5 U.S.C. 801(a)(1)(A) (2000).
- 1 This recital to be omitted if Interconnection Customer has elected to forego the Interconnection Feasibility Study.

104 FERC P 61103 (F.E.R.C.), 2003 WL 21725988

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