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Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, DC 20426

RE: <u>Duke Energy Corporation and Progress Energy, Inc.</u>,

Docket No ER11- -000

Dear Secretary Bose:

Pursuant to Section 205 of the Federal Power Act ("FPA"), 16 U.S.C. § 824e, and Part 35 of the Regulations of the Federal Energy Regulatory Commission ("FERC" or "the Commission"), 18 C.F.R. Part 35, Duke Energy Corporation ("Duke Energy") on its own behalf and on behalf of its public utility subsidiary, Duke Energy Carolinas, LLC ("DEC") and Progress Energy, Inc. ("Progress Energy"), on its own behalf and on behalf of its public utility subsidiaries, Carolina Power & Light Company, d/b/a Progress Energy Carolinas, Inc. ("PEC") and Florida Power Corporation, d/b/a Progress Energy Florida, Inc. ("PEF") (collectively, "Applicants"), hereby submit for filing a joint Open Access Transmission Tariff (the "Joint OATT"). The Joint OATT combines into a single OATT the current version of the DEC OATT, the PEC OATT and the PEF OATT.¹ The Joint OATT provides for transmission service at non-pancaked rates for transactions involving more than one of the DEC, PEC, and/or PEF transmission systems.

The PEC OATT and the PEF OATT are virtually identical; the PEF OATT has a different transmission planning process in Attachment K and the PEF OATT has different Power Factor Requirements (see, e.g., Attachment V which applies only to PEF). Together, the PEC OATT and the PEF OATT are referred to herein as the "PEC/PEF OATT."

The Applicants are making this filing in connection with the proposed merger of Duke Energy and Progress Energy in which Progress Energy will become a wholly-owned subsidiary of Duke Energy (the "Transaction").² Each of the public utility subsidiaries of Duke Energy and Progress Energy will remain distinct entities with separate control areas (also known as balancing authority areas) when the Transaction is consummated. The Joint OATT will apply to the transmission service provided by the Applicants in each control area. The Joint OATT maintains each company's existing rates as zonal rates.³ The Applicants request that the Commission waive its 120-day notice requirement contained in section 35.3 of the Commission's regulations⁴ and allow the Joint OATT to be accepted for filing and put into effect on the date the Transaction is consummated.

The Applicants are eFiling the Joint OATT but are requesting a limited partial waiver of the Commission's eTariff filing requirements established in Order No. 714⁵ and Sections 35.7 and 35.9 of the Commission's Regulations⁶ in connection with the instant filing. As discussed further below, Applicants submit that good cause exists for granting the requested waiver of the eTariff requirements under the circumstances of this case. Applicants commit that they will submit the Joint OATT, as it may be revised by the Commission, in a compliance filing that fully complies with the Commission's eTariff requirements, before the Transaction is consummated and the Joint OATT becomes effective.

I. Description of the Joint OATT

Currently, DEC provides transmission services to customers under a FERC-approved OATT, and PEC and PEF provide transmission service to customers under the PEC/PEF OATT.⁷ To develop the Joint OATT, Applicants started with

Concurrently with the filing of this Joint OATT, the Applicants are also filing an application with the Commission under section 203 of the FPA for approval of the Transaction. In addition, Applicants are filing concurrently under section 205 of the FPA a Joint Dispatch Agreement.

The zonal rate for DEC is based on the recent filing made in Docket No. ER11-2895-000, which the Commission has not yet acted upon (the "DEC Formula Rate Filing"). To the extent that the Commission requires any changes to the rates filed in Docket No. ER11-2895-000, those changes automatically would apply to the DEC zonal rate in the Joint OATT.

⁴ 18 C.F.R. § 35.3.

Electronic Tariff Filings, Order No. 714, FERC Stats. & Regs. ¶ 31,276 (2008).

^{6 18} C.F.R. §§ 35.7, 35.9.

The PEC/PEF OATT was initially approved by the Commission in Docket No. ER01-1807. See Carolina Power & Light Co., 95 FERC ¶ 61,429, order on

the provisions in the current versions of the DEC OATT and the PEC/PEF OATT, including provisions that are currently pending before the Commission in the proceeding initiated by the DEC Formula Rate Filing. Applicants then made certain modifications to the Joint OATT discussed below, most significantly, modifications to eliminate rate pancaking in transactions involving more than one of the DEC and PEC/PEF systems. Finally, in cases where there were differences between the DEC and PEC/PEF OATT, Applicants either (1) eliminated the difference by incorporating the FERC-approved provision from either the DEC or PEC/PEF OATT, or (2) retained the difference, but made it applicable only for transmission services in the relevant zone. As a result, except for the modifications discussed in Section I.B below and certain non-substantive clean-up changes, the Joint OATT will consist of provisions that the Commission has already approved, either in proceedings involving the DEC OATT or proceedings involving the PEC/PEF OATT.

A. Current Versions of the DEC OATT and PEC/PEF OATT

The eTariff-compliant version of the DEC OATT was accepted by the Commission in Docket No. ER10-2566. The eTariff-compliant versions of the PEC and PEF OATTs were accepted by the Commission in Docket Nos. ER10-1774 and ER10-1775, respectively. DEC and PEC/PEF subsequently have made several revisions to their OATTs that have been accepted by the Commission. The DEC Formula Rate Filing is pending before the Commission in Docket No. ER11-2895-000. In that proceeding, on February 16, 2011, DEC made a filing to implement a formula rate for transmission service provided under the DEC OATT.8

In developing the Joint OATT, Applicants started with the provisions of the DEC OATT and the PEC/PEF OATT that have been approved by the Commission and then included those changes pending in the DEC Formula Rate Filing. To the extent any of the proposed provisions in the DEC Formula Rate Filing are modified or revised by the Commission in that proceeding, Applicants will submit a compliance filing conforming the Joint OATT to the Commission's rulings.

reh'g, 97 FERC ¶ 61,048 (2001). A joint OATT between PEC and PEF had previously been approved by the Commission in connection with the merger of Carolina Power & Light Company and Florida Progress Corporation in 2000. See CP&L Holdings, Inc., 92 FERC ¶ 61,023 (2000), reh'g denied, 94 FERC ¶ 61,096 (2001).

BEC's filing in that proceeding included a settlement agreement negotiated with DEC's customers that resolved all disputes concerning the filing.

B. Changes to the Existing OATTs

In this filing, Applicants have made four primary modifications to the Joint OATT that have not been presented to the Commission in other proceedings involving the DEC OATT and PEC/PEF OATT. First, the Joint OATT provides for a zonal rate structure that eliminates rate pancaking in transactions involving more than one of the DEC, PEC and/or PEF systems. Second, the Joint OATT eliminates Recallable Firm Long-Term Firm Point-to-Point Transmission Service, which DEC added to its OATT several years ago but is not currently taken by any transmission customer. Third, the Joint OATT revises DEC's form of Network Integration Transmission Service Agreement ("NITSA") to conform to the format of NITSAs that have recently been filed by DEC and accepted by the Commission. Fourth, the Joint OATT eliminates references to the PEC zone in the provisions governing Network Contract Demand Transmission Service, since that service is only available to transmission customers in the PEF zone with agreements for that service effective on or before June 14, 2008.

1. Zonal Rates

The Joint OATT provides for a zonal rate structure for transactions involving more than one of the DEC, PEC and/or PEF transmission systems. Under the zonal rate structure, transmission customers who use only one of the zones will pay the rate applicable to that zone. If a transmission customer uses transmission facilities in more than one zone, it will pay non-pancaked transmission rates. The customer will be charged only the rate for the zone in which the load is located or from which the power is removed from the system. For example, a Network Customer using Point-to-Point or Network Service to serve load located in a different zone pays only the applicable charge in the zone where the load is located.

The zonal rate structure is beneficial for transmission customers who have transactions involving more than one of the DEC, PEC, and/or PEF transmission systems because the arrangement provides for transmission service at non-pancaked rates for transactions involving more than one zone. The zonal rate structure in the Joint OATT is patterned after provisions accepted or approved by the Commission in other merger proceedings. For example, the Commission approved a similar zonal rate structure when it accepted the PEC/PEF OATT developed by Carolina Power & Light Co. and Florida Progress Corp. in connection with their merger in 2000. See CP&L Holdings, 92 FERC ¶ 61,023 at 61,060-61. The Commission has accepted a zonal rate structure in several other merger contexts. See, e.g., Sierra Pac. Power Co., 93 FERC ¶ 61,217 at 61,725 (2000); Sierra Pac. Power Co., 87 FERC ¶ 61,077 at 61,337 (1999); WPS Res. Corp., 83 FERC ¶ 61,196 at 61,840 (1998).

2. Elimination of Recallable Firm Service

One difference between the DEC OATT and the PEC/PEF OATT is that the DEC OATT offers Recallable Long-Term Firm Point-to-Point Transmission Service ("Recallable Firm Service") and the PEC/PEF OATT does not. Recallable Firm Service is not a service that is required by Order Nos. 8889 or 890.10 This service was added to the DEC OATT in 1999. At that time, DEC filed with the Commission certain service agreements providing that type of service for DEC's merchant function. In response, the Commission accepted the service agreements, but required DEC to revise its OATT to offer Recallable Firm Service to all transmission customers. See Duke Energy Corp., 88 FERC ¶ 61,184 at 61,597, reh'g denied, 89 FERC ¶ 61,190 at 61,585 (1999).

However, since 1999, only a few transmission customers have requested Recallable Firm Service. Further, no customer currently takes this service and no customer has utilized this service since 2007. Also, the service agreements with DEC's merchant function that were filed with the Commission in 1999 have expired, and DEC's merchant function does not take Recallable Firm Service. Therefore, there is no longer any need for DEC to offer this type of transmission service and eliminating this service from the Joint OATT will not harm any transmission customers.

3. Revisions to DEC's NITSA Form

The current version of the DEC OATT includes a form of NITSA that is no longer used by DEC when it enters into new NITSAs. For the last several years, any new NITSA entered into by DEC has used a different form and has been filed with the Commission as a non-conforming NITSA. The Commission has routinely

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, FERC Stats. & Regs. ¶ 31,036, clarified, 76 FERC ¶ 61,009 (1996), order on reh'g, Order No. 888-A, FERC Stats. & Regs. ¶ 31,048, 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 substantial 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).

Preventing Undue Discrimination and Preference in Transmission Serv., Order No. 890, FERC Stats. & Regs. ¶ 31,241, order on reh'g and clarification, Order No. 890-A, FERC Stats. & Regs. ¶ 31,261 (2007), order on reh'g and clarification, Order No. 890-B, FERC Stats. & Regs. ¶ 31,241 (2008), order on reh'g, Order No. 890-C, 126 FERC ¶ 61,228, order on clarification, Order No. 890-D, 129 FERC ¶ 61,126 (2009).

accepted these non-conforming NITSAs.¹¹ Applicants have made ministerial changes to the Joint OATT to modify the DEC form NITSA to reflect the form of NITSAs actually used by DEC and routinely accepted by the Commission.

4. Eliminating References to the PEC Zone for Network Contract Demand Transmission Service

Section IV of the PEC/PEF OATT governs Network Contract Demand Transmission Service, which is a service not required under Order Nos. 888 or 890. In 2008, the Commission approved revisions to the PEC/PEF OATT to eliminate the requirement to provide that service to new customers and to limit the availability of that service only to customers with agreements effective on or before June 14, 2008. The only customers now eligible for this service have agreements that were effective on or before June 14, 2008. These customers all are located in the PEF zone. For this reason, the Joint OATT eliminates references to the PEC zone in the provisions governing Network Contract Demand Transmission Service.

C. Combining the Current Versions of the DEC and PEC/PEF OATT

Besides the changes discussed in the previous section and certain non-substantive clean up changes, the provisions contained in the Joint OATT have either previously been accepted by the Commission or are currently pending before the Commission in another proceeding. As a result of the Commission's efforts to standardize the provisions of the OATT in Order Nos. 888, 2003¹³ and 890, most of the provisions in the DEC OATT and the PEC/PEF OATT are identical. In cases where there are differences between the DEC OATT and the PEC/PEF OATT, Applicants have adopted one of two approaches to address those differences.

First, in some cases, Applicants eliminated the differences in the Joint OATT by incorporating the FERC-approved provision from either the DEC OATT or the PEC/PEF OATT. For example, in Sections 3, 4.2, 13.3, 13.7, 19.10, and 29.2, where there were differences in the FERC-approved language between the

¹¹ See, e.g., Duke Energy Carolinas, LLC, Docket No. ER10-1926-000, Letter Order (Sept. 14, 2010).

¹² See Carolina Power & Light Co., 123 FERC ¶ 61,291 at P 20 (2008).

Standardization of Generator Interconnection Agreements and Procedures, Order No. 2003, FERC Stats. & Regs. ¶ 31,146 (2003), order on reh'g, Order No. 2003-A, FERC Stats. & Regs. ¶ 31,160 (2004), order on reh'g, Order No. 2003-B, FERC Stats. & Regs. ¶ 31,171, order on reh'g, Order No. 2003-C, FERC Stats. & Regs. ¶ 31,190 (2005), aff'd sub nom. Nat'l Ass'n of Regulatory Util. Comm'rs v. FERC, 475 F.3d 1277 (D.C. Cir. 2007).

DEC OATT and the PEC/PEF OATT, the Joint OATT incorporated the FERC-approved language from the PEC/PEF OATT. In Sections 30.2 and 30.3, where there were differences in the language, the Joint OATT incorporated the FERC-approved language from the DEC OATT.

Second, in some cases, the differences between the DEC OATT and the PEC/PEF OATT have been retained in the Joint OATT, and different provisions will continue to apply to transmission services in the applicable zones. For example, in the body of the Joint OATT, zonal differences exist in the following sections: 13.2, 13.6, 13.8, 14.6, 14.7, 15.7, 18.3, 18.4, 28.5, 30.2, 33.7, 34.1, 34.2 and 34.3. Also, the following differences between the DEC OATT and the PEC/PEF OATT are being retained in the Attachments to the Joint OATT:

- Under Attachment K of the DEC OATT, an "Independent Entity" performs certain OATT-related functions relating to requests and studies for transmission and generator interconnection service in the DEC system.¹⁴ Under Attachment K of the Joint OATT, the Independent Entity will continue to perform these same functions for transmission and generator interconnection service in the DEC zone.¹⁵
- Attachments C-1, C-2 and C-3 of the Joint OATT contain the methodologies for calculating Available Transmission Capability ("ATC") applicable in the PEC, PEF and DEC zones, respectively. Those Attachments incorporate the current, FERC-approved versions of Attachment C for the PEC, PEF and DEC OATTs, which are similar in that they each use a flowgate methodology to assess ATC, but do contain some differences in substance and form.

The Commission accepted the Independent Entity arrangement for the DEC system in 2005. See Duke Power, 113 FERC ¶ 61,288 (2005). Currently, the Midwest Independent Transmission System Operator, Inc. serves as the Independent Entity.

In the PEC/PEF OATT, Attachment K had been dedicated to the Transmission Planning Process. The Transmission Planning Processes are now in Attachment N-1 and N-2. Other non-substantive renumbering of certain Schedules and Attachments was necessary in order to conform the multiple tariffs into one tariff, e.g., Attachment T in the PEC/PEF OATT, "Methodology for Clustering Transmission Studies" has been incorporated into Attachment P with the DEC clustering methods. Attachment T is now marked as "Reserved" for future use.

- The DEC OATT and the PEC/PEF OATT contain creditworthiness requirements that are not the same in all respects. Under Attachment O of the Joint OATT, the DEC creditworthiness requirements will apply to service in the DEC zone and the PEC/PEF creditworthiness requirements will apply to service in the PEC and PEF zones.
- Under the current versions of the DEC OATT and PEC/PEF OATT, the transmission planning process for DEC and PEC is the same, but PEF is subject to a different transmission planning process. This zonal difference is retained in Attachment N-1 (PEC/DEC) and Attachment N-2 (PEF) of the Joint OATT.
- Attachments F-1 (PEC/PEF) and F-2 (DEC) of the Joint OATT reflect different forms applicable for service in the relevant zones. Attachment F-2 (DEC) incorporates the DEC Network Operating Agreement, thus the Network Operating Agreement included at Attachment G of the Joint OATT applies only to the PEC/PEF zones.
- In the PEC/PEF OATT, PEC adopted local Transmission Loading Relief ("TLR") procedures to supplement the North American Electric Reliability Council ("NERC") TLR procedures. Under Attachment L of the Joint OATT, this local procedure is applicable to service in the PEC zone only; the NERC procedures apply to service in the DEC, PEC and PEF zones.
- The DEC OATT and the PEC/PEF OATT contain different methods for conducting clustering studies. Under Attachment P of the Joint OATT, the DEC clustering methods will apply for service in the DEC zone and the PEC/PEF methods will apply for service in the PEC and PEF zones.
- Finally, Attachments Q, R, S, U and V of the Joint OATT are attachments that apply only to service in the PEF zone.

At the merger, DEC, PEC and PEF each will continue to operate their own control areas and will continue to use their own OASIS sites. Transmission customers will take transmission service under the Joint OATT, but they will use the DEC OASIS site for transmission service in the DEC zone and the PEC and PEF OASIS sites for transmission service in the PEC and PEF zones. If transmission service involves one or more of the DEC, PEC or PEF zones, the transmission customer will use the OASIS sites of the applicable zones and comply with the zonal OATT provisions of the applicable zones. In this manner, the

process for obtaining transmission service across more than one zone will be much like it was before the merger, except that the requirements are all contained in a single OATT and, most importantly, transmission customers will not pay pancaked transmission rates.

II. Description of the Rates to be Charged

The rates to be charged for transmission in each zone under the Joint OATT are the same rates charged by DEC, PEC and PEF under the respective current OATTs. PEC and PEF recover their transmission costs through formula rates that have been approved by this Commission in prior proceedings. Those formulas are not being changed under the Joint OATT. As explained above, DEC has made a filing in Docket No. ER11-2895-000 to recover its transmission costs through a formula rate under its OATT. DEC will, therefore, recover its transmission costs through the formula rate that is ultimately approved by the Commission in that proceeding.

III. Proposed Effective Date and Request for Waivers

A. Effective Date

Applicants request that the Joint OATT become effective upon the consummation of the Transaction. Applicants respectfully request waiver of the Commission's 120-day notice requirement in section 35.3 of the Commission's regulations, 18 C.F.R. § 35.3, to permit the Joint OATT to become effective upon such date. Good cause exists to grant this requested waiver because the waiver is limited in scope, will have no undesirable consequences, and will ensure that the effective date of the Joint OATT coincides with the effective date of the Transaction and that the Joint OATT will not become effective unless the Transaction is consummated.

B. Filing Requirements

Under the zonal rate approach, the existing rates for DEC, PEC and PEF will continue to apply in each zone. For this reason, this filing does not involve a rate increase within the meaning of section 35.13(a)(2)(iii) of the Commission's regulations, 18 C.F.R. § 35.13(a)(2)(iii), and the Applicants are filing the Joint OATT pursuant to the abbreviated procedures set forth in that provision. Further, no expenses or costs in connection with this filing are illegal, duplicative, or unnecessary within the meaning of 18 C.F.R. § 35.13(b)(7). To the extent that the

See Fla. Power Corp., Docket No. ER08-105-000, Letter Order (Dec. 17, 2007); Carolina Power & Light Co., Docket No. ER08-889-000 and -001, Letter Order (June 27, 2008).

enclosed materials and information do not meet the filing requirements of the Commission's regulations, Applicants respectfully request that the Commission grant any necessary waivers.

C. eTariff

Finally, Applicants respectfully request a limited partial waiver of the Commission's eTariff filing requirements established in Order No. 714 and sections 35.7 and 35.9 of the Commission's Regulations. The request for waiver is limited in that it applies to a filing which is not a typical OATT amendment, but rather is conditioned upon consummation of the Transaction. The request for waiver is partial because it merely seeks a delay in the eTariff filing requirements. Applicants commit that they will submit the Joint OATT, as it may be revised by the Commission, in a compliance filing that fully meets the Commission's eTariff requirements before the Transaction is consummated and before the Joint OATT becomes effective.

Good cause exists for the Commission to grant the requested limited partial waiver because, as discussed below, (a) delaying the required eTariff filing offers certain important beneficial effects while creating no harm, and (b) such a waiver does not intrude into the purpose or scope of the eTariff filing requirements as contemplated by Order No. 714.

Among other benefits, granting the requested waiver will enhance certainty and avoid confusion for transmission service customers of DEC, PEC and PEF, as well as for other potential intervenors in these proceedings. Each of the three companies has on file with the Commission an eTariff baseline version of its OATT; DEC also has pending its DEC Formula Rate Filing. Customers of each of these companies rely on these Commission-accepted tariffs for information regarding the current rates, terms and conditions for the applicable transmission service. They also rely on eTariff filings for notice of a proposed material amendment to those rates, terms and conditions, for example the pending DEC Formula Rate Filing. Here, the Joint OATT, which blends three existing tariffs into one and provides for non-pancaked rates, is entirely conditioned on consummation of the Transaction. Cancellation of the existing tariffs (even contingently) at this time, on the basis of a Joint OATT that will go into effect under these circumstances, would be a recipe for confusion, uncertainty and potential misunderstandings for customers of DEC, PEC and PEF. Moreover, there is no eTariff mechanism for posting explanatory language that might provide customers and others guidance as to the nature of the Joint OATT, its conditional status, the zonal rates, the re-numerating of certain attachments, etc.

Granting the requested waiver will not compromise the purpose or scope of the eTariff filing requirements. The instant eFiling provides full transparency for any and all who wish to scrutinize the Joint OATT. Commission staff, customers,

state regulators and other potential intervenors have the ability to review the eFiled clean copy of the Joint OATT as well as blackline versions that specifically compare the Joint OATT to the existing OATTs of DEC, PEC and PEF, respectively. In fact, given that the Joint OATT combines the provisions of three existing OATTs, examination of this particular filing in this format likely provides a more clear and coherent mechanism for understanding and analyzing the entirety of the Joint OATT proposal than might be the case under the eTariff requirements.

The instant waiver request recognizes that "the tariff itself is an organically changing document." Applicants commit that, before consummation of the Transaction and before the Joint OATT goes into effect, they will submit the Joint OATT, as it may be revised by the Commission, in a compliance filing that fully meets the Commission's eTariff requirements. In this way, "Commission staff, as well as the public, [will be able] to access all or portions of [the] company[ies'] tariffs and rate schedules compiled using date, text, and status criteria" and the objectives of Order No. 714 will have been met. ¹⁸ For these reasons, Applicants respectfully request that the limited partial waiver be granted.

IV. Communications

Please place the following individuals on the official service list for this proceeding.

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¹⁷ Order No. 714 at P 10.

¹⁸ Id. at P 26; see also N. States Power Co., 65 FERC ¶ 61,351 at 62,851 (1993) (discussing "elevat[ing] form over substance [which] would have resulted in a waste of resources by the Commission and the parties").

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V. Persons Served

Pursuant to 18 C.F.R. § 385.2010(f)(i) of the Commission's regulations, a copy of this filing is being served by electronic means on all customers taking service under the DEC OATT, the PEC OATT and the PEF OATT, as well as the North Carolina Utilities Commission, the Public Service Commission of South Carolina, the South Carolina Office of Regulatory Staff, and the Florida Public Service Commission. Specifically, on the date of this filing, Applicants will send an e-mail that notifies OATT transmission customers and the state commissions that this filing is available from both the Duke Energy FERC compliance website at http://www.ferc.duke-energy.com and the Progress Energy corporate website at http://www.progress-energy.com/aboutenergy/ferc/index.asp.

VI. Contents of Filing

Included in this filing are the following materials:

- This transmittal letter describing the amendments and the requested approvals;
- Appendix A Clean version of the Joint OATT;
- Appendix B Blacklined version comparing the Joint OATT to the DEC OATT (excluding those Attachment pages in which no substantive changes were made);
- Appendix C Blacklined version comparing the Joint OATT to the PEC OATT (excluding those Attachment pages in which no substantive changes were made); and

^{*} Designated for service.

> Appendix D – Blacklined version comparing the Joint OATT to the PEF OATT (excluding those Attachment pages in which no substantive changes were made).

VII. Conclusion

For the reasons stated herein, Applicants respectfully request that the Commission accept the Joint OATT effective upon the consummation of the Transaction.

Respectfully submitted,

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Enclosures

Appendix A

Clean Version of

<u>Joint Open Access Transmission Tariff</u>

JOINT

OPEN ACCESS TRANSMISSION TARIFF

OF

DUKE ENERGY CAROLINAS, LLC FLORIDA POWER CORPORATION

AND

CAROLINA POWER & LIGHT COMPANY

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I. COMMON SERVICE PROVISIONS

1 Definitions

1.1 Affiliate:

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.

1.2 Ancillary Services:

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.

1.3 Annual Period:

The period of time coinciding with the calendar year beginning 12:00 a.m. on January 1 and ending 12:00 midnight on December 31, or a period of time that covers 12 consecutive months.

1.4 Annual Transmission Costs:

The total annual cost of the Transmission System for purposes of Network

Integration Transmission Service shall be the amount specified in Attachment H

until amended by the Transmission Provider or modified by the Commission.

1.5 Application:

A request by an Eligible Customer for transmission service pursuant to the provisions of the Tariff.

1.6 Commission:

The Federal Energy Regulatory Commission.

1.7 Completed Application:

An Application that satisfies all of the information and other requirements of the Tariff, including any required deposit.

1.8 Control Area:

An electric power system or combination of electric power systems to which a common automatic generation control scheme is applied in order to:

- (1) match, at all times, the power output of the generators within the electric power system(s) and capacity and energy purchased from entities outside the electric power system(s), with the load within the electric power system(s);
- (2) maintain scheduled interchange with other Control Areas, within the limits of Good Utility Practice;
- (3) maintain the frequency of the electric power system(s) within reasonable limits in accordance with Good Utility Practice; and
- (4) provide sufficient generating capacity to maintain operating reserves in accordance with Good Utility Practice.

1.9 CP&L:

Carolina Power & Light Company.

1.10 Curtailment:

A reduction in firm or non-firm transmission service in response to a transfer capability shortage as a result of system reliability conditions.

1.11 DEC

Duke Energy Carolinas, LLC.

1.12 Delivering Party:

The entity supplying capacity and energy to be transmitted at Point(s) of Receipt.

1.13 Designated Agent:

Any entity that performs actions or functions on behalf of the Transmission

Provider, an Eligible Customer, or the Transmission Customer required under the

Tariff.

1.14 Direct Assignment Facilities:

Facilities or portions of facilities that are constructed by the Transmission

Provider for the sole use/benefit of a particular Transmission Customer requesting
service under the Tariff. Direct Assignment Facilities shall be specified in the

Service Agreement that governs service to the Transmission Customer and shall
be subject to Commission approval.

1.15 Eligible Customer:

(i) Any electric utility (including the Transmission Provider and any power marketer), Federal power marketing agency, or any person generating electric energy for sale for resale is an Eligible Customer under the Tariff. Electric energy sold or produced by such entity may be electric energy produced in the United States, Canada or Mexico. However, with respect to transmission service that the Commission is prohibited from ordering by Section 212(h) of the Federal Power Act, such entity is eligible only if the service is provided pursuant to a state requirement that the Transmission Provider offer the unbundled transmission service, or pursuant to a voluntary offer of such service by the

Transmission Provider. (ii) Any retail customer taking unbundled transmission service pursuant to a state requirement that the Transmission Provider offer the transmission service, or pursuant to a voluntary offer of such service by the Transmission Provider, is an Eligible Customer under the Tariff.

1.16 Facilities Study:

An engineering study conducted by the Transmission Provider to determine the required modifications to the Transmission Provider's Transmission System, including the cost and scheduled completion date for such modifications, that will be required to provide the requested transmission service.

1.17 Firm Point-To-Point Transmission Service:

Transmission Service under this Tariff that is reserved and/or scheduled between specified Points of Receipt and Delivery pursuant to Part II of this Tariff.

1.18 FPC:

Florida Power Corporation.

1.19 FRCC:

The Florida Reliability Coordinating Council, a regional reliability organization of NERC.

1.20 Generator Service:

Generator Regulation Service and Delivery Scheduling and Balancing Service, as provided in Section 3 and Schedule 3A.

1.21 Good Utility Practice:

Any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility 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, including those practices required by Federal Power Act section 215(a)(4).

1.22 Hourly Period:

A period of time consisting of 60 consecutive minutes beginning at the top of each hour.

1.23 Interruption:

A reduction in non-firm transmission service due to economic reasons pursuant to Section 14.7.

1.24 Load Ratio Share:

In the CP&L Zone and in the FPC Zone, Load Ratio Share means the ratio of a Transmission Customer's Network Load to the Transmission Provider's total load computed in accordance with Sections 34.2 and 34.3 of the Network Integration Transmission Service under Part III of the Tariff.

In the DEC Zone, Load Ratio Share means the ratio of a Transmission Customer's Network Load to the Transmission Provider's Monthly Transmission System Peak computed in accordance with Sections 34.2 and 34.3 of the Network Integration Transmission Service under Part III of the Tariff.

1.25 Load Shedding:

The systematic reduction of system demand by temporarily decreasing load in response to transmission system or area capacity shortages, system instability, or voltage control considerations under Part III or IV of the Tariff.

1.26 Long-Term Firm Point-To-Point Transmission Service:

Firm Point-To-Point Transmission Service under Part II of the Tariff or Network Contract Demand Transmission Service under Part IV of the Tariff with a term of one year or more.

1.27 Monthly Period:

The period of time which coincides with the calendar month beginning on 12:00 a.m. on the first day of the month and ending 12:00 midnight on the last day of the month, or a period of time that covers 30 consecutive days.

1.28 Native Load Customers:

The wholesale and retail power customers of the Transmission Provider on whose behalf the Transmission Provider, by statute, franchise, regulatory requirement, or contract, has undertaken an obligation to construct and operate the Transmission Provider's system to meet the reliable electric needs of such customers.

1.29 NERC:

The North American Electric Reliability Council.

1.30 Network Contract Demand Customer:

An entity receiving transmission service pursuant to the terms of Part IV of the Tariff.

1.31 Network Contract Demand Transmission Service:

The transmission service provided under Part IV of the Tariff.

1.32 Network Customer:

An entity receiving transmission service pursuant to the terms of the Transmission Provider's Network Integration Transmission Service under Part III of the Tariff.

1.33 Network Integration Transmission Service:

The transmission service provided under Part III of the Tariff.

1.34 Network Load:

Transmission Service under Part III of the Tariff. The Network Customer's Network Load shall include all load served by the output of any Network Resources designated by the Network Customer. A Network Customer may elect to designate less than its total load as Network Load but may not designate only part of the load at a discrete Point of Delivery. Where an Eligible Customer has elected not to designate a particular load at discrete points of delivery as Network Load, the Eligible Customer is responsible for making separate arrangements under Parts II or IV of the Tariff for any Point-To-Point Transmission Service or Network Contract Demand Transmission Service that may be necessary for such non-designated load.

1.35 Network Operating Agreement:

An executed agreement that contains the terms and conditions under which the Network Customer shall operate its facilities and the technical and operational matters associated with the implementation of Network Integration Transmission Service or Network Contract Demand Transmission Service under Parts III or IV, respectively, of the Tariff.

1.36 Network Operating Committee:

A group made up of representatives from the Network Customer(s) and the Transmission Provider established to coordinate operating criteria and other technical considerations required for implementation of Network Integration Transmission Service or Network Contract Demand Transmission Service under Parts III or IV, respectively, of this Tariff.

1.37 Network Resource:

Any designated generating resource owned, purchased or leased by a Network

Customer under the Network Integration Transmission Service or Network

Contract Demand Transmission Service portions of the Tariff. Network

Resources do not include any resource, or any portion thereof, that is committed

for sale to third parties or otherwise cannot be called upon to meet the Network

Customer's Network Load on a non-interruptible basis, except for purposes of

fulfilling obligations under a reserve sharing program.

1.38 Network Upgrades:

Modifications or additions to transmission-related facilities that are integrated with and support the Transmission Provider's overall Transmission System for the general benefit of all users of such Transmission System.

1.39 Non-Firm Point-To-Point Transmission Service:

Point-To-Point Transmission Service under the Tariff that is reserved and scheduled on an as-available basis and is subject to Curtailment or Interruption as set forth in Section 14.7 under Part II of this Tariff. Non-Firm Point-To-Point Transmission Service is available on a stand-alone basis for periods ranging from one hour to one month.

1.40 Non-Firm Sale:

An energy sale for which receipt or delivery may be interrupted for any reason or no reason, without liability on the part of either the buyer or seller.

1.41 Open Access Same-Time Information System (OASIS):

The information system and standards of conduct contained in Part 37 and Part 38 of the Commission's regulations and all additional requirements implemented by subsequent Commission orders dealing with OASIS.

1.42 Part I:

Tariff Definitions and Common Service Provisions contained in Sections 2 through 12.

1.43 Part II:

Tariff Sections 13 through 27 pertaining to Point-To-Point Transmission Service in conjunction with the applicable Common Service Provisions of Part I and appropriate Schedules and Attachments.

1.44 Part III:

Tariff Sections 28 through 35 pertaining to Network Integration Transmission Service in conjunction with the applicable Common Service Provisions of Part I and appropriate Schedules and Attachments.

1.45 Part IV:

Tariff Sections 36 through 46 pertaining to Network Contract Demand

Transmission Service in conjunction with the applicable Common Service

Provisions of Part I and appropriate Schedules and Attachments.

1.46 Parties:

The Transmission Provider and the Transmission Customer receiving service under the Tariff.

1.47 Point(s) of Delivery:

Point(s) on the Transmission Provider's Transmission System where capacity and energy transmitted by the Transmission Provider will be made available to the Receiving Party under Part II of the Tariff. The Point(s) of Delivery shall be specified in the Service Agreements for Long-Term Firm Point-To-Point Transmission Service.

1.48 Point(s) of Receipt:

Point(s) of interconnection on the Transmission Provider's Transmission System where capacity and energy will be made available to the Transmission Provider by the Delivering Party under Part II of the Tariff. The Point(s) of Receipt shall be specified in the Service Agreement for Long-Term Firm Point-To-Point Transmission Service.

1.49 Point-To-Point Transmission Service:

The reservation and transmission of capacity and energy on either a firm or non-firm basis from the Point(s) of Receipt to the Point(s) of Delivery under Part II of the Tariff.

1.50 Power Purchaser:

The entity that is purchasing the capacity and energy to be transmitted under the Tariff.

1.51 Pre-Confirmed Application:

An Application that commits the Eligible Customer to execute a Service Agreement upon receipt of notification that the Transmission Provider can provide the requested Transmission Service.

1.52 Receiving Party:

The entity receiving the capacity and energy transmitted by the Transmission Provider to Point(s) of Delivery.

1.53 Regional Transmission Group (RTG):

A voluntary organization of transmission owners, transmission users and other entities approved by the Commission to efficiently coordinate transmission planning (and expansion), operation and use on a regional (and interregional) basis.

1.54 Reserved Capacity:

The maximum amount of capacity and energy that the Transmission Provider agrees to transmit for the Transmission Customer over the Transmission Provider's Transmission System between the Point(s) of Receipt and the Point(s) of Delivery under Part II of the Tariff or from Network Resources to Points of Delivery under Part IV of the Tariff. Reserved Capacity shall be expressed in terms of whole megawatts on a sixty (60) minute interval (commencing on the clock hour) basis.

1.55 **SERC:**

The Southeastern Electric Reliability Corporation, a regional reliability organization of NERC.

1.56 Service Agreement:

The initial agreement and any amendments or supplements thereto entered into by the Transmission Customer and the Transmission Provider for service under the Tariff.

1.57 Service Commencement Date:

The date the Transmission Provider begins to provide service pursuant to the terms of an executed Service Agreement, or the date the Transmission Provider begins to provide service in accordance with Section 15.3, Section 29.1 or Section 37.8 under the Tariff.

1.58 Short-Term Firm Point-To-Point Transmission Service:

Firm Point-To-Point Transmission Service under Part II of the Tariff or Network Contract Demand Transmission Service under Part IV of the Tariff with a term of less than one year.

1.59 System Condition:

A specified condition on the Transmission Provider's system or on a neighboring system, such as a constrained transmission element or flowgate, that may trigger Curtailment of Long-Term Firm Point-To-Point Transmission Service using the curtailment priority pursuant to Section 13.6. Such conditions must be identified in the Transmission Customer's Service Agreement.

1.60 System Impact Study:

An assessment by the Transmission Provider of (i) the adequacy of the

Transmission System to accommodate a request for either Firm Point-To-Point

Transmission Service, Network Integration Transmission Service or Network

Contract Demand Transmission Service and (ii) whether any additional costs may be incurred in order to provide transmission service.

1.61 Third-Party Sale:

Any sale for resale in interstate commerce to a Power Purchaser that is not designated as part of Network Load under the Network Integration Transmission Service or a Point of Delivery under Network Contract Demand Service.

1.62 Time Periods:

The Daily Period is defined as the period of time coinciding with the 24-hour calendar day beginning 12:00 a.m. and ending 12:00 midnight (00:00 to 24:00 military time).

In the DEC Zone, the daily sliding period is the 24 hour period of time beginning at 11:00 p.m., 12:00 midnight, or 1:00 a.m. (23:00, 24:00 or 01:00 military time). On-peak days are defined as Monday through Friday of each week with the exception of the following holidays which are considered off-peak days: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. All Saturdays and Sundays are considered off-peak days. In the CP&L Zone, Good Friday is also considered an off-peak day.

On-peak hours are the hours from 7 a.m. through 11 p.m. (07:00 through 23:00 military time) during on-peak days. All other hours are considered off-peak hours.

1.63 Transmission Customer:

Any Eligible Customer (or its Designated Agent) that (i) executes a Service Agreement, or (ii) requests in writing that the Transmission Provider file with the Commission, a proposed unexecuted Service Agreement to receive transmission service under Part II or Part IV of the Tariff. This term is used in the Part I

Common Service Provisions to include customers receiving transmission service under Part II, Part III or Part IV of this Tariff.

1.64 Transmission Provider:

The public utility (or its Designated Agent) that owns, controls, or operates facilities used for the transmission of electric energy in interstate commerce and provides transmission service under the Tariff as follows: (a) CP&L is the Transmission Provider in the CP&L Zone; (b) FPC is the Transmission Provider in the FPC Zone; and (c) DEC is the Transmission Provider in the DEC Zone.

1.65 Transmission Provider's Monthly Transmission System Peak:

The maximum firm usage in a Zone of the Transmission Provider's Transmission System as determined under Section 34.3.

1.66 Transmission Service:

Point-To-Point Transmission Service provided under Part II of the Tariff on a firm and non-firm basis.

1.67 Transmission System:

The facilities owned, controlled or operated by the Transmission Provider in a

Zone that are used to provide transmission service under Part II, Part III and Part

IV of the Tariff.

1.68 Weekly Period:

Weekly Period is the period of seven consecutive days coinciding with the calendar week beginning 12:00 a.m. Monday morning and ending 12:00 midnight on Sunday, or a period of time that covers seven consecutive days.

1.69 Zone:

The Transmission System of DEC, the Transmission System of CP&L, or the Transmission System of FPC, as applicable.

2 Initial Allocation and Renewal Procedures

2.1 Initial Allocation of Available Transfer Capability:

For purposes of determining whether existing capability on the Transmission Provider's Transmission System is adequate to accommodate a request for firm service under this Tariff, all Completed Applications for new firm transmission service received during the initial sixty (60) day period commencing with the effective date of the Tariff will be deemed to have been filed simultaneously. A lottery system conducted by an independent party shall be used to assign priorities for Completed Applications filed simultaneously. All Completed Applications for firm transmission service received after the initial sixty (60) day period shall be assigned a priority pursuant to Section 13.2.

2.2 Reservation Priority For Existing Firm Service Customers:

Existing firm service customers (wholesale requirements and transmission-only, with a contract term of five years or more), have the right to continue to take transmission service from the Transmission Provider when the contract expires, rolls over or is renewed. This transmission reservation priority is independent of whether the existing customer continues to purchase capacity and energy from the Transmission Provider or elects to purchase capacity and energy from another supplier. If at the end of the contract term, the Transmission Provider's Transmission System cannot accommodate all of the requests for transmission service, the existing firm service customer must agree to accept a contract term at

least equal to a competing request by any new Eligible Customer and to pay the current just and reasonable rate, as approved by the Commission, for such service; provided that, the firm service customer shall have a right of first refusal at the end of such service only if the new contract is for five years or more. The existing firm service customer must provide notice to the Transmission Provider whether it will exercise its right of first refusal no less than one year prior to the expiration date of its transmission service agreement. This transmission reservation priority for existing firm service customers is an ongoing right that may be exercised at the end of all firm contract terms of five years or longer. Service agreements subject to a right of first refusal entered into prior to October 15, 2008 for CP&L, April 1, 2009 for DEC, and July 25, 2008 for FPC or associated with a transmission service request received prior to July 13, 2007, unless terminated, will become subject to the five year/one year requirement on the first rollover date after October 15, 2008 for CP&L, April 1, 2009 for DEC, and July 25, 2008 for FPC; provided that, the one-year notice requirement shall apply to such service agreements with five years or more left in their terms as of October 15, 2008 for CP&L, April 1, 2009 for DEC, and July 25, 2008 for FPC.

3 Ancillary Services and Generator Services

Ancillary Services and Generator Services are needed with transmission service to maintain reliability within and among the Control Areas affected by the transmission service. The Transmission Provider is required to provide (or offer to arrange with the local Control Area operator as discussed below), and the Transmission Customer is required to purchase, the following Ancillary Services (i) Scheduling, System Control

and Dispatch, and (ii) Reactive Supply and Voltage Control from Generation or Other Sources.

The Transmission Provider is required to offer to provide (or offer to arrange with the local Control Area operator as discussed below) the following Ancillary Services only to the Transmission Customer serving load within the Transmission Provider's Control Area (i) Regulation and Frequency Response, (ii) Energy Imbalance, (iii) Operating Reserve - Spinning, and (iv) Operating Reserve - Supplemental. The Transmission Customer serving load within the Transmission Provider's Control Area is required to acquire these Ancillary Services, whether from the Transmission Provider, from a third party, or by self-supply.

The Transmission Provider is required to provide (or offer to arrange with the local Control Area Operator as discussed below), to the extent it is physically feasible to do so from its resources or from resources available to it, Generator Imbalance Service when Transmission Service is used to deliver energy from a generator located within its Control Area. The Transmission Customer using Transmission Service to deliver energy from a generator located within the Transmission Provider's Control Area is required to acquire Generator Imbalance Service, whether from the Transmission Provider, from a third party, or by self-supply.

For Transmission Service provided in the FPC Zone, the Transmission Provider is required to offer to provide (or offer to arrange with the local Control Area operator as discussed below) the following Generator Services: (i) Generator Regulation Service to the Transmission Customer serving load outside the Transmission Provider's Control Area from generation located inside the Transmission Provider's Control Area; and (ii)

Delivery Scheduling and Balancing Service to the Transmission Customer that takes energy from generation located inside the Transmission Provider's Control Area.

The Transmission Customer may not decline the Transmission Provider's offer of Ancillary Services or Generator Services unless it demonstrates that it has acquired the Ancillary Services or Generator Services from another source. The Transmission Customer must list in its Application which Ancillary Services and Generator Services it will purchase from the Transmission Provider. A Transmission Customer that exceeds its firm reserved capacity at any Point of Receipt or Point of Delivery or an Eligible Customer that uses Transmission Service at a Point of Receipt or Point of Delivery that it has not reserved is required to pay for all of the Ancillary Services identified in this section that were provided by the Transmission Provider associated with the unreserved service. The Transmission Customer or Eligible Customer will pay for Ancillary Services based on the amount of transmission service it used but did not reserve.

If the Transmission Provider is a public utility providing transmission service but is not a Control Area operator, it may be unable to provide some or all of the Ancillary Services and Generator Services. In this case, the Transmission Provider can fulfill its obligation to provide Ancillary Services and Generator Services by acting as the Transmission Customer's agent to secure these Ancillary Services and Generator Services from the Control Area operator. The Transmission Customer may elect to (i) have the Transmission Provider act as its agent, (ii) secure the Ancillary Services and Generator Services directly from the Control Area operator, or (iii) secure the Ancillary Services and Generator Services (discussed in Schedules 3, 3A, 4, 5, 6 and 13) from a third party or by self-supply when technically feasible.

The Transmission Provider shall specify the rate treatment and all related terms and conditions in the event of an unauthorized use of Ancillary Services or Generator Services by the Transmission Customer.

The specific Ancillary Services and Generator Services, prices and/or compensation methods are described on the Schedules that are attached to and made a part of the Tariff. Three principal requirements apply to discounts for Ancillary Services and Generator Services provided by the Transmission Provider in conjunction with its provision of transmission service as follows: (1) any offer of a discount made by the Transmission Provider must be announced to all Eligible Customers solely by posting on the OASIS, (2) any customer-initiated requests for discounts (including requests for use by one's wholesale merchant or an Affiliate's use) must occur solely by posting on the OASIS, and (3) once a discount is negotiated, details must be immediately posted on the OASIS. A discount agreed upon for an Ancillary Service or Generator Service must be offered for the same period to all Eligible Customers on the Transmission Provider's system. Sections 3.1 through 3.7 below list the seven Ancillary Services and Generator Services.

3.1 Scheduling, System Control and Dispatch Service:

The rates and/or methodology are described in Schedule 1.

3.2 Reactive Supply and Voltage Control from Generation or Other Sources Service:

The rates and/or methodology are described in Schedule 2.

3.3 Regulation and Frequency Response Service:

Where applicable the rates and/or methodology are described in Schedule 3.

3.3A Generator Regulation Service:

Where applicable the rates and/or methodology are described in Schedule 3A.

3.4 Energy Imbalance Service:

Where applicable the rates and/or methodology are described in Schedule 4.

3.5 Operating Reserve - Spinning Reserve Service:

Where applicable the rates and/or methodology are described in Schedule 5.

3.6 Operating Reserve - Supplemental Reserve Service:

Where applicable the rates and/or methodology are described in Schedule 6.

3.7 Generator Imbalance Service:

Where applicable the rates and/or methodology are described in Schedule 13.

3.8 Credits for Energy and Generation Imbalance Penalty Revenues:

Where applicable the rates and/or methodology are described in Schedules 4 and 13.

4 Open Access Same-Time Information System (OASIS)

4.1 Terms and Conditions

Terms and conditions regarding Open Access Same-Time Information System and standards of conduct are set forth in 18 C.F.R. § 37 of the Commission's regulations (Open Access Same-Time Information System and Standards of Conduct for Public Utilities) and 18 C.F.R. § 38 of the Commission's regulations (Business Practice Standards and Communication Protocols for Public Utilities). In the event available transfer capability as posted on the OASIS is insufficient to accommodate a request for firm transmission service, additional studies may be required as provided by this Tariff pursuant to Sections 19, 32, and 40.

The Transmission Provider shall post on OASIS and its public website an electronic link to all rules, standards and practices that (i) relate to the terms and conditions of transmission service, (ii) are not subject to a North American Energy Standards Board (NAESB) copyright restriction, and (iii) are not otherwise included in this Tariff. The Transmission Provider shall post on OASIS and on its public website an electronic link to the NAESB website where any rules, standards and practices that are protected by copyright may be obtained. The Transmission Provider shall also post on OASIS and its public website an electronic link to a statement of the process by which the Transmission Provider shall add, delete or otherwise modify the rules, standards and practices that are not included in this Tariff. Such process shall set forth the means by which the Transmission Provider shall provide reasonable advance notice to Transmission Customers and Eligible Customers of any such additions, deletions or modifications, the associated effective date, and any additional implementation procedures that the Transmission Provider deems appropriate.

4.2 NAESB WEQ Business Practice Standards

The following business practice and electronic communication standards promulgated by the North American Energy Standards Board (NAESB)

Wholesale Electric Quadrant (WEQ) are incorporated herein by reference:

- Open Access Same-Time Information Systems (OASIS), Version 1.5 (WEQ-001, Version 002.1, March 11, 2009, with minor corrections applied May 29, 2009 and September 8, 2009), with the exception of Standards 001-0.1, 001-0.9 through 001-0.13, 001-1.0, 001-9.7, 001-14.1.3, and 001-15.1.2;
- Open Access Same-Time Information Systems (OASIS) Standards & Communications Protocols, Version 1.5 (WEQ-002, Version 002.1, March 11, 2009, with minor corrections applied May 29, 2009 and September 8, 2009);

- Open Access Same-Time Information Systems (OASIS) Data Dictionary, Version 1.5 (WEQ-003, Version 002.1, March 11, 2009, with minor corrections applied May 29, 2009 and September 8, 2009);
- Coordinate Interchange (WEQ-004, Version 002.1, March 11, 2009, with minor corrections applied May 29, 2009 and September 8, 2009);
- Area Control Error (ACE) Equation Special Cases (WEQ-005, Version 002.1, March 11, 2009, with minor corrections applied May 29, 2009 and September 8, 2009);
- Manual Time Error Correction (WEQ-006, Version 001, Oct. 31, 2007, with minor corrections applied on Nov. 16, 2007);
- Inadvertent Interchange Payback (WEQ-007, Version 002.1, March 11, 2009, with minor corrections applied May 29, 2009 and September 8, 2009);
- Transmission Loading Relief Eastern Interconnection (WEQ-008, Version 002.1, March 11, 2009, with minor corrections applied May 29, 2009 and September 8, 2009);
- Gas/Electric Coordination (WEQ-011, Version 002.1, March 11, 2009, with minor corrections applied May 29, 2009 and September 8, 2009);
- Public Key Infrastructure (PKI) (WEQ-012, Version 002.1, March 11, 2009, with minor corrections applied May 29, 2009 and September 8, 2009); and
- Open Access Same-Time Information Systems (OASIS) Implementation Guide, Version 1.5 (WEQ-013, Version 002.1, March 11, 2009, with minor corrections applied May 29, 2009 and September 8, 2009).

5 Local Furnishing Bonds

5.1 Transmission Providers That Own Facilities Financed by Local Furnishing Bonds:

This provision is applicable only to Transmission Providers that have financed facilities for the local furnishing of electric energy with tax-exempt bonds, as described in Section 142(f) of the Internal Revenue Code ("local furnishing bonds"). Notwithstanding any other provision of this Tariff, the Transmission Provider shall not be required to provide transmission service to any Eligible Customer pursuant to this Tariff if the provision of such transmission service

would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance the Transmission Provider's facilities that would be used in providing such transmission service.

5.2 Alternative Procedures for Requesting Transmission Service:

- (i) If the Transmission Provider determines that the provision of transmission service requested by an Eligible Customer would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance its facilities that would be used in providing such transmission service, it shall advise the Eligible Customer within thirty (30) days of receipt of the Completed Application.
- transmission service referred to in (i) by tendering an application under

 Section 211 of the Federal Power Act, the Transmission Provider, within

 ten (10) days of receiving a copy of the Section 211 application, will

 waive its rights to a request for service under Section 213(a) of the Federal

 Power Act and to the issuance of a proposed order under Section 212(c) of

 the Federal Power Act. The Commission, upon receipt of the

 Transmission Provider's waiver of its rights to a request for service under

 Section 213(a) of the Federal Power Act and to the issuance of a proposed

 order under Section 212(c) of the Federal Power Act, shall issue an order

 under Section 211 of the Federal Power Act. Upon issuance of the order

 under Section 211 of the Federal Power Act, the Transmission Provider

 shall be required to provide the requested transmission service in

 accordance with the terms and conditions of this Tariff.

6 Reciprocity

A Transmission Customer receiving transmission service under this Tariff agrees to provide comparable transmission service that it is capable of providing to the Transmission Provider on similar terms and conditions over facilities used for the transmission of electric energy owned, controlled or operated by the Transmission Customer and over facilities used for the transmission of electric energy owned, controlled or operated by the Transmission Customer's corporate Affiliates. A Transmission Customer that is a member of, or takes transmission service from, a power pool, Regional Transmission Group, Regional Transmission Organization (RTO), Independent System Operator (ISO) or other transmission organization approved by the Commission for the operation of transmission facilities also agrees to provide comparable transmission service to the transmission-owning members of such power pool and Regional Transmission Group, RTO, ISO or other transmission organization on similar terms and conditions over facilities used for the transmission of electric energy owned, controlled or operated by the Transmission Customer and over facilities used for the transmission of electric energy owned, controlled or operated by the Transmission Customer's corporate Affiliates.

This reciprocity requirement applies not only to the Transmission Customer that obtains transmission service under the Tariff, but also to all parties to a transaction that involves the use of transmission service under the Tariff, including the power seller, buyer and any intermediary, such as a power marketer. This reciprocity requirement also applies to any Eligible Customer that owns, controls or operates transmission facilities that uses an intermediary, such as a power marketer, to request transmission service under the Tariff. If the Transmission Customer does not own, control or operate

transmission facilities, it must include in its Application a sworn statement of one of its duly authorized officers or other representatives that the purpose of its Application is not to assist an Eligible Customer to avoid the requirements of this provision.

7 Billing and Payment

7.1 Billing Procedure:

Within a reasonable time after the first day of each month, the Transmission

Provider shall submit an invoice to the Transmission Customer for the charges for all services furnished under the Tariff during the preceding month. The invoice shall be paid by the Transmission Customer within twenty (20) days of receipt.

All payments shall be made in immediately available funds payable to the Transmission Provider, or by wire transfer to a bank named by the Transmission Provider.

7.2 Interest on Unpaid Balances:

Interest on any unpaid amounts (including amounts placed in escrow) shall be calculated in accordance with the methodology specified for interest on refunds in the Commission's regulations at 18 C.F.R. § 35.19a(a)(2)(iii). Interest on delinquent amounts shall be calculated from the due date of the bill to the date of payment. When payments are made by mail, bills shall be considered as having been paid on the date of receipt by the Transmission Provider.

7.3 Customer Default:

In the event the Transmission Customer fails, for any reason other than a billing dispute as described below, to make payment to the Transmission Provider on or before the due date as described above, and such failure of payment is not corrected within thirty (30) calendar days after the Transmission Provider notifies

the Transmission Customer to cure such failure, a default by the Transmission

Customer shall be deemed to exist. Upon the occurrence of a default, the

Transmission Provider may initiate a proceeding with the Commission to

terminate service but shall not terminate service until the Commission so

approves any such request. In the event of a billing dispute between the

Transmission Provider and the Transmission Customer, the Transmission

Provider will continue to provide service under the Service Agreement as long as
the Transmission Customer (i) continues to make all payments not in dispute, and

(ii) pays into an independent escrow account the portion of the invoice in dispute,
pending resolution of such dispute. If the Transmission Customer fails to meet
these two requirements for continuation of service, then the Transmission

Provider may provide notice to the Transmission Customer of its intention to
suspend service in sixty (60) days, in accordance with Commission policy.

8 Accounting for the Transmission Provider's Use of the Tariff

The Transmission Provider shall record the following amounts, as outlined below.

8.1 Transmission Revenues:

Include in a separate operating revenue account or subaccount the revenues it receives from Transmission Service when making Third-Party Sales under Part II or Part IV of the Tariff.

8.2 Study Costs and Revenues:

Include in a separate transmission operating expense account or subaccount, costs properly chargeable to expense that are incurred to perform any System Impact Studies or Facilities Studies which the Transmission Provider conducts to determine if it must construct new transmission facilities or upgrades necessary

for its own uses, including making Third-Party Sales under the Tariff; and include in a separate operating revenue account or subaccount the revenues received for System Impact Studies or Facilities Studies performed when such amounts are separately stated and identified in the Transmission Customer's billing under the Tariff.

9 Regulatory Filings

9.1 Federal Power Act Rights Retained

Except as provided in Schedule 10-B, Exhibit A, Section 3(h), (a) nothing contained in the Tariff or any Service Agreement shall be construed as affecting in any way the right of the Transmission Provider to unilaterally make application to the Commission for a change in rates, terms and conditions, charges, classification of service, Service Agreement, rule or regulation under Section 205 of the Federal Power Act and pursuant to the Commission's rules and regulations promulgated thereunder, and (b) nothing contained in the Tariff or any Service Agreement shall be construed as affecting in any way the ability of any Party receiving service under the Tariff to exercise its rights under the Federal Power Act and pursuant to the Commission's rules and regulations promulgated thereunder.

9.2 Annual Informational Filings:

The Transmission Provider shall make annual filings with the Commission providing a summary of penalty revenue credits that were provided in accordance with the following: Energy and Generator Imbalance (reference Schedule 4, Sections 4.2.2 and 4.3.1 and Schedule 13, Sections 13.1 and 13.2); late study penalties as described in Section 19.10; and unreserved use penalties as described in Sections A.7.6 and B.7.6 of Schedule 7.

Sections A.8.7 and B.8.7 of Schedule 8, and Section 7.G of the DEC OASIS Business Practices (available at http://www.oatioasis.com/DUK/DUKdocs/Practices.pdf).

The annual filing will provide a summary of penalty revenue credits in each of the above areas by transmission customer, total penalty revenues collected from Affiliates, total penalty revenues collected from non-Affiliates, a description of the costs incurred as a result of the offending behavior, and a summary of the portion of the unreserved penalty revenue retained by the Transmission Provider. The annual compliance reports will be submitted on or before the Transmission Provider's deadline for submitting FERC Form-1, as established by the Commission's Office of Enforcement each year.

10 Force Majeure and Indemnification

10.1 Force Majeure:

An event of Force Majeure means 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 Curtailment, 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. Neither the Transmission Provider nor the Transmission Customer will be considered in default as to any obligation under this Tariff if prevented from fulfilling the obligation due to an event of Force Majeure. However, a Party whose performance under this Tariff is hindered by an event of Force Majeure shall make all reasonable efforts to perform its obligations under this Tariff.

10.2 Indemnification:

The Transmission Customer shall at all times indemnify, defend, and save the Transmission Provider 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, demands, 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 Transmission Provider's performance of its obligations under this Tariff on behalf of the Transmission Customer, except in cases of negligence or intentional wrongdoing by the Transmission Provider.

11 Creditworthiness

The Transmission Provider will specify its Creditworthiness procedures in Attachment O.

12 Dispute Resolution Procedures

12.1 Internal Dispute Resolution Procedures:

Any dispute between a Transmission Customer and the Transmission Provider involving transmission service under the Tariff (excluding applications for rate changes or other changes to the Tariff, or to any Service Agreement entered into under the Tariff, which shall be presented directly to the Commission for resolution) shall be referred to a designated senior representative of the Transmission Provider and a senior representative of the Transmission Customer for resolution on an informal basis as promptly as practicable. In the event the designated representatives are unable to resolve the dispute within thirty (30) days, or such other period as the Parties may agree upon, by mutual agreement, such dispute may be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below.

12.2 External Arbitration Procedures:

Any arbitration initiated under the Tariff 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) days of the referral 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) 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 generally conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association and any applicable Commission regulations or Regional Transmission Group rules.

12.3 Arbitration Decisions:

Unless otherwise agreed, the arbitrator(s) shall render a decision within ninety (90) 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 Tariff and any Service Agreement entered into under the Tariff and shall have no power to modify or change any of the above 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 and/or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with the Commission if it affects jurisdictional rates, terms and conditions of service or facilities.

12.4 Costs:

Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable:

- (A) 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
- (B) one half the cost of the single arbitrator jointly chosen by the Parties.

12.5 Rights Under The Federal Power Act:

Nothing in this section shall restrict the rights of any party to file a Complaint with the Commission under relevant provisions of the Federal Power Act.

II. POINT-TO-POINT TRANSMISSION SERVICE

Preamble

The Transmission Provider will provide Firm and Non-Firm Point-To-Point

Transmission Service pursuant to the applicable terms and conditions of this Tariff.

Point-To-Point Transmission Service is for the receipt of capacity and energy at designated Point(s) of Receipt and the transfer of such capacity and energy to designated Point(s) of Delivery.

13 Nature of Firm Point-To-Point Transmission Service

13.1 Term:

The minimum term of Firm Point-To-Point Transmission Service shall be one day and the maximum term shall be specified in the Service Agreement.

13.2 Reservation Priority:

(i) Long-Term Firm Point-To-Point Transmission Service and Long-Term

Network Contract Demand Transmission Service shall be available on a

first-come, first-served basis i.e., in the chronological sequence in which
each Transmission Customer has requested service.

In the DEC Zone, all Long-Term Firm Point-To-Point

Transmission Service requests ("Long-Term Firm Requests") made within the first five minutes after the transmission reservation period set forth in the Transmission Provider's business practices opens for the service requested will be considered to have been submitted simultaneously. If the transmission reservation period for Network Resource designations is the same as the transmission reservation period for Long-Term Firm Requests, such Network Resource designations requests made within the

first five minutes after the transmission reservation period opens also will be considered to have been submitted simultaneously with the Long-Term Firm Requests. If sufficient transfer capability is not available to meet all Long-Term Firm Requests and Network Resource designation requests that are considered to have been submitted simultaneously, available transfer capability first will be allocated based on pre-confirmation status (Pre-Confirmed or not confirmed). If insufficient transfer capability is available to accommodate all Pre-Confirmed Applications, then Pre-Confirmed Applications will be allocated a portion of the available transfer capability on a pro-rata basis. If sufficient transfer capability is available to accommodate all Pre-Confirmed Applications but not enough to accommodate all other requests, then the Pre-Confirmed Applications will be accepted and all other requests will be allocated a portion of the available transfer capability on a pro-rata basis.

(ii) Reservations for Short-Term Firm Point-To-Point Transmission Service and Short-Term Network Contract Demand Transmission Service will be conditional based upon the length of the requested transaction or reservation. However, Pre-Confirmed Applications for Short-Term Point-To-Point Transmission Service will receive priority over earlier-submitted requests that are not Pre-Confirmed and that have equal or shorter duration. Among requests or reservations with the same duration and, as relevant, pre-confirmation status (pre-confirmed, confirmed, or not confirmed), priority will be given to an Eligible Customer's request or reservation that

- offers the highest price, followed by the date and time of the request or reservation.
- (iii) If the Transmission System becomes oversubscribed, requests for service may preempt competing reservations up to the following conditional reservation deadlines: one day before the commencement of daily service, one week before the commencement of weekly service, and one month before the commencement of monthly service.

Before the conditional reservation deadline, if available transfer capability is insufficient to satisfy all requests and reservations, an Eligible Customer with a reservation for shorter term service or equal duration service and lower price has the right of first refusal to match any longer term request or equal duration service with a higher price before losing its reservation priority. A longer term competing request for Short-Term Firm Point-To-Point Transmission Service or Short-Term Network Contract Demand Transmission Service will be granted if the Eligible Customer with the right of first refusal does not agree to match the competing request within 24 hours (or earlier if necessary to comply with the scheduling deadlines provided in sections 13.8 or 36.9) from being notified by the Transmission Provider of a longer-term competing request for Short-Term Firm Point-To-Point Transmission Service. When a longer duration request preempts multiple shorter duration reservations, the shorter duration reservations shall have simultaneous opportunities to exercise the right of first refusal. Duration, price and time of response will be used to determine the order by which multiple shorter duration reservations will be able to exercise the right of first refusal. After the conditional reservation deadline, service will commence pursuant to the terms of Part II of the Tariff.

(iv) Firm Point-To-Point Transmission Service will always have a reservation priority over Non-Firm Point-To-Point Transmission Service under the Tariff. All Long-Term Firm Point-To-Point Transmission Service will have equal reservation priority with Native Load Customers, Network Customers and Long-Term Network Contract Demand Customers.

Reservation priorities for existing firm service customers are provided in Section 2.2.

In the DEC Zone, Short-Term Firm requests made within the first five minutes after the transmission reservation period set forth in the Transmission Provider's business practices opens for the service requested will be grouped by price and then duration time; the following procedure will be used to allocate capacity if insufficient transfer capability is available to accommodate all requests, starting with the group of requests with the longest duration:

- a) If insufficient transfer capability is available to accommodate all pre-confirmed requests, then all pre-confirmed requests will be counteroffered on a pro-rata basis and all requests that are not preconfirmed will be refused.
- b) If sufficient transfer capability is available to accommodate all preconfirmed requests, but not enough to accommodate all other requests, then the pre-confirmed requests will be accepted and all other requests will be counteroffered on a pro-rata basis.

c) If sufficient transfer capability is available to accommodate all requests of a given duration, all requests will be accepted and the next-longest duration group will be evaluated in a similar fashion.

13.3 Use of Firm Transmission Service by the Transmission Provider:

The Transmission Provider will be subject to the rates, terms and conditions of Part II or Part IV of the Tariff when making Third-Party Sales under (i) agreements executed on or after July 9, 1996 or (ii) agreements executed prior to the aforementioned date that the Commission requires to be unbundled, by the date specified by the Commission. The Transmission Provider will maintain separate accounting, pursuant to Section 8, for any use of the Point-To-Point Transmission Service or Network Contract Demand Service to make Third-Party Sales.

13.4 Service Agreements:

The Transmission Provider shall offer a standard form Firm Point-To-Point

Transmission Service Agreement (Attachment A) to an Eligible Customer when it submits a Completed Application for Long-Term Firm Point-To-Point

Transmission Service. The Transmission Provider shall offer a standard form

Firm Point-To-Point Transmission Service Agreement (Attachment A) to an

Eligible Customer when it first submits a Completed Application for Short-Term

Firm Point-To-Point Transmission Service pursuant to the Tariff. Executed

Service Agreements that contain the information required under the Tariff shall be filed with the Commission in compliance with applicable Commission regulations.

An Eligible Customer that uses Transmission Service at a Point of Receipt or

Point of Delivery that it has not reserved and that has not executed a Service

Agreement will be deemed, for purposes of assessing any appropriate charges and

Agreement shall, when applicable, specify any conditional curtailment options selected by the Transmission Customer. Where the Service Agreement contains conditional curtailment options and is subject to a biennial reassessment as described in Section 15.4, the Transmission Provider shall provide the Transmission Customer notice of any changes to the curtailment conditions no less than 90 days prior to the date for imposition of new curtailment conditions. Concurrent with such notice, the Transmission Provider shall provide the Transmission Customer with the reassessment study and a narrative description of the study, including the reasons for changes to the number of hours per year or System Conditions under which conditional curtailment may occur.

13.5 Transmission Customer Obligations for Facility Additions or Redispatch Costs:

In cases where the Transmission Provider determines that the Transmission System is not capable of providing Firm Point-To-Point Transmission Service without (1) degrading or impairing the reliability of service to Native Load Customers, Network Customers, Network Contract Demand Customers and other Transmission Customers taking Firm Point-To-Point Transmission Service, or (2) interfering with the Transmission Provider's ability to meet prior firm contractual commitments to others, the Transmission Provider will be obligated to expand or upgrade its Transmission System pursuant to the terms of Section 15.4. The Transmission Customer must agree to compensate the Transmission Provider for any necessary transmission facility additions pursuant to the terms of Section 27. To the extent the Transmission Provider can relieve any system constraint by

redispatching the Transmission Provider's resources, it shall do so, provided that the Eligible Customer agrees to compensate the Transmission Provider pursuant to the terms of Section 27 and agrees to either (i) compensate the Transmission Provider for any necessary transmission facility additions or (ii) accept the service subject to a biennial reassessment by the Transmission Provider of redispatch requirements as described in Section 15.4. Any redispatch, Network Upgrade or Direct Assignment Facilities costs to be charged to the Transmission Customer on an incremental basis under the Tariff will be specified in the Service Agreement prior to initiating service.

13.6 Curtailment of Firm Transmission Service:

In the event that a Curtailment on the Transmission Provider's Transmission

System, or a portion thereof, is required to maintain reliable operation of such system and the systems directly and indirectly interconnected with Transmission

Provider's Transmission System, Curtailments will be made on a non-discriminatory basis to the transaction(s) that effectively relieve the constraint.

The Transmission Provider may elect to implement such Curtailments pursuant to the Transmission Loading Relief procedures specified in Attachment L. If multiple transactions require Curtailment, to the extent practicable and consistent with Good Utility Practice, the Transmission Provider will curtail service to Network Customers, Network Contract Demand Customers, and Transmission Customers taking Firm Point-To-Point Transmission Service on a basis comparable to the curtailment of service to the Transmission Provider's Native Load Customers. All Curtailments will be made on a non-discriminatory basis, however, Non-Firm Point-To-Point Transmission Service shall be subordinate to

Firm Transmission Service. Long-Term Firm Point-To-Point Service subject to conditions described in Section 15.4 shall be curtailed with secondary service in cases where the conditions apply, but otherwise will be curtailed on a pro rata basis with other Firm Transmission Service. When the Transmission Provider determines that an electrical emergency exists on its Transmission System and implements emergency procedures to Curtail Firm Transmission Service, the Transmission Customer shall make the required reductions upon request of the Transmission Provider. However, the Transmission Provider reserves the right to Curtail, in whole or in part, any Firm Transmission Service provided under the Tariff when, in the Transmission Provider's sole discretion, an emergency or other unforeseen condition impairs or degrades the reliability of its Transmission System. The Transmission Provider will notify all affected Transmission Customers in a timely manner of any scheduled Curtailments.

In the CP&L Zone and the FPC Zone, in the event a Transmission Customer fails to implement a Curtailment within ten minutes as required by the Transmission Provider, the Transmission Customer shall pay, in addition to any other charges for service, a charge equal to two times the amount of transmission service which the Transmission Customer fails to curtail multiplied by the maximum charge for Firm Point-To-Point Transmission Service for the lesser of the transaction term or one month.

13.7 Classification of Firm Transmission Service:

(a) The Transmission Customer taking Firm Point-To-Point Transmission

Service may (1) change its Receipt and Delivery Points to obtain service

on a non-firm basis consistent with the terms of Section 22.1 or (2) request

- a modification of the Points of Receipt or Delivery on a firm basis pursuant to the terms of Section 22.2.
- (b) The Transmission Customer may purchase transmission service to make sales of capacity and energy from multiple generating units that are on the Transmission Provider's Transmission System. For such a purchase of transmission service, the resources will be designated as multiple Points of Receipt, unless the multiple generating units are at the same generating plant in which case the units would be treated as a single Point of Receipt.
- (c) The Transmission Provider shall provide firm deliveries of capacity and energy from the Point(s) of Receipt to the Point(s) of Delivery. Each Point of Receipt at which firm transmission capacity is reserved by the Transmission Customer shall be set forth in the Firm Point-To-Point Service Agreement for Long-Term Firm Transmission Service along with a corresponding capacity reservation associated with each Point of Receipt. Points of Receipt and corresponding capacity reservations shall be as mutually agreed upon by the Parties for Short-Term Firm Transmission. Each Point of Delivery at which firm transfer capability is reserved by the Transmission Customer shall be set forth in the Firm Point-To-Point Service Agreement for Long-Term Firm Transmission Service along with a corresponding capacity reservation associated with each Point of Delivery. Points of Delivery and corresponding capacity reservations shall be as mutually agreed upon by the Parties for Short-Term Firm Transmission. The greater of either (1) the sum of the capacity

reservations at the Point(s) of Receipt, or (2) the sum of the capacity reservations at the Point(s) of Delivery shall be the Transmission Customer's Reserved Capacity. The Transmission Customer will be billed for its Reserved Capacity under the terms of Schedule 7. The Transmission Customer may not exceed its firm capacity reserved at each Point of Receipt and each Point of Delivery except as otherwise specified in Section 22.

(d) In the event that the Transmission Customer (including Third-Party Sales by the Transmission Provider) exceeds its firm reserved capacity at any Point of Receipt or Point of Delivery, or uses Transmission Service at a Point of Receipt or Point of Delivery that it has not reserved, the Transmission Customer shall pay the rate for unauthorized use as specified in Schedule 7.

13.8 Scheduling of Firm Point-To-Point Transmission Service:

Schedules for the Transmission Customer's Firm Point-To-Point Transmission

Service must be submitted to the Transmission Provider no later than 10:00 a.m.

of the day prior to commencement of such service. Schedules submitted after

10:00 a.m. will be accommodated, if practicable. Hour-to-hour schedules of any
capacity and energy that is to be delivered must be stated in increments of 1,000

kW per hour. Transmission Customers within the Transmission Provider's service

area with multiple requests for Transmission Service at a Point of Receipt, each of

which is under 1,000 kW per hour, may consolidate their service requests at a

common point of receipt into units of 1,000 kW per hour for scheduling and

billing purposes. In the CP&L Zone and in the DEC Zone scheduling changes

will be permitted up to twenty (20) minutes before the start of the next clock hour provided that the Delivering Party and Receiving Party also agree to the schedule modification. In the DEC Zone, scheduling changes submitted less than twenty (20) minutes before the start of the next clock hour will be accommodated, if practicable. In the FPC Zone, scheduling changes will be permitted up to ten (10) minutes before the start of the next clock hour provided that the Delivering Party and the Receiving Party also agree to the schedule modification and that the transaction can be reasonably accommodated on the Transmission System. The Transmission Provider will furnish to the Delivering Party's system operator, hour-to-hour schedules equal to those furnished by the Receiving Party (unless reduced for losses) and shall deliver the capacity and energy provided by such schedules. Should the Transmission Customer, Delivering Party or Receiving Party revise or terminate any schedule, such party shall immediately notify the Transmission Provider, and the Transmission Provider shall have the right to adjust accordingly the schedule for capacity and energy to be received and to be delivered.

14 Nature of Non-Firm Point-To-Point Transmission Service

14.1 Term:

Non-Firm Point-To-Point Transmission Service will be available for periods ranging from one (1) hour to one (1) month. However, a Purchaser of Non-Firm Point-To-Point Transmission Service will be entitled to reserve a sequential term of service (such as a sequential monthly term without having to wait for the initial term to expire before requesting another monthly term) so that the total time

period for which the reservation applies is greater than one month, subject to the requirements of Section 18.3.

14.2 Reservation Priority:

Non-Firm Point-To-Point Transmission Service shall be available from transfer capability in excess of that needed for reliable service to Native Load Customers, Network Customers, Network Contract Demand Customers and other Transmission Customers taking Long-Term and Short-Term Firm Point-To-Point Transmission Service. A higher priority will be assigned first to requests or reservations with a longer duration of service, and second to Pre-Confirmed Applications. In the event the Transmission System is constrained, competing requests of the same Pre-Confirmation status and equal duration will be prioritized based on the highest price offered by the Eligible Customer for the Transmission Service. Eligible Customers that have already reserved shorter term service have the right of first refusal to match any longer term request before being preempted. A longer term competing request for Non-Firm Point-To-Point Transmission Service will be granted if the Eligible Customer with the right of first refusal does not agree to match the competing request: (a) immediately for hourly Non- Firm Point-To-Point Transmission Service after notification by the Transmission Provider; and, (b) within 24 hours (or earlier if necessary to comply with the scheduling deadlines provided in section 14.6) for Non-Firm Point-To-Point Transmission Service other than hourly transactions after notification by the Transmission Provider. Transmission service for Network Customers or Network Contract Demand Customers from resources other than designated Network Resources will have a higher priority than any Non-Firm Point-To-Point

Transmission Service. Non-Firm Point-To-Point Transmission Service over secondary Point(s) of Receipt and Point(s) of Delivery will have the lowest reservation priority under the Tariff.

14.3 Use of Non-Firm Point-To-Point Transmission Service by the Transmission Provider:

The Transmission Provider will be subject to the rates, terms and conditions of Part II of the Tariff when making Third-Party Sales under (i) agreements executed on or after July 9, 1996 or (ii) agreements executed prior to the aforementioned date that the Commission requires to be unbundled, by the date specified by the Commission. The Transmission Provider will maintain separate accounting, pursuant to Section 8, for any use of Non-Firm Point-To-Point Transmission Service to make Third-Party Sales.

14.4 Service Agreements:

The Transmission Provider shall offer a standard form Non-Firm Point-To-Point Transmission Service Agreement (Attachment B) to an Eligible Customer when it first submits a Completed Application for Non-Firm Point-To-Point Transmission Service pursuant to the Tariff. Executed Service Agreements that contain the information required under the Tariff shall be filed with the Commission in compliance with applicable Commission regulations.

14.5 Classification of Non-Firm Point-To-Point Transmission Service:

Non-Firm Point-To-Point Transmission Service shall be offered under terms and conditions contained in Part II of the Tariff. The Transmission Provider undertakes no obligation under the Tariff to plan its Transmission System in order to have sufficient capacity for Non-Firm Point-To-Point Transmission Service.

Parties requesting Non-Firm Point-To-Point Transmission Service for the transmission of firm power do so with the full realization that such service is subject to availability and to Curtailment or Interruption under the terms of the Tariff. In the event that the Transmission Customer (including Third-Party Sales by the Transmission Provider) exceeds its non-firm Reserved Capacity at any Point of Receipt and/or Point of Delivery, the Transmission Customer shall pay the rate for unauthorized use as specified in Schedule 8. Non-Firm Point-To-Point Transmission Service shall include transmission of energy on an hourly basis and transmission of scheduled short-term capacity and energy on a daily, weekly or monthly basis, but not to exceed one month's reservation for any one Application, under Schedule 8.

14.6 Scheduling of Non-Firm Point-To-Point Transmission Service:

Schedules for Non-Firm Point-To-Point Transmission Service in the CP&L Zone or in the DEC Zone must be submitted to the Transmission Provider no later than 2:00 p.m. of the day prior to commencement of such service. Schedules for Non-Firm Point-To-Point Transmission Service in the FPC Zone must be submitted to the Transmission Provider no later than fifteen (15) minutes before the scheduled start of hourly transactions or one hour prior to the scheduled start of longer-term transactions. Schedules submitted after such times will be accommodated, if practicable. Hour-to-hour schedules of energy that is to be delivered must be stated in increments of 1,000 kW per hour. Transmission Customers within the Transmission Provider's service area with multiple requests for Transmission Service at a Point of Receipt, each of which is under 1,000 kW per hour, may consolidate their schedules at a common Point of Receipt into units of 1,000 kW

per hour. In the CP&L Zone and in the DEC Zone scheduling changes will be permitted up to twenty (20) minutes before the start of the next clock hour provided that the Delivering Party and Receiving Party also agree to the schedule modification. In the DEC Zone, scheduling changes submitted less than twenty (20) minutes before the start of the next clock hour will be accommodated, if practicable. In the FPC Zone scheduling changes will be permitted up to ten (10) minutes before the start of the next clock hour provided that the Delivering Party and the Receiving Party also agree to the schedule modification and that the transaction can be reasonably accommodated on the Transmission System. The Transmission Provider will furnish to the Delivering Party's system operator, hour-to-hour schedules equal to those furnished by the Receiving Party (unless reduced for losses) and shall deliver the capacity and energy provided by such schedules. Should the Transmission Customer, Delivering Party or Receiving Party revise or terminate any schedule, such party shall immediately notify the Transmission Provider, and the Transmission Provider shall have the right to adjust accordingly the schedule for capacity and energy to be received and to be delivered.

14.7 Curtailment or Interruption of Service:

The Transmission Provider reserves the right to Curtail, in whole or in part, Non-Firm Point-To-Point Transmission Service provided under the Tariff for reliability reasons when an emergency or other unforeseen condition threatens to impair or degrade the reliability of its Transmission System or the systems directly or indirectly interconnected with Transmission Provider's Transmission System. The Transmission Provider may elect to implement such Curtailments

pursuant to the Transmission Loading Relief procedures specified in Attachment L. The Transmission Provider reserves the right to Interrupt, in whole or in part, Non-Firm Point-To-Point Transmission Service provided under the Tariff for economic reasons in order to accommodate (1) a request for Firm Transmission Service, (2) a request for Non-Firm Point-To-Point Transmission Service of greater duration, (3) a request for Non-Firm Point-To-Point Transmission Service of equal duration with a higher price, (4) transmission service for Network Customers and Network Contract Demand Customers from non-designated resources, or (5) transmission service for Firm Point-To-Point Transmission Service during conditional curtailment periods as described in Section 15.4. The Transmission Provider also will discontinue or reduce service to the Transmission Customer to the extent that deliveries for transmission are discontinued or reduced at the Point(s) of Receipt. Where required, Curtailments or Interruptions will be made on a non-discriminatory basis to the transaction(s) that effectively relieve the constraint, however, Non-Firm Point-To-Point Transmission Service shall be subordinate to Firm Transmission Service. If multiple transactions require Curtailment or Interruption, to the extent practicable and consistent with Good Utility Practice, Curtailments or Interruptions will be made to transactions of the shortest term (e.g., hourly non-firm transactions will be Curtailed or Interrupted before daily non-firm transactions and daily non-firm transactions will be Curtailed or Interrupted before weekly non-firm transactions). Transmission service for Network Customers and Network Contract Demand Customers from resources other than designated Network Resources will have a higher priority

than any Non-Firm Point-To-Point Transmission Service under the Tariff. Non-Firm Point-To-Point Transmission Service over secondary Point(s) of Receipt and Point(s) of Delivery will have a lower priority than any Non-Firm Point-To-Point Transmission Service under the Tariff. The Transmission Provider will provide advance notice of Curtailment or Interruption where such notice can be provided consistent with Good Utility Practice. In the CP&L Zone and the FPC Zone, in the event a Transmission Customer fails to implement a Curtailment within ten minutes or Interruption within twenty minutes as required by the Transmission Provider, the Transmission Customer shall pay, in addition to any other charges for service, a charge equal to two times the amount of transmission service which the Transmission Customer fails to curtail or interrupt multiplied by the maximum charge for Firm Point-To-Point Transmission Service for the lesser of the transaction term or one month.

15 Service Availability

15.1 General Conditions:

The Transmission Provider will provide Firm and Non-Firm Point-To-Point Transmission Service over, on or across its Transmission System to any Transmission Customer that has met the requirements of Section 16.

15.2 Determination of Available Transfer Capability:

A description of the Transmission Provider's specific methodology for assessing available transfer capability posted on the relevant Transmission Provider's OASIS (Section 4) is contained in Attachment C-1 (CP&L Zone), Attachment C-2 (FPC Zone), and Attachment C-3 (DEC Zone), as applicable, of the Tariff. In the event sufficient transfer capability may not exist to accommodate a service

request, the Transmission Provider will respond by performing a System Impact Study.

15.3 Initiating Service in the Absence of an Executed Service Agreement:

If the Transmission Provider and the Transmission Customer requesting Firm or Non-Firm Point-To-Point Transmission Service cannot agree on all the terms and conditions of the Point-To-Point Service Agreement, the Transmission Provider shall file with the Commission, within thirty (30) days after the date the Transmission Customer provides written notification directing the Transmission Provider to file, an unexecuted Point-To-Point Service Agreement containing terms and conditions deemed appropriate by the Transmission Provider for such requested Transmission Service. The Transmission Provider shall commence providing Transmission Service subject to the Transmission Customer agreeing to (i) compensate the Transmission Provider at whatever rate the Commission ultimately determines to be just and reasonable, and (ii) comply with the terms and conditions of the Tariff including posting appropriate security deposits in accordance with the terms of Section 17.3.

15.4 Obligation to Provide Transmission Service That Requires Expansion or Modification of the Transmission System, Redispatch or Conditional Curtailment:

(a) If the Transmission Provider determines that it cannot accommodate a

Completed Application for Firm Point-To-Point Transmission Service

because of insufficient capability on its Transmission System, the

Transmission Provider will use due diligence to expand or modify its

Transmission System to provide the requested Firm Transmission Service,

consistent with its planning obligations in Attachment N-1 (CP&L Zone

and DEC Zone) or Attachment N-2 (FPC Zone), as applicable, provided the Transmission Customer agrees to compensate the Transmission Provider for such costs pursuant to the terms of Section 27. The Transmission Provider will conform to Good Utility Practice and its planning obligations in Attachment N-1 or Attachment N-2, as applicable, in determining the need for new facilities and in the design and construction of such facilities. The obligation applies only to those facilities that the Transmission Provider has the right to expand or modify.

- (b) If the Transmission Provider determines that it cannot accommodate a Completed Application for Long-Term Firm Point-To-Point Transmission Service because of insufficient capability on its Transmission System, the Transmission Provider will use due diligence to provide redispatch from its own resources until (i) Network Upgrades are completed for the Transmission Customer, (ii) the Transmission Provider determines through a biennial reassessment that it can no longer reliably provide the redispatch, or (iii) the Transmission Customer terminates the service because of redispatch changes resulting from the reassessment. A Transmission Provider shall not unreasonably deny self-provided redispatch or redispatch arranged by the Transmission Customer from a third party resource.
- (c) If the Transmission Provider determines that it cannot accommodate a

 Completed Application for Long-Term Firm Point-To-Point Transmission

 Service because of insufficient capability on its Transmission System, the

Transmission Provider will offer the Firm Transmission Service with the condition that the Transmission Provider may curtail the service prior to the curtailment of other Firm Transmission Service for a specified number of hours per year or during System Condition(s). If the Transmission Customer accepts the service, the Transmission Provider will use due diligence to provide the service until (i) Network Upgrades are completed for the Transmission Customer, (ii) the Transmission Provider determines through a biennial reassessment that it can no longer reliably provide such service, or (iii) the Transmission Customer terminates the service because the reassessment increased the number of hours per year of conditional curtailment or changed the System Conditions.

15.5 Deferral of Service:

The Transmission Provider may defer providing service until it completes construction of new transmission facilities or upgrades needed to provide Firm Point-To-Point Transmission Service whenever the Transmission Provider determines that providing the requested service would, without such new facilities or upgrades, impair or degrade reliability to any existing firm services.

15.6 Other Transmission Service Schedules:

Eligible Customers receiving transmission service under other agreements on file with the Commission may continue to receive transmission service under those agreements until such time as those agreements may be modified by the Commission.

15.7 Real Power Losses:

Real Power Losses are associated with all transmission service. The

Transmission Provider is not obligated to provide Real Power Losses. The

Transmission Customer is responsible for replacing losses associated with all

transmission service as calculated by the Transmission Provider.

The applicable Real Power Loss factor in the CP&L Zone is 2.15%.

The applicable Real Power Loss factors in the FPC Zone are 2.05% for delivery at transmission voltages and 3.05% for delivery at distribution voltages. Procedures for annual changes to the Real Power Loss factors in the FPC Zone are set out in Attachment Q.

The applicable Real Power loss factors in the DEC Zone are as follows:

The loss factor used to determine the amount of losses associated with the use of facilities at or above 44 kV shall be three (3) percent. In the DEC Zone, the Transmission Provider and Transmission Customer may agree to have the Transmission Provider supply the capacity and/or energy necessary to compensate for losses in accordance with Schedule 9.

16 Transmission Customer Responsibilities

16.1 Conditions Required of Transmission Customers:

Point-To-Point Transmission Service shall be provided by the Transmission Provider only if the following conditions are satisfied by the Transmission Customer:

 a. The Transmission Customer has pending a Completed Application for service;

- The Transmission Customer meets the creditworthiness criteria set forth in Attachment O;
- c. The Transmission Customer will have arrangements in place for any other transmission service necessary to effect the delivery from the generating source to the Transmission Provider prior to the time service under Part II of the Tariff commences;
- d. The Transmission Customer agrees to pay for any facilities constructed and chargeable to such Transmission Customer under Part II of the Tariff, whether or not the Transmission Customer takes service for the full term of its reservation;
- e. The Transmission Customer provides the information required by the

 Transmission Provider's planning process established in Attachment N-1

 or Attachment N-2, as applicable; and
- f. The Transmission Customer has executed a Point-To-Point Service

 Agreement or has agreed to receive service pursuant to Section 15.3.

16.2 Transmission Customer Responsibility for Third-Party Arrangements:

Any scheduling arrangements that may be required by other electric systems shall be the responsibility of the Transmission Customer requesting service. The Transmission Customer shall provide, unless waived by the Transmission Provider, notification to the Transmission Provider identifying such systems and authorizing them to schedule the capacity and energy to be transmitted by the Transmission Provider pursuant to Part II of the Tariff on behalf of the Receiving Party at the Point of Delivery or the Delivering Party at the Point of Receipt. However, the Transmission Provider will undertake reasonable efforts to assist

the Transmission Customer in making such arrangements, including without limitation, providing any information or data required by such other electric system pursuant to Good Utility Practice.

17 Procedures for Arranging Firm Point-To-Point Transmission Service

17.1 Application:

A request for Firm Point-To-Point Transmission Service for periods of one year or longer must be made on the OASIS of the Transmission Provider of each affected Zone. Such Application[s] must be submitted at least sixty (60) days in advance of the calendar month in which service is to commence. The Transmission Provider will consider requests for such firm service on shorter notice when feasible. Requests for firm service for periods of less than one year shall be subject to expedited procedures that shall be negotiated between the Parties within the time constraints provided in Section 17.5. All Firm Point-To-Point Transmission Service requests should be submitted by entering the information listed below on the OASIS for each affected Zone.

17.2 Completed Application:

A Completed Application shall provide all of the information included in 18 C.F.R. § 2.20 including but not limited to the following:

- (i) The identity, address, telephone number and facsimile number of the entity requesting service;
- (ii) A statement that the entity requesting service is, or will be upon commencement of service, an Eligible Customer under the Tariff;
- (iii) The location of the Point(s) of Receipt and Point(s) of Delivery and the identities of the Delivering Parties and the Receiving Parties;
- (iv) The location of the generating facility(ies) supplying the capacity and energy and the location of the load ultimately served by the capacity and

energy transmitted. The Transmission Provider will treat this information as confidential except to the extent that disclosure of this information is required by this Tariff, by regulatory or judicial order, for reliability purposes pursuant to Good Utility Practice or pursuant to RTG transmission information sharing agreements. The Transmission Provider shall treat this information consistent with the standards of conduct contained in Part 37 of the Commission's regulations;

- (v) A description of the supply characteristics of the capacity and energy to be delivered;
- (vi) An estimate of the capacity and energy expected to be delivered to the Receiving Party;
- (vii) The Service Commencement Date and the term of the requested Transmission Service;
- (viii) The transmission capacity requested for each Point of Receipt and each Point of Delivery on the Transmission Provider's Transmission System; customers may combine their requests for service in order to satisfy the minimum transmission capacity requirement;
- (ix) A statement indicating that, if the Eligible Customer submits a Pre-Confirmed Application, the Eligible Customer will execute a Service Agreement upon receipt of notification that the Transmission Provider can provide the requested Transmission Service; and
- (x) Any additional information required by the Transmission Provider's planning process established in Attachment N-1 or Attachment N-2, as applicable.

The Transmission Provider shall treat this information consistent with the standards of conduct contained in Part 37 of the Commission's regulations.

17.3 Deposit:

A Completed Application for Firm Point-To-Point Transmission Service also shall include a deposit of either one month's charge for Reserved Capacity or the full charge for Reserved Capacity for service requests of less than one month. If the Application is rejected by the Transmission Provider because it does not meet the conditions for service as set forth herein, or in the case of requests for service

arising in connection with losing bidders in a Request For Proposals (RFP), said deposit shall be returned with interest less any reasonable costs incurred by the Transmission Provider in connection with the review of the losing bidder's Application. The deposit also will be returned with interest less any reasonable costs incurred by the Transmission Provider if the Transmission Provider is unable to complete new facilities needed to provide the service. If an Application is withdrawn or the Eligible Customer decides not to enter into a Service Agreement for Firm Point-To-Point Transmission Service, the deposit shall be refunded in full, with interest, less reasonable costs incurred by the Transmission Provider to the extent such costs have not already been recovered by the Transmission Provider from the Eligible Customer. The Transmission Provider will provide to the Eligible Customer a complete accounting of all costs deducted from the refunded deposit, which the Eligible Customer may contest if there is a dispute concerning the deducted costs. Deposits associated with construction of new facilities are subject to the provisions of Section 19. If a Service Agreement for Firm Point-To-Point Transmission Service is executed, the deposit, with interest, will be returned to the Transmission Customer upon expiration or termination of the Service Agreement for Firm Point-To-Point Transmission Service. Applicable interest shall be computed in accordance with the Commission's regulations at 18 C.F.R. § 35.19a(a)(2)(iii), and shall be calculated from the day the deposit check is credited to the Transmission Provider's account. Notwithstanding the foregoing, the Transmission Provider shall on a nondiscriminatory basis waive the requirement that a deposit accompany an

Application for an Eligible Customer that has met the necessary conditions of Attachment O of this Tariff.

17.4 Notice of Deficient Application:

If an Application fails to meet the requirements of the Tariff, the Transmission Provider shall notify the entity requesting service within fifteen (15) days of receipt of the reasons for such failure. The Transmission Provider will attempt to remedy minor deficiencies in the Application through informal communications with the Eligible Customer. If such efforts are unsuccessful, the Transmission Provider shall return the Application, along with any deposit, with interest. Upon receipt of a new or revised Application that fully complies with the requirements of Part II of the Tariff, the Eligible Customer shall be assigned a new priority consistent with the date of the new or revised Application.

17.5 Response to a Completed Application:

Following receipt of a Completed Application for Firm Point-To-Point

Transmission Service, the Transmission Provider shall make a determination of available transfer capability as required in Section 15.2. The Transmission

Provider shall notify the Eligible Customer as soon as practicable, but not later than thirty (30) days after the date of receipt of a Completed Application either (i) if it will be able to provide service without performing a System Impact Study or (ii) if such a study is needed to evaluate the impact of the Application pursuant to Section 19.1. Responses by the Transmission Provider must be made as soon as practicable to all completed applications (including applications by its own merchant function) and the timing of such responses must be made on a non-discriminatory basis.

17.6 Execution of Service Agreement:

Whenever the Transmission Provider determines that a System Impact Study is not required and that the service can be provided, it shall notify the Eligible Customer as soon as practicable but no later than thirty (30) days after receipt of the Completed Application. Where a System Impact Study is required, the provisions of Section 19 will govern the execution of a Service Agreement. Failure of an Eligible Customer to execute and return the Service Agreement or request the filing of an unexecuted service agreement pursuant to Section 15.3, within fifteen (15) days after it is tendered by the Transmission Provider will be deemed a withdrawal and termination of the Application and any deposit submitted shall be refunded with interest. Nothing herein limits the right of an Eligible Customer to file another Application after such withdrawal and termination.

17.7 Extensions for Commencement of Service:

The Transmission Customer can obtain, subject to availability, up to <u>five (5) one-year extensions</u> for the commencement of service. The Transmission Customer may postpone service by paying a non-refundable annual reservation fee equal to one-month's charge for Firm Transmission Service for each year or fraction thereof within 15 days of notifying the Transmission Provider it intends to extend the commencement of service. If during any extension for the commencement of service an Eligible Customer submits a Completed Application for Firm Transmission Service, and such request can be satisfied only by releasing all or part of the Transmission Customer's Reserved Capacity, the original Reserved Capacity will be released unless the following condition is satisfied. Within thirty

(30) days, the original Transmission Customer agrees to pay the Firm Point-To-Point transmission rate for its Reserved Capacity concurrent with the new Service Commencement Date. In the event the Transmission Customer elects to release the Reserved Capacity, the reservation fees or portions thereof previously paid will be forfeited.

18 Procedures for Arranging Non-Firm Point-To-Point Transmission Service

18.1 Application:

Eligible Customers seeking Non-Firm Point-To-Point Transmission Service must submit a Completed Application to the Transmission Provider. Applications should be submitted by entering the information listed below on the Transmission Provider's OASIS.

18.2 Completed Application:

A Completed Application shall provide all of the information included in 18 C.F.R. § 2.20 including but not limited to the following:

- (i) The identity, address, telephone number and facsimile number of the entity requesting service;
- (ii) A statement that the entity requesting service is, or will be upon commencement of service, an Eligible Customer under the Tariff;
- (iii) The Point(s) of Receipt and the Point(s) of Delivery;
- (iv) The maximum amount of capacity requested at each Point of Receipt and Point of Delivery; and
- (v) The proposed dates and hours for initiating and terminating transmission service hereunder.

In addition to the information specified above, when required to properly evaluate system conditions, the Transmission Provider also may ask the Transmission Customer to provide the following:

- (vi) The electrical location of the initial source of the power to be transmitted pursuant to the Transmission Customer's request for service; and
- (vii) The electrical location of the ultimate load.

The Transmission Provider will treat this information in (vi) and (vii) as confidential at the request of the Transmission Customer except to the extent that disclosure of this information is required by this Tariff, by regulatory or judicial order, for reliability purposes pursuant to Good Utility Practice, or pursuant to RTG transmission information sharing agreements. The Transmission Provider shall treat this information consistent with the standards of conduct contained in Part 37 of the Commission's regulations.

(viii) A statement indicating that, if the Eligible Customer submits a Pre-Confirmed Application, the Eligible Customer will execute a Service Agreement upon receipt of notification that the Transmission Provider can provide the requested Transmission Service.

18.3 Reservation of Non-Firm Point-To-Point Transmission Service:

Requests for monthly service shall be submitted <u>no earlier than sixty (60) days</u> before service is to commence; requests for weekly service shall be submitted <u>no earlier than fourteen (14) days</u> before service is to commence, requests for daily service shall be submitted <u>no earlier than two (2) days</u> before service is to commence, and requests for hourly service shall be submitted <u>no earlier than noon the day</u> before service is to commence. Requests for service in the CP&L Zone and requests for service in the DEC Zone received <u>later than 2:00 p.m.</u> prior to the day service is scheduled to commence will be accommodated if practicable.

Requests for service in the FPC Zone received later than 15 minutes before the scheduled start of hourly service or twelve noon prior to the day longer term service is scheduled to commence will be accommodated if practicable.

18.4 Determination of Available Transfer Capability:

Following receipt of a tendered schedule the Transmission Provider will make a determination on a non-discriminatory basis of available transfer capability pursuant to Section 15.2. Such determination shall be made as soon as reasonably practicable after receipt, but not later than the following time periods for the following terms of service: (i) in the CP&L Zone and in the DEC Zone, thirty (30) minutes for hourly service, and in the FPC Zone, prior to the requested start of the transaction for hourly service; (ii) in all Zones, thirty (30) minutes for daily service; (iii) in all Zones, four (4) hours for weekly service; and (iv) in all Zones, two (2) days for monthly service.

19 Additional Study Procedures For Firm Point-To-Point Transmission Service Requests

19.1 Notice of Need for System Impact Study:

After receiving a request for service, the Transmission Provider shall determine on a non-discriminatory basis whether a System Impact Study is needed. A description of the Transmission Provider's methodology for completing a System Impact Study is provided in Attachment D. If the Transmission Provider determines that a System Impact Study is necessary to accommodate the requested service, it shall so inform the Eligible Customer, as soon as practicable. Once informed, the Eligible Customer shall timely notify the Transmission Provider if it elects to have the Transmission Provider study redispatch or conditional curtailment as part of the System Impact Study. If notification is provided prior to tender of the System Impact Study Agreement, the Eligible Customer can avoid the costs associated with the study of these options. The

Transmission Provider shall within thirty (30) days of receipt of a Completed Application, tender a System Impact Study Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for performing the required System Impact Study. For a service request to remain a Completed Application, the Eligible Customer shall execute the System Impact Study Agreement and return it to the Transmission Provider within fifteen (15) days. If the Eligible Customer elects not to execute the System Impact Study Agreement, its application shall be deemed withdrawn and its deposit, pursuant to Section 17.3, shall be returned with interest.

19.2 System Impact Study Agreement and Cost Reimbursement:

- Transmission Provider's estimate of the actual cost, and time for completion of the System Impact Study. The charge shall not exceed the actual cost of the study. In performing the System Impact Study, the Transmission Provider shall rely, to the extent reasonably practicable, on existing transmission planning studies. The Eligible Customer will not be assessed a charge for such existing studies; however, the Eligible Customer will be responsible for charges associated with any modifications to existing planning studies that are reasonably necessary to evaluate the impact of the Eligible Customer's request for service on the Transmission System.
- (ii) If in response to multiple Eligible Customers requesting service in relation to the same competitive solicitation, a single System Impact Study is sufficient for the Transmission Provider to accommodate the requests for

- service, the costs of that study shall be pro-rated among the Eligible Customers.
- (iii) For System Impact Studies that the Transmission Provider conducts on its own behalf, the Transmission Provider shall record the cost of the System Impact Studies pursuant to Section 20.

19.3 System Impact Study Procedures:

Upon receipt of an executed System Impact Study Agreement, the Transmission Provider will use due diligence to complete the required System Impact Study within a sixty (60) day period. The System Impact Study shall identify (1) any system constraints identified with specificity by transmission element or flowgate, (2) redispatch options (when requested by an Eligible Customer) including an estimate of the cost of redispatch, (3) conditional curtailment options (when requested by an Eligible Customer) including the number of hours per year and the System Conditions during which conditional curtailment may occur, and (4) additional Direct Assignment Facilities or Network Upgrades required to provide the requested service. For customers requesting the study of redispatch options, the System Impact Study shall (1) identify all resources located within the Transmission Provider's Control Area that can significantly contribute toward relieving the system constraint and (2) provide a measurement of each resource's impact on the system constraint. If the Transmission Provider possesses information indicating that any resource outside its Control Area could relieve the constraint, it shall identify each such resource in the System Impact Study. In the event that the Transmission Provider is unable to complete the required System Impact Study within such time period, it shall so notify the Eligible Customer and

provide an estimated completion date along with an explanation of the reasons why additional time is required to complete the required studies. A copy of the completed System Impact Study and related work papers shall be made available to the Eligible Customer as soon as the System Impact Study is complete. The Transmission Provider will use the same due diligence in completing the System Impact Study for an Eligible Customer as it uses when completing studies for itself. The Transmission Provider shall notify the Eligible Customer immediately upon completion of the System Impact Study if the Transmission System will be adequate to accommodate all or part of a request for service or that no costs are likely to be incurred for new transmission facilities or upgrades. In order for a request to remain a Completed Application, within fifteen (15) days of completion of the System Impact Study the Eligible Customer must execute a Service Agreement or request the filing of an unexecuted Service Agreement pursuant to Section 15.3, or the Application shall be deemed terminated and withdrawn.

19.4 Facilities Study Procedures:

If a System Impact Study indicates that additions or upgrades to the Transmission System are needed to supply the Eligible Customer's service request, the Transmission Provider, within thirty (30) days of the completion of the System Impact Study, shall tender to the Eligible Customer a Facilities Study Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for performing the required Facilities Study. For a service request to remain a Completed Application, the Eligible Customer shall execute the Facilities Study Agreement and return it to the Transmission Provider within fifteen (15) days. If the Eligible Customer elects not to execute the Facilities

Study Agreement, its application shall be deemed withdrawn and its deposit, pursuant to Section 17.3, shall be returned with interest. Upon receipt of an executed Facilities Study Agreement, the Transmission Provider will use due diligence to complete the required Facilities Study within a sixty (60) day period. If the Transmission Provider is unable to complete the Facilities Study in the allotted time period, the Transmission Provider shall notify the Transmission Customer and provide an estimate of the time needed to reach a final determination along with an explanation of the reasons that additional time is required to complete the study. When completed, the Facilities Study will include a good faith estimate of (i) the cost of Direct Assignment Facilities to be charged to the Transmission Customer, (ii) the Transmission Customer's appropriate share of the cost of any required Network Upgrades as determined pursuant to the provisions of Part II of the Tariff, and (iii) the time required to complete such construction and initiate the requested service. The Transmission Customer shall provide the Transmission Provider with a letter of credit or other reasonable form of security acceptable to the Transmission Provider equivalent to the costs of new facilities or upgrades consistent with commercial practices as established by the Uniform Commercial Code. The Transmission Customer shall have thirty (30) days to execute a Service Agreement or request the filing of an unexecuted Service Agreement and provide the required letter of credit or other form of security or the request will no longer be a Completed Application and shall be deemed terminated and withdrawn.

19.5 Facilities Study Modifications:

Any change in design arising from inability to site or construct facilities as proposed will require development of a revised good faith estimate. New good faith estimates also will be required in the event of new statutory or regulatory requirements that are effective before the completion of construction or other circumstances beyond the control of the Transmission Provider that significantly affect the final cost of new facilities or upgrades to be charged to the Transmission Customer pursuant to the provisions of Part II of the Tariff.

19.6 Due Diligence in Completing New Facilities:

The Transmission Provider shall use due diligence to add necessary facilities or upgrade its Transmission System within a reasonable time. The Transmission Provider will not upgrade its existing or planned Transmission System in order to provide the requested Firm Point-To-Point Transmission Service if doing so would impair system reliability or otherwise impair or degrade existing firm service.

19.7 Partial Interim Service:

If the Transmission Provider determines that it will not have adequate transfer capability to satisfy the full amount of a Completed Application for Firm Point-To-Point Transmission Service, the Transmission Provider nonetheless shall be obligated to offer and provide the portion of the requested Firm Point-To-Point Transmission Service that can be accommodated without addition of any facilities and through redispatch. However, the Transmission Provider shall not be obligated to provide the incremental amount of requested Firm Point-To-Point

Transmission Service that requires the addition of facilities or upgrades to the Transmission System until such facilities or upgrades have been placed in service.

19.8 Expedited Procedures for New Facilities:

In lieu of the procedures set forth above, the Eligible Customer shall have the option to expedite the process by requesting the Transmission Provider to tender at one time, together with the results of required studies, an "Expedited Service Agreement" pursuant to which the Eligible Customer would agree to compensate the Transmission Provider for all costs incurred pursuant to the terms of the Tariff. In order to exercise this option, the Eligible Customer shall request in writing an expedited Service Agreement covering all of the above-specified items within thirty (30) days of receiving the results of the System Impact Study identifying needed facility additions or upgrades or costs incurred in providing the requested service. While the Transmission Provider agrees to provide the Eligible Customer with its best estimate of the new facility costs and other charges that may be incurred, such estimate shall not be binding and the Eligible Customer must agree in writing to compensate the Transmission Provider for all costs incurred pursuant to the provisions of the Tariff. The Eligible Customer shall execute and return such an Expedited Service Agreement within fifteen (15) days of its receipt or the Eligible Customer's request for service will cease to be a Completed Application and will be deemed terminated and withdrawn.

19.9 Penalties for Failure to Meet Study Deadlines:

Sections 19.3 and 19.4 require a Transmission Provider to use due diligence to meet 60-day study completion deadlines for System Impact Studies and Facilities Studies.

- (i) The Transmission Provider is required to file a notice with the

 Commission in the event that more than twenty (20) percent of non
 Affiliates' System Impact Studies and Facilities Studies completed by

 the Transmission Provider in any two consecutive calendar quarters

 are not completed within the 60-day study completion deadlines. Such

 notice must be filed within thirty (30) days of the end of the calendar

 quarter triggering the notice requirement.
- Impact Studies and Facilities Studies processed outside of the 60-day study completion deadlines, the Transmission Provider shall consider all System Impact Studies and Facilities Studies that it completes for non-Affiliates during the calendar quarter. The percentage should be calculated by dividing the number of those studies which are completed on time by the total number of completed studies. The Transmission Provider may provide an explanation in its notification filing to the Commission if it believes there are extenuating circumstances that prevented it from meeting the 60-day study completion deadlines.
- (iii) The Transmission Provider is subject to an operational penalty if it completes ten (10) percent or more of non-Affiliates' System Impact Studies and Facilities Studies outside of the 60-day study completion deadlines for each of the two calendar quarters immediately following the quarter that triggered its notification filing to the Commission. The

operational penalty will be assessed for each calendar quarter for which an operational penalty applies, starting with the calendar quarter immediately following the quarter that triggered the Transmission Provider's notification filing to the Commission. The operational penalty will continue to be assessed each quarter until the Transmission Provider completes at least ninety (90) percent of all non-Affiliates' System Impact Studies and Facilities Studies within the 60-day deadline.

(iv) For penalties assessed in accordance with subsection (iii) above, the penalty amount for each System Impact Study or Facilities Study shall be equal to \$500 for each day the Transmission Provider takes to complete that study beyond the 60-day deadline.

19.10 Credits for Late Study Penalty Revenues:

The Transmission Provider will provide credits back to Transmission Customers for the penalties assessed under Section 19.9. These credits will be provided in accordance with the below provisions.

The operational penalties pursuant to Section 19.9(iii) and (iv) shall be credited based on the ratio of the quarterly transmission revenues collected from each Network Transmission Customer (excluding any Transmission Provider Affiliates) or Point-To-Point Transmission Customer (excluding any Transmission Provider Affiliates) to the sum of the transmission revenues from all Transmission Customers (excluding any Transmission Provider Affiliates). The operational penalties will be refunded to the Transmission Customers based on the quarters the operational penalty applies.

The Transmission Provider will disburse accumulated operational penalty revenues, plus interest calculated in accord with 18 C.F.R. § 35.19a, within 60 days after the end of the quarter where a penalty was assessed.

20 Procedures if The Transmission Provider is Unable to Complete New Transmission Facilities for Firm Point-To-Point Transmission Service

20.1 Delays in Construction of New Facilities:

If any event occurs that will materially affect the time for completion of new facilities, or the ability to complete them, the Transmission Provider shall promptly notify the Transmission Customer. In such circumstances, the Transmission Provider shall within thirty (30) days of notifying the Transmission Customer of such delays, convene a technical meeting with the Transmission Customer to evaluate the alternatives available to the Transmission Customer. The Transmission Provider also shall make available to the Transmission Customer studies and work papers related to the delay, including all information that is in the possession of the Transmission Provider that is reasonably needed by the Transmission Customer to evaluate any alternatives.

20.2 Alternatives to the Original Facility Additions:

When the review process of Section 20.1 determines that one or more alternatives exist to the originally planned construction project, the Transmission Provider shall present such alternatives for consideration by the Transmission Customer. If, upon review of any alternatives, the Transmission Customer desires to maintain its Completed Application subject to construction of the alternative facilities, it may request the Transmission Provider to submit a revised Service Agreement for Firm Point-To-Point Transmission Service. If the alternative approach solely

involves Non-Firm Point-To-Point Transmission Service, the Transmission

Provider shall promptly tender a Service Agreement for Non-Firm Point-To-Point

Transmission Service providing for the service. In the event the Transmission

Provider concludes that no reasonable alternative exists and the Transmission

Customer disagrees, the Transmission Customer may seek relief under the dispute resolution procedures pursuant to Section 12 or it may refer the dispute to the Commission for resolution.

20.3 Refund Obligation for Unfinished Facility Additions:

If the Transmission Provider and the Transmission Customer mutually agree that no other reasonable alternatives exist and the requested service cannot be provided out of existing capability under the conditions of Part II of the Tariff, the obligation to provide the requested Firm Point-To-Point Transmission Service shall terminate and any deposit made by the Transmission Customer shall be returned with interest pursuant to Commission regulations 35.19a(a)(2)(iii). However, the Transmission Customer shall be responsible for all prudently incurred costs by the Transmission Provider through the time construction was suspended.

21 Provisions Relating to Transmission Construction and Services on the Systems of Other Utilities

21.1 Responsibility for Third-Party System Additions:

The Transmission Provider shall not be responsible for making arrangements for any necessary engineering, permitting, and construction of transmission or distribution facilities on the system(s) of any other entity or for obtaining any regulatory approval for such facilities. The Transmission Provider will undertake

reasonable efforts to assist the Transmission Customer in obtaining such arrangements, including without limitation, providing any information or data required by such other electric system pursuant to Good Utility Practice.

21.2 Coordination of Third-Party System Additions:

In circumstances where the need for transmission facilities or upgrades is identified pursuant to the provisions of Part II of the Tariff, and if such upgrades further require the addition of transmission facilities on other systems, the 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. The Transmission Provider shall notify the Transmission Customer in writing of the basis for any decision to defer construction and the specific problems which must be resolved before it will initiate or resume construction of new facilities. Within sixty (60) days of receiving written notification by the Transmission Provider of its intent to defer construction pursuant to this section, the Transmission Customer may challenge the decision in accordance with the dispute resolution procedures pursuant to Section 12 or it may refer the dispute to the Commission for resolution.

22 Changes in Service Specifications

22.1 Modifications On a Non-Firm Basis:

The Transmission Customer taking Firm Point-To-Point Transmission Service may request the Transmission Provider to provide transmission service on a non-

firm basis over Receipt and Delivery Points other than those specified in the Service Agreement ("Secondary Receipt and Delivery Points"), in amounts not to exceed its firm capacity reservation, without incurring an additional Non-Firm Point-To-Point Transmission Service charge or executing a new Service Agreement, subject to the following conditions.

- (a) Service provided over Secondary Receipt and Delivery Points will be nonfirm only, on an as-available basis and will not displace any firm or nonfirm service reserved or scheduled by third-parties under the Tariff or by the Transmission Provider on behalf of its Native Load Customers.
- (b) The sum of all Firm and non-firm Point-To-Point Transmission Service provided to the Transmission Customer at any time pursuant to this section shall not exceed the Reserved Capacity in the relevant Service Agreement under which such services are provided.
- (c) The Transmission Customer shall retain its right to schedule Firm Point-To-Point Transmission Service at the Receipt and Delivery Points specified in the relevant Service Agreement in the amount of its original capacity reservation.
- (d) Service over Secondary Receipt and Delivery Points on a non-firm basis shall not require the filing of an Application for Non-Firm Point-To-Point Transmission Service under the Tariff. However, all other requirements of Part II of the Tariff (except as to transmission rates) shall apply to transmission service on a non-firm basis over Secondary Receipt and Delivery Points.

22.2 Modification On a Firm Basis:

Any request by a Transmission Customer to modify Receipt and Delivery Points on a firm basis shall be treated as a new request for service in accordance with Section 17 hereof, except that such Transmission Customer shall not be obligated to pay any additional deposit if the capacity reservation does not exceed the amount reserved in the existing Service Agreement. While such new request is pending, the Transmission Customer shall retain its priority for service at the existing firm Receipt and Delivery Points specified in its Service Agreement.

23 Sale or Assignment of Transmission Service

23.1 Procedures for Assignment or Transfer of Service:

- (a) A Transmission Customer may sell, assign, or transfer all or a portion of its rights under its Service Agreement, but only to another Eligible Customer (the Assignee). The Transmission Customer that sells, assigns or transfers its rights under its Service Agreement is hereafter referred to as the Reseller. Compensation to Resellers shall be at rates established by agreement between the Reseller and the Assignee.
- (b) The Assignee must execute a service agreement with the Transmission

 Provider governing reassignments of transmission service prior to the date
 on which the reassigned service commences. The Transmission Provider
 shall charge the Reseller, as appropriate, at the rate stated in the Reseller's
 Service Agreement with the Transmission Provider or the associated
 OASIS schedule and credit the Reseller with the price reflected in the
 Assignee's Service Agreement with the Transmission Provider or the
 associated OASIS schedule; provided that, such credit shall be reversed in

the event of non-payment by the Assignee. If the Assignee does not request any change in the Point(s) of Receipt or the Point(s) of Delivery, or a change in any other term or condition set forth in the original Service Agreement, the Assignee will receive the same services as did the Reseller and the priority of service for the Assignee will be the same as that of the Reseller. The Assignee will be subject to all terms and conditions of this Tariff. If the Assignee requests a change in service, the reservation priority of service will be determined by the Transmission Provider pursuant to Section 13.2.

23.2 Limitations on Assignment or Transfer of Service:

If the Assignee requests a change in the Point(s) of Receipt or Point(s) of Delivery, or a change in any other specifications set forth in the original Service Agreement, the Transmission Provider will consent to such change subject to the provisions of the Tariff, provided that the change will not impair the operation and reliability of the Transmission Provider's generation, transmission, or distribution systems.

The Assignee shall compensate the Transmission Provider for performing any System Impact Study needed to evaluate the capability of the Transmission

System to accommodate the proposed change and any additional costs resulting from such change. The Reseller shall remain liable for the performance of all obligations under the Service Agreement, except as specifically agreed to by the Transmission Provider and the Reseller through an amendment to the Service Agreement.

23.3 Information on Assignment or Transfer of Service:

In accordance with Section 4, all sales or assignments of capacity must be conducted through or otherwise posted on the Transmission Provider's OASIS on or before the date the reassigned service commences and are subject to Section 23.1. Resellers may also use the Transmission Provider's OASIS to post transmission capacity available for resale.

24 Metering and Power Factor Correction at Receipt and Delivery Points(s)

24.1 Transmission Customer Obligations:

Unless otherwise agreed, the Transmission Customer shall be responsible for installing and maintaining compatible metering and communications equipment to accurately account for the capacity and energy being transmitted under Part II of the Tariff and to communicate the information to the Transmission Provider.

Such equipment shall remain the property of the Transmission Customer.

24.2 Transmission Provider Access to Metering Data:

The Transmission Provider shall have access to metering data, which may reasonably be required to facilitate measurements and billing under the Service Agreement.

24.3 Power Factor:

Unless otherwise agreed, the Transmission Customer is required to maintain a power factor within the same range as the Transmission Provider pursuant to Good Utility Practices. The power factor requirements are specified in the Service Agreement where applicable.

25 Compensation for Transmission Service

Rates for Firm and Non-Firm Point-To-Point Transmission Service are provided in the Schedules appended to the Tariff: Firm Point-To-Point Transmission Service (Schedule 7); Non-Firm Point-To-Point Transmission Service (Schedule 8); and Distribution Substation Service in the FPC Zone (Schedule 11). The Transmission Provider shall use Part II or Part IV of the Tariff to make its Third-Party Sales. The Transmission Provider shall account for such use at the applicable Tariff rates, pursuant to Section 8.

26 Stranded Cost Recovery

The Transmission Provider may seek to recover stranded costs from the Transmission Customer pursuant to this Tariff in accordance with the terms, conditions and procedures set forth in FERC Order No. 888. However, the Transmission Provider must separately file any specific proposed stranded cost charge under Section 205 of the Federal Power Act.

27 Compensation for New Facilities and Redispatch Costs

Whenever a System Impact Study performed by the Transmission Provider in connection with the provision of Firm Point-To-Point Transmission Service identifies the need for new facilities, the Transmission Customer shall be responsible for such costs to the extent consistent with Commission policy. Whenever a System Impact Study performed by the Transmission Provider identifies capacity constraints that may be relieved by redispatching the Transmission Provider's resources to eliminate such constraints, the Transmission Customer shall be responsible for the redispatch costs to the extent consistent with Commission policy.

III. NETWORK INTEGRATION TRANSMISSION SERVICE

Preamble

The Transmission Provider will provide Network Integration Transmission Service pursuant to the applicable terms and conditions contained in the Tariff and Service Agreement. Network Integration Transmission Service allows the Network Customer to integrate, economically dispatch and regulate its current and planned Network Resources to serve its Network Load in a manner comparable to that in which the Transmission Provider utilizes its Transmission System to serve its Native Load Customers. Network Integration Transmission Service also may be used by the Network Customer to deliver economy energy purchases to its Network Load from non-designated resources on an asavailable basis without additional charge. Transmission Service for sales to non-designated loads will be provided pursuant to the applicable terms and conditions of Part II or Part IV of the Tariff.

28 Nature of Network Integration Transmission Service

28.1 Scope of Service:

Network Integration Transmission Service is a transmission service that allows

Network Customers to efficiently and economically utilize their Network

Resources (as well as other non-designated generation resources) to serve their

Network Load located in the Transmission Provider's Control Area and any

additional load that may be designated pursuant to Section 31.3 of the Tariff. The

Network Customer taking Network Integration Transmission Service must obtain

or provide Ancillary Services pursuant to Section 3.

28.2 Transmission Provider Responsibilities:

The Transmission Provider will plan, construct, operate and maintain its Transmission System in accordance with Good Utility Practice and its planning obligations in Attachment N-1 or Attachment N-2, as applicable, in order to provide the Network Customer with Network Integration Transmission Service over the Transmission Provider's Transmission System. The Transmission Provider, on behalf of its Native Load Customers, shall be required to designate resources and loads in the same manner as any Network Customer under Part III of this Tariff. This information must be consistent with the information used by the Transmission Provider to calculate available transfer capability. The Transmission Provider shall include the Network Customer's Network Load in its Transmission System planning and shall, consistent with Good Utility Practice and Attachment N-1 or Attachment N-2, as applicable, endeavor to construct and place into service sufficient transfer capability to deliver the Network Customer's Network Resources to serve its Network Load on a basis comparable to the Transmission Provider's delivery of its own generating and purchased resources to its Native Load Customers.

28.3 Network Integration Transmission Service:

The Transmission Provider will provide firm transmission service over its

Transmission System to the Network Customer for the delivery of capacity and energy from its designated Network Resources to service its Network Loads on a basis that is comparable to the Transmission Provider's use of the Transmission System to reliably serve its Native Load Customers.

28.4 Secondary Service:

The Network Customer may use the Transmission Provider's Transmission System to deliver energy to its Network Loads from resources that have not been designated as Network Resources. Such energy shall be transmitted, on an asavailable basis, at no additional charge. Secondary service shall not require the filing of an Application for Network Integration Transmission Service under the Tariff. However, all other requirements of Part III of the Tariff (except for transmission rates) shall apply to secondary service. Deliveries from resources other than Network Resources will have a higher priority than any Non-Firm Point-To-Point Transmission Service under Part II of the Tariff. In the DEC Zone. if the transmission reservation period for firm requests is the same as for secondary service requests, if after allocating transfer capability to firm requests as described in Sections 13.2 and 30.2 of this Tariff, there is some transfer capability but not sufficient transfer capability to meet all secondary service reservations that are considered to have been submitted simultaneously, the available transfer capability will be allocated pro rata based on the quantity of service (MW) requested.

28.5 Real Power Losses:

Real Power Losses are associated with all transmission service. The Transmission Provider is not obligated to provide Real Power Losses. The Network Customer is responsible for replacing losses associated with all transmission service as calculated by the Transmission Provider.

The applicable Real Power Loss factor in the CP&L Zone is 2.15%.

The applicable Real Power Loss factors in the FPC Zone are 2.05% for delivery at transmission voltages and 3.05% for delivery at distribution voltages. Procedures for annual changes to the Real Power Loss factors in the FPC Zone are set out in Attachment Q.

The applicable Real Power Loss factor in the DEC Zone used to determine the amount of losses associated with the use of facilities at or above 44 kV shall be three (3) percent. In the DEC Zone, the Transmission Provider and Transmission Customer may agree to have the Transmission Provider supply the capacity and/or energy necessary to compensate for losses in accordance with Schedule 9.

28.6 Restrictions on Use of Service:

The Network Customer shall not use Network Integration Transmission Service for (i) sales of capacity and energy to non-designated loads, or (ii) direct or indirect provision of transmission service by the Network Customer to third parties. All Network Customers taking Network Integration Transmission Service shall use Point-To-Point Transmission Service under Part II of the Tariff or Network Contract Demand Transmission Service under Part IV of the Tariff for any Third-Party Sale which requires use of the Transmission Provider's Transmission System. The Transmission Provider shall specify any appropriate charges and penalties and all related terms and conditions applicable in the event that a Network Customer uses Network Integration Transmission Service or secondary service pursuant to Section 28.4 to facilitate a wholesale sale that does not serve a Network Load. Such use will be treated as an unreserved use of Point-

To-Point Transmission Service and will be subject to the unreserved use penalties for such service set forth in Section 13.7.

29 Initiating Service

29.1 Condition Precedent for Receiving Service:

Subject to the terms and conditions of Part III of the Tariff, the Transmission Provider will provide Network Integration Transmission Service to any Eligible Customer, provided that (i) the Eligible Customer completes an Application for service as provided under Part III of the Tariff, (ii) the Eligible Customer and the Transmission Provider complete the technical arrangements set forth in Sections 29.3 and 29.4, (iii) the Eligible Customer executes a Service Agreement pursuant to Attachment F-1 or Attachment F-2, as applicable, for service under Part III of the Tariff or requests in writing that the Transmission Provider file a proposed unexecuted Service Agreement with the Commission, (iv) the Eligible Customer meets the Creditworthiness criteria set forth in Attachment O, and (v) the Eligible Customer executes a Network Operating Agreement with the Transmission Provider pursuant to Attachment G (in the DEC Zone, the Network Operating Agreement is Attachment E to the Form of Service Agreement for Network Integration Transmission Service (available at Attachment F-2 to the Tariff)), or requests in writing that Transmission Provider file a proposed unexecuted Network Operating Agreement.

29.2 Application Procedures:

An Eligible Customer requesting service under Part III of the Tariff must submit an Application, with a deposit approximating the charge for one month of service, to the Transmission Provider as far as possible in advance of the month in which service is to commence; provided that the Transmission Provider shall on a non-discriminatory basis waive the requirement that a deposit accompany an Application for an Eligible Customer that has met the necessary conditions of Attachment O of this Tariff. Unless subject to the procedures in Section 2, Completed Applications for Network Integration Transmission Service will be assigned a priority according to the date and time the Application is received, with the earliest Application receiving the highest priority. Applications should be submitted by entering the information listed below on the Transmission Provider's OASIS. A Completed Application shall provide all of the information included in 18 C.F.R. § 2.20 including but not limited to the following:

- (i) The identity, address, telephone number and facsimile number of the party requesting service;
- (ii) A statement that the party requesting service is, or will be upon commencement of service, an Eligible Customer under the Tariff;
- (iii) A description of the Network Load at each delivery point. This description should separately identify and provide the Eligible Customer's best estimate of the total loads to be served at each transmission voltage level, and the loads to be served from each Transmission Provider substation at the same transmission voltage level. The description should include a ten (10) year forecast of summer and winter load and resource requirements beginning with the first year after the service is scheduled to commence;
- (iv) The amount and location of any interruptible loads included in the Network Load. This shall include the summer and winter capacity requirements for each interruptible load (had such load not been interruptible), that portion of the load subject to interruption, the conditions under which an interruption can be implemented and any limitations on the amount and frequency of interruptions. An Eligible Customer should identify the amount of interruptible customer load (if any) included in the 10 year load forecast provided in response to (iii) above;

- (v) A description of Network Resources (current and 10-year projection). For each on-system Network Resource, such description shall include:
 - Unit size and amount of capacity from that unit to be designated as Network Resource
 - VAR capability (both leading and lagging) of all generators
 - Operating restrictions
 - Any periods of restricted operations throughout the year
 - Maintenance schedules
 - Minimum loading level of unit
 - Normal operating level of unit
 - Any must-run unit designations required for system reliability or contract reasons
 - Approximate variable generating cost (\$/MWH) for redispatch computations
 - Arrangements governing sale and delivery of power to third parties from generating facilities located in the Transmission Provider Control Area, where only a portion of unit output is designated as a Network Resource;

For each off-system Network Resource, such description shall include:

- Identification of the Network Resource as an off-system resource
- Amount of power to which the customer has rights
- Identification of the control area from which the power will originate
- Delivery point(s) to the Transmission Provider's Transmission System
- Transmission arrangements on the external transmission system(s)
- Operating restrictions, if any
 - Any periods of restricted operations throughout the year
 - Maintenance schedules
 - Minimum loading level of unit
 - Normal operating level of unit
 - Any must-run unit designations required for system reliability or contract reasons
- Approximate variable generating cost (\$/MWH) for redispatch computations;
- (vi) Description of Eligible Customer's transmission system:
 - Load flow and stability data, such as real and reactive parts of the load, lines, transformers, reactive devices and load type, including normal and emergency ratings of all transmission equipment in a load flow format compatible with that used by the Transmission Provider
 - Operating restrictions needed for reliability

- Operating guides employed by system operators
- Contractual restrictions or committed uses of the Eligible
 Customer's transmission system, other than the Eligible Customer's
 Network Loads and Resources
- Location of Network Resources described in subsection (v) above
- 10 year projection of system expansions or upgrades
- Transmission System maps that include any proposed expansions or upgrades
- Thermal ratings of Eligible Customer's Control Area ties with other Control Areas;
- (vii) Service Commencement Date and the term of the requested Network Integration Transmission Service. The minimum term for Network Integration Transmission Service is one year;
- (viii) A statement signed by an authorized officer from or agent of the Network Customer attesting that all of the network resources listed pursuant to Section 29.2(v) satisfy the following conditions: (1) the Network Customer owns the resource, has committed to purchase generation pursuant to an executed contract, or has committed to purchase generation where execution of a contract is contingent upon the availability of transmission service under Part III of the Tariff; and (2) the Network Resources do not include any resources, or any portion thereof, that are committed for sale to non-designated third party load or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program; and
- (ix) Any additional information required of the Transmission Customer as specified in the Transmission Provider's planning process established in Attachment N-1 or Attachment N-2, as applicable.

Unless the Parties agree to a different time frame, the Transmission Provider must acknowledge the request within ten (10) days of receipt. The acknowledgment must include a date by which a response, including a Service Agreement, will be sent to the Eligible Customer. If an Application fails to meet the requirements of this section, the Transmission Provider shall notify the Eligible Customer requesting service within fifteen (15) days of receipt and specify the reasons for such failure. Wherever possible, the Transmission Provider will attempt to remedy deficiencies in the Application through informal communications with the

Eligible Customer. If such efforts are unsuccessful, the Transmission Provider shall return the Application without prejudice to the Eligible Customer filing a new or revised Application that fully complies with the requirements of this section. The Eligible Customer will be assigned a new priority consistent with the date of the new or revised Application. The Transmission Provider shall treat this information consistent with the standards of conduct contained in Part 37 of the Commission's regulations.

29.3 Technical Arrangements to be Completed Prior to Commencement of Service:

Network Integration Transmission Service shall not commence until the Transmission Provider and the Network Customer, or a third party, have completed installation of all equipment specified under the Network Operating Agreement consistent with Good Utility Practice and any additional requirements reasonably and consistently imposed to ensure the reliable operation of the Transmission System. The Transmission Provider shall exercise reasonable efforts, in coordination with the Network Customer, to complete such arrangements as soon as practicable taking into consideration the Service Commencement Date.

29.4 Network Customer Facilities:

The provision of Network Integration Transmission Service shall be conditioned upon the Network Customer's constructing, maintaining and operating the facilities on its side of each delivery point or interconnection necessary to reliably deliver capacity and energy from the Transmission Provider's Transmission System to the Network Customer. The Network Customer shall be solely

responsible for constructing or installing all facilities on the Network Customer's side of each such delivery point or interconnection.

29.5 Filing of Service Agreement:

The Transmission Provider will file Service Agreements with the Commission in compliance with applicable Commission regulations.

30 Network Resources

30.1 Designation of Network Resources:

Network Resources shall include all generation owned, purchased or leased by the Network Customer designated to serve Network Load under the Tariff. Network Resources may not include resources, or any portion thereof, that are committed for sale to non-designated third party load or otherwise cannot be called upon to meet the Network Customer's Network Load or a Network Contract Demand Customer's Network Contract Demand on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program. Any owned or purchased resources that were serving the Network Customer's loads under firm agreements entered into on or before the Service Commencement Date shall initially be designated as Network Resources until the Network Customer terminates the designation of such resources.

30.2 Designation of New Network Resources:

The Network Customer may designate a new Network Resource by providing the Transmission Provider with as much advance notice as practicable. A designation of a new Network Resource must be made through the Transmission Provider's OASIS by a request for modification of service pursuant to an Application under Section 29. This request must include a statement that the new network resource

satisfies the following conditions: (1) the Network Customer owns the resource, has committed to purchase generation pursuant to an executed contract, or has committed to purchase generation where execution of a contract is contingent upon the availability of transmission service under Part III of the Tariff; and (2) The Network Resources do not include any resources, or any portion thereof, that are committed for sale to non-designated third party load or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program. The Network Customer's request will be deemed deficient if it does not include this statement and the Transmission Provider will follow the procedures for a deficient application as described in Section 29.2 of the Tariff. One day is the minimum term for a Network Resource designation.

In the DEC Zone, all Applications to designate Network Resources made within the first five minutes after the transmission reservation period set forth in the Transmission Provider's business practices opens for the service requested will be considered to have been submitted simultaneously. If the transmission reservation period for Network Resource designations is the same as the transmission reservation period for Long-Term Firm Requests, such Network Resource designations requests made within the first five minutes after the transmission reservation period opens also will be considered to have been submitted simultaneously with the Long-Term Firm Requests. If sufficient transfer capability is not available to meet all Long-Term Firm Requests and Network Resource designation requests that are considered to have been

submitted simultaneously, available transfer capability first will be allocated based on pre-confirmation status (Pre-Confirmed or not confirmed). If insufficient transfer capability is available to accommodate all Pre-Confirmed Applications, then Pre-Confirmed Applications will be allocated a portion of the available transfer capability on a pro-rata basis.

In the DEC Zone, if sufficient transfer capability is available to accommodate all Pre-Confirmed Applications but not enough to accommodate all other requests, then the Pre-Confirmed Applications will be accepted and all other requests will be allocated a portion of the available transfer capability on a prorata basis.

30.3 Termination of Network Resources:

The Network Customer may terminate the designation of all or part of a generating resource as a Network Resource by providing notification to the Transmission Provider through OASIS no later than 10:00 a.m. of the day prior to the commencement of the termination. Requests to terminate Network Resources submitted after 10:00 a.m. of the day prior to the commencement of the termination will be accommodated, if practicable. Any request for termination of Network Resource status must be submitted on OASIS, and should indicate whether the request is for indefinite or temporary termination. A request for indefinite termination of Network Resource status must indicate the date and time that the termination is to be effective, and the identification and capacity of the resource(s) or portions thereof to be indefinitely terminated. A request for temporary termination of Network Resource status must include the following:

(i) Effective date and time of temporary termination;

- (ii) Effective date and time of redesignation, following period of temporary termination;
- (iii) Identification and capacity of resource(s) or portions thereof to be temporarily terminated;
- (iv) Resource description and attestation for redesignating the network resource following the temporary termination, in accordance with Section 30.2; and
- (v) Identification of any related transmission service requests to be evaluated concomitantly with the request for temporary termination, such that the requests for undesignation and the request for these related transmission service requests must be approved or denied as a single request. The evaluation of these related transmission service requests must take into account the termination of the network resources identified in (iii) above, as well as all competing transmission service requests of higher priority.

As part of a temporary termination, a Network Customer may only redesignate the same resource that was originally designated, or a portion thereof. Requests to redesignate a different resource and/or a resource with increased capacity will be deemed deficient and the Transmission Provider will follow the procedures for a deficient application as described in Section 29.2 of the Tariff.

30.4 Operation of Network Resources:

The Network Customer shall not operate its designated Network Resources located in the Network Customer's or Transmission Provider's Control Area such that the output of those facilities exceeds its designated Network Load and its Network Contract Demand under Part IV, plus Non-Firm Sales delivered pursuant

to Part II of the Tariff, plus losses, plus power sales under a reserve sharing program, plus sales that permit curtailment without penalty to serve its designated Network Load. This limitation shall not apply to changes in the operation of a Transmission Customer's Network Resources at the request of the Transmission Provider to respond to an emergency or other unforeseen condition which may impair or degrade the reliability of the Transmission System. For all Network Resources not physically connected with the Transmission Provider's Transmission System, the Network Customer may not schedule delivery of energy in excess of the Network Resource's capacity, as specified in the Network Customer's Application pursuant to Section 29, unless the Network Customer supports such delivery within the Transmission Provider's Transmission System by either obtaining Point-To-Point Transmission Service or utilizing secondary service pursuant to Section 28.4. The Transmission Provider shall specify the rate treatment and all related terms and conditions applicable in the event that a Network Customer's schedule at the delivery point for a Network Resource not physically interconnected with the Transmission Provider's Transmission System exceeds the Network Resource's designated capacity, excluding energy delivered using secondary service or Point-To-Point Transmission Service. In the DEC Zone, such delivery will be treated as an unreserved use of Point-To-Point Transmission Service and subject to the unreserved use penalties for such service set forth in Section 13.7.

30.5 Network Customer Redispatch Obligation:

As a condition to receiving Network Integration Transmission Service, the Network Customer agrees to redispatch its Network Resources as requested by

the Transmission Provider pursuant to Section 33.2. To the extent practical, the redispatch of resources pursuant to this section shall be on a least cost, non-discriminatory basis between all Network Customers, Network Contract Demand Customers and the Transmission Provider.

30.6 Transmission Arrangements for Network Resources Not Physically Interconnected With The Transmission Provider:

The Network Customer shall be responsible for any arrangements necessary to deliver capacity and energy from a Network Resource not physically interconnected with the Transmission Provider's Transmission System. The Transmission Provider will undertake reasonable efforts to assist the Network Customer in obtaining such arrangements, including without limitation, providing any information or data required by such other entity pursuant to Good Utility Practice.

30.7 Limitation in Designation of Network Resources:

The Network Customer must demonstrate that it owns or has committed to purchase generation pursuant to an executed contract in order to designate a generating resource as a Network Resource. Alternatively, the Network Customer may establish that execution of a contract is contingent upon the availability of transmission service under Part III of the Tariff.

30.8 Use of Interface Capacity by the Network Customer:

There is no limitation upon a Network Customer's use of the Transmission

Provider's Transmission System at any particular interface to integrate the

Network Customer's Network Resources (or substitute economy purchases) with

its Network Loads. However, a Network Customer's use of the Transmission

Provider's total interface capacity with other transmission systems may not exceed the Network Customer's Load.

30.9 Network Customer Owned Transmission Facilities:

The Network Customer that owns existing transmission facilities that are integrated with the Transmission Provider's Transmission System may be eligible to receive consideration either through a billing credit or some other mechanism. In order to receive such consideration the Network Customer must demonstrate that its transmission facilities are integrated into the plans or operations of the Transmission Provider to serve its power and transmission customers. For facilities added by the Network Customer subsequent to July 13, 2007, the Network Customer shall receive credit for such transmission facilities added if such facilities are integrated into the operations of the Transmission Provider's facilities; provided however, the Network Customer's transmission facilities shall be presumed to be integrated if such transmission facilities, if owned by the Transmission Provider, would be eligible for inclusion in the Transmission Provider's annual transmission revenue requirement as specified in Attachment H. Calculation of any credit under this subsection shall be addressed in either the Network Customer's Service Agreement or any other agreement between the Parties.

31 Designation of Network Load

31.1 Network Load:

The Network Customer must designate the individual Network Loads on whose behalf the Transmission Provider will provide Network Integration Transmission Service. The Network Loads shall be specified in the Service Agreement.

31.2 New Network Loads Connected With the Transmission Provider:

The Network Customer shall provide the Transmission Provider with as much advance notice as reasonably practicable of the designation of new Network Load that will be added to its Transmission System. A designation of new Network Load must be made through a modification of service pursuant to a new Application. The Transmission Provider will use due diligence to install any transmission facilities required to interconnect a new Network Load designated by the Network Customer. The costs of new facilities required to interconnect a new Network Load shall be determined in accordance with the procedures provided in Section 32.4 and shall be charged to the Network Customer in accordance with Commission policies.

31.3 Network Load Not Physically Interconnected With the Transmission Provider:

This section applies to both initial designation pursuant to Section 31.1 and the subsequent addition of new Network Load not physically interconnected with the Transmission Provider. To the extent that the Network Customer desires to obtain transmission service for a load outside the Transmission Provider's Transmission System, the Network Customer shall have the option of (1) electing to include the entire load as Network Load for all purposes under Part III of the Tariff and designating Network Resources in connection with such additional Network Load, or (2) excluding that entire load from its Network Load and purchasing Point-To-Point Transmission Service under Part II of the Tariff or Network Contract Demand Transmission Service under Part IV of the Tariff. To the extent that the Network Customer gives notice of its intent to add a new

Network Load as part of its Network Load pursuant to this section the request must be made through a modification of service pursuant to a new Application.

31.4 New Interconnection Points:

To the extent the Network Customer desires to add a new Delivery Point or interconnection point between the Transmission Provider's Transmission System and a Network Load, the Network Customer shall provide the Transmission Provider with as much advance notice as reasonably practicable.

31.5 Changes in Service Requests:

Under no circumstances shall the Network Customer's decision to cancel or delay a requested change in Network Integration Transmission Service (e.g., the addition of a new Network Resource or designation of a new Network Load) in any way relieve the Network Customer of its obligation to pay the costs of transmission facilities constructed by the Transmission Provider and charged to the Network Customer as reflected in the Service Agreement. However, the Transmission Provider must treat any requested change in Network Integration Transmission Service in a non-discriminatory manner.

31.6 Annual Load and Resource Information Updates:

The Network Customer shall provide the Transmission Provider with annual updates of Network Load and Network Resource forecasts consistent with those included in its Application for Network Integration Transmission Service under Part III of the Tariff including but not limited to, any information provided under section 29.2(ix) pursuant to the Transmission Provider's planning process in Attachment N-1 or Attachment N-2, as applicable. The Network Customer also shall provide the Transmission Provider with timely written notice of material

changes in any other information provided in its Application relating to the

Network Customer's Network Load, Network Resources, its transmission system

or other aspects of its facilities or operations affecting the Transmission Provider's

ability to provide reliable service.

32 Additional Study Procedures For Network Integration Transmission Service Requests

32.1 Notice of Need for System Impact Study:

After receiving a request for service, the Transmission Provider shall determine on a non-discriminatory basis whether a System Impact Study is needed. A description of the Transmission Provider's methodology for completing a System Impact Study is provided in Attachment D. If the Transmission Provider determines that a System Impact Study is necessary to accommodate the requested service, it shall so inform the Eligible Customer, as soon as practicable. In such cases, the Transmission Provider shall within thirty (30) days of receipt of a Completed Application, tender a System Impact Study Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for performing the required System Impact Study. For a service request to remain a Completed Application, the Eligible Customer shall execute the System Impact Study Agreement and return it to the Transmission Provider within fifteen (15) days. If the Eligible Customer elects not to execute the System Impact Study Agreement, its Application shall be deemed withdrawn and its deposit shall be returned with interest.

32.2 System Impact Study Agreement and Cost Reimbursement:

- Transmission Provider's estimate of the actual cost, and time for completion of the System Impact Study. The charge shall not exceed the actual cost of the study. In performing the System Impact Study, the Transmission Provider shall rely, to the extent reasonably practicable, on existing transmission planning studies. The Eligible Customer will not be assessed a charge for such existing studies; however, the Eligible Customer will be responsible for charges associated with any modifications to existing planning studies that are reasonably necessary to evaluate the impact of the Eligible Customer's request for service on the Transmission System.
- (ii) If in response to multiple Eligible Customers requesting service in relation to the same competitive solicitation, a single System Impact Study is sufficient for the Transmission Provider to accommodate the service requests, the costs of that study shall be pro-rated among the Eligible Customers.
- (iii) For System Impact Studies that the Transmission Provider conducts on its own behalf, the Transmission Provider shall record the cost of the System Impact Studies pursuant to Section 8.

32.3 System Impact Study Procedures:

Upon receipt of an executed System Impact Study Agreement, the Transmission Provider will use due diligence to complete the required System Impact Study within a sixty (60) day period. The System Impact Study shall identify (1) any

system constraints, identified with specificity by transmission element or flowgate, (2) redispatch options (when requested by an Eligible Customer) including, to the extent possible, an estimate of the cost of redispatch, (3) available options for installation of automatic devices to curtail service (when requested by an Eligible Customer), and (4) additional Direct Assignment Facilities or Network Upgrades required to provide the requested service. For customers requesting the study of redispatch options, the System Impact Study shall (1) identify all resources located within the Transmission Provider's Control Area that can significantly contribute toward relieving the system constraint and (2) provide a measurement of each resource's impact on the system constraint. If the Transmission Provider possesses information indicating that any resource outside its Control Area could relieve the constraint, it shall identify each such resource in the System Impact Study. In the event that the Transmission Provider is unable to complete the required System Impact Study within such time period, it shall so notify the Eligible Customer and provide an estimated completion date along with an explanation of the reasons why additional time is required to complete the required studies. A copy of the completed System Impact Study and related work papers shall be made available to the Eligible Customer as soon as the System Impact Study is complete. The Transmission Provider will use the same due diligence in completing the System Impact Study for an Eligible Customer as it uses when completing studies for itself. The Transmission Provider shall notify the Eligible Customer immediately upon completion of the System Impact Study if the Transmission System will be adequate to accommodate all or part of a

request for service or that no costs are likely to be incurred for new transmission facilities or upgrades. In order for a request to remain a Completed Application, within fifteen (15) days of completion of the System Impact Study the Eligible Customer must execute a Service Agreement or request the filing of an unexecuted Service Agreement, or the Application shall be deemed terminated and withdrawn.

32.4 Facilities Study Procedures:

If a System Impact Study indicates that additions or upgrades to the Transmission System are needed to supply the Eligible Customer's service request, the Transmission Provider, within thirty (30) days of the completion of the System Impact Study, shall tender to the Eligible Customer a Facilities Study Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for performing the required Facilities Study. For a service request to remain a Completed Application, the Eligible Customer shall execute the Facilities Study Agreement and return it to the Transmission Provider within fifteen (15) days. If the Eligible Customer elects not to execute the Facilities Study Agreement, its Application shall be deemed withdrawn and its deposit shall be returned with interest. Upon receipt of an executed Facilities Study Agreement, the Transmission Provider will use due diligence to complete the required Facilities Study within a sixty (60) day period. If the Transmission Provider is unable to complete the Facilities Study in the allotted time period, the Transmission Provider shall notify the Eligible Customer and provide an estimate of the time needed to reach a final determination along with an explanation of the reasons that additional time is required to complete the study. When completed,

the Facilities Study will include a good faith estimate of (i) the cost of Direct Assignment Facilities to be charged to the Eligible Customer, (ii) the Eligible Customer's appropriate share of the cost of any required Network Upgrades, and (iii) the time required to complete such construction and initiate the requested service. The Eligible Customer shall provide the Transmission Provider with a letter of credit or other reasonable form of security acceptable to the Transmission Provider equivalent to the costs of new facilities or upgrades consistent with commercial practices as established by the Uniform Commercial Code. The Eligible Customer shall have thirty (30) days to execute a Service Agreement or request the filing of an unexecuted Service Agreement and provide the required letter of credit or other form of security or the request no longer will be a Completed Application and shall be deemed terminated and withdrawn.

32.5 Penalties for Failure to Meet Study Deadlines:

Section 19.9 defines penalties that apply for failure to meet the 60-day study completion due diligence deadlines for System Impact Studies and Facilities Studies under Part II of the Tariff. These same requirements and penalties apply to service under Part III of the Tariff.

33 Load Shedding and Curtailments

33.1 Procedures:

Prior to the Service Commencement Date, the Transmission Provider and the Network Customer shall establish Load Shedding and Curtailment procedures pursuant to the Network Operating Agreement with the objective of responding to contingencies on the Transmission System and on systems directly and indirectly interconnected with the Transmission Provider's Transmission System. The

Parties will implement such programs during any period when the Transmission Provider determines that a system contingency exists and such procedures are necessary to alleviate such contingency. The Transmission Provider will notify all affected Network Customers in a timely manner of any scheduled Curtailment.

33.2 Transmission Constraints:

During any period when the Transmission Provider determines that a transmission constraint exists on the Transmission System, and such constraint may impair the reliability of the Transmission Provider's system, the Transmission Provider will take whatever actions, consistent with Good Utility Practice, that are reasonably necessary to maintain the reliability of the Transmission Provider's system. To the extent the Transmission Provider determines that the reliability of the Transmission System can be maintained by redispatching resources, the Transmission Provider will initiate procedures pursuant to the Network Operating Agreement to redispatch all Network Resources of Network Customers and Network Contract Demand Customers and the Transmission Provider's own resources on a least-cost basis without regard to the ownership of such resources. Any redispatch under this section may not unduly discriminate between the Transmission Provider's use of the Transmission System on behalf of its Native Load Customers, any Network Customer's use of the Transmission System to serve its designated Network Load and any Network Contract Demand Customer's use of the Transmission System to serve its Network Contract Demand Points of Delivery.

33.3 Cost Responsibility for Relieving Transmission Constraints:

Whenever the Transmission Provider implements least-cost redispatch procedures in response to a transmission constraint, the Transmission Provider, Network Customers and Network Contract Demand Customers will each bear a proportionate share of the total redispatch cost based on their respective Load Ratio Shares or contract demands, as appropriate.

33.4 Curtailments of Scheduled Deliveries:

If a transmission constraint on the Transmission Provider's Transmission System cannot be relieved through the implementation of least-cost redispatch procedures and the Transmission Provider determines that it is necessary to Curtail scheduled deliveries, the Parties shall Curtail such schedules in accordance with the Network Operating Agreement or pursuant to the Transmission Loading Relief procedures specified in Attachment L.

33.5 Allocation of Curtailments:

The Transmission Provider shall, on a non-discriminatory basis, Curtail the transaction(s) that effectively relieve the constraint. However, to the extent practicable and consistent with Good Utility Practice, any Curtailment will be shared by the Transmission Provider and Network Customer in proportion to their respective Load Ratio Shares. The Transmission Provider shall not direct the Network Customer to Curtail schedules to an extent greater than the Transmission Provider would Curtail the Transmission Provider's schedules under similar circumstances.

33.6 Load Shedding:

To the extent that a system contingency exists on the Transmission Provider's

Transmission System and the Transmission Provider determines that it is

necessary for the Transmission Provider, Network Customers and Network

Contract Demand Customers to shed load, the Parties shall shed load in

accordance with previously established procedures under the Network Operating

Agreement.

33.7 System Reliability:

Notwithstanding any other provisions of this Tariff, the Transmission Provider reserves the right, consistent with Good Utility Practice and on a not unduly discriminatory basis, to Curtail Network Integration Transmission Service without liability on the Transmission Provider's part for the purpose of making necessary adjustments to, changes in, or repairs on its lines, substations and facilities, and in cases where the continuance of Network Integration Transmission Service would endanger persons or property. In the event of any adverse condition(s) or disturbance(s) on the Transmission Provider's Transmission System or on any other system(s) directly or indirectly interconnected with the Transmission Provider's Transmission System, the Transmission Provider, consistent with Good Utility Practice, also may Curtail Network Integration Transmission Service in order to (i) limit the extent or damage of the adverse condition(s) or disturbance(s), (ii) prevent damage to generating or transmission facilities, or (iii) expedite restoration of service. The Transmission Provider will give the Network Customer as much advance notice as is practicable in the event of such Curtailment. Any Curtailment of Network Integration Transmission Service will

be not unduly discriminatory relative to the Transmission Provider's use of the Transmission System on behalf of its Native Load Customers.

In the CP&L Zone and in the FPC Zone, in the event that the Network

Customer fails to respond to established Load Shedding and Curtailment

procedures, the Customer shall pay, in addition to any other charges for service, a

charge equal to two times the amount of transmission service which the Customer

fails to curtail multiplied by the monthly charge for Network Integration

Transmission Service.

34 Rates and Charges

The Network Customer shall pay the Transmission Provider for any Direct Assignment Facilities, Ancillary Services, and applicable study costs, consistent with Commission policy, along with the following:

34.1 Monthly Demand Charge:

The Network Customer whose Network Load is located in or served from the CP&L Zone shall pay a monthly Demand Charge which shall be determined by multiplying its load at the time of the monthly transmission peak times the Transmission Provider's monthly transmission rate for the CP&L Zone as specified in Attachment H.

The Network Customer whose Network Load is located in or served from the FPC Zone shall pay a monthly Demand Charge, which shall be determined as provided in Schedules 10-A and 11.

The Network Customer whose Network Load is located in or served from the DEC Zone by facilities at or above 44 kV shall pay a monthly Demand Charge, which shall be determined by multiplying its Load Ratio Share times one

twelfth (1/12) of the Transmission Provider's Annual Transmission Revenue Requirement determined pursuant to Schedule 10-B, Exhibit B.

A Network Customer utilizing Network Integration Transmission Service under this Tariff, Network Contract Demand Transmission Service, or Long Term Firm or Short Term Firm Point-To-Point Transmission Service in any Zone to serve Network Load located in another Zone, shall pay only the applicable charge of the Zone in which the Network Load is located.

34.2 Determination of Network Customer's Monthly Network Load:

In the CP&L Zone and in the FPC Zone, the Network Customer's monthly

Network Load in a Zone is its hourly load (including its designated Network Load

not physically interconnected with the Transmission Provider under Section 31.3)

that is located in or connected to that Zone coincident with the Transmission

Provider's Monthly Transmission System Peak in that Zone.

In the DEC Zone, the Network Customer's monthly Network Load is its hourly load (including its designated Network Load not physically interconnected with the Transmission Provider under Section 31.3) that is located in or connected to the DEC Zone coincident with the Transmission Provider's Monthly Transmission System Peak, plus the output of the Network Customer's behind the load-meter generation at the time of the Transmission Provider's Monthly Transmission Peak.

34.3 Determination of Transmission Provider's Monthly Transmission System Peak:

The Transmission Provider's monthly Transmission System load in the CP&L

Zone and in the FPC Zone is the Transmission Provider's Monthly Transmission

System Peak in that Zone minus the coincident peak usage of all Firm Point-To-Point Transmission Service Customers and Network Contract Demand
Transmission Customers in that Zone pursuant to Parts II and IV of this Tariff
plus the Reserved Capacity of all Firm Point-To-Point Transmission Service
Customers and Network Contract Demand Transmission Customers taking
service in that Zone.

The Transmission Provider's Monthly Transmission System Peak in the DEC Zone is the highest hourly total (single hour coincident amount of the following: (a) the Transmission Provider's Control Area load, plus (b) the output of all behind-the-load-meter generation of Network Customers, plus (c) the amount of firm loads that have been pseudo-tied out of the Transmission Provider's Control Area, minus (d) the usage of all Point-To-Point Transmission Service customers pursuant to Part II of this Tariff, plus (e) the Reserved Capacity of all long-term Firm Point-To-Point Transmission Service customers.

34.4 Redispatch Charge:

The Network Customer shall pay a proportionate share of any redispatch costs for the Zone in which it is taking service, allocated among Network Customers, Network Contract Demand Customers, and the Transmission Provider pursuant to Section 33. To the extent that the Transmission Provider incurs an obligation to the Network Customer for redispatch costs in accordance with Section 33, such amounts shall be credited against the Network Customer's bill for the applicable month.

34.5 Stranded Cost Recovery:

The Transmission Provider may seek to recover stranded costs from the Network Customer pursuant to this Tariff in accordance with the terms, conditions and procedures set forth in FERC Order No. 888. However, the Transmission Provider must separately file any proposal to recover stranded costs under Section 205 of the Federal Power Act.

35 Operating Arrangements

35.1 Operation Under The Network Operating Agreement:

The Network Customer shall plan, construct, operate and maintain its facilities in accordance with Good Utility Practice and in conformance with the Network Operating Agreement.

35.2 Network Operating Agreement:

The terms and conditions under which the Network Customer shall operate its facilities and the technical and operational matters associated with the implementation of Part III of the Tariff shall be specified in the Network Operating Agreement. The Network Operating Agreement shall provide for the Parties to (i) operate and maintain equipment necessary for integrating the Network Customer within the Transmission Provider's Transmission System (including, but not limited to, remote terminal units, metering, communications equipment and relaying equipment), (ii) transfer data between the Transmission Provider and the Network Customer (including, but not limited to, heat rates and operational characteristics of Network Resources, generation schedules for units outside the Transmission Provider's Transmission System, interchange schedules, unit outputs for redispatch required under Section 33, voltage schedules, loss

factors and other real time data), (iii) use software programs required for data links and constraint dispatching, (iv) exchange data on forecasted loads and resources necessary for long-term planning, and (v) address any other technical and operational considerations required for implementation of Part III of the Tariff, including scheduling protocols. The Network Operating Agreement will recognize that the Network Customer shall either (i) operate as a Control Area under applicable guidelines of the Electric Reliability Organization (ERO) as defined in 18 C.F.R. § 39.1, (ii) satisfy its Control Area requirements, including all necessary Ancillary Services, by contracting with the Transmission Provider, or (iii) satisfy its Control Area requirements, including all necessary Ancillary Services, by contracting with another entity, consistent with Good Utility Practice, which satisfies the applicable reliability guidelines of the ERO. The Transmission Provider shall not unreasonably refuse to accept contractual arrangements with another entity for Ancillary Services. The Network Operating Agreement is included in Attachment G (in the DEC Zone, the Network Operating Agreement is Attachment E to the Form of Service Agreement for Network Integration Transmission Service (available at Attachment F-2 of this Tariff)).

35.3 Network Operating Committee:

A Network Operating Committee (Committee) shall be established to coordinate operating criteria for the Parties' respective responsibilities under the Network Operating Agreement. Each Network Customer shall be entitled to have at least one representative on the Committee. The Committee shall meet from time to time as need requires, but no less than once each calendar year.

Notwithstanding anything to the contrary in this or any other section of this tariff, service is no longer available to new service requests under Sections 36-46 of this tariff on or after June 14, 2008. Service availability is limited to customers with Network Contract Demand Service agreements effective on or before June 14, 2008 through the termination of such agreements.

IV. NETWORK CONTRACT DEMAND TRANSMISSION SERVICE

Preamble

The Transmission Provider will provide Network Contract Demand Transmission Service pursuant to the applicable terms and conditions contained in the Tariff and Service Agreement. Network Contract Demand Transmission Service allows the Network Contract Demand Customer to integrate, economically dispatch and regulate multiple generating resources to serve designated loads in a manner comparable to that in which the Transmission Provider utilizes its generating units and its Transmission System to make third party sales of system power and energy. Service is available to any Transmission Customer that meets the requirements of Section 37. The provision of Network Contract Demand Transmission Service shall not cause the rates of Transmission Customers taking service under Part II or Part III of the Tariff to increase above what they would be absent the provision of service under this Part IV of the Tariff.

36 Nature of Network Contract Demand Transmission Service

36.1 Scope of Service:

Network Contract Demand Transmission Service is firm transmission service that allows Network Contract Demand Customers to efficiently and economically utilize multiple generation resources to serve designated loads. The Network Contract Demand Customer taking Network Contract Demand Transmission Service must obtain or provide Ancillary Services pursuant to Section 3.

36.2 Transmission Provider Responsibilities:

The Transmission Provider will plan, construct, operate and maintain its

Transmission System in accordance with Good Utility Practice in order to provide
the Network Contract Demand Customer with Network Contract Demand
Transmission Service over the Transmission Provider's Transmission System.

The Transmission Provider shall be required to file a service agreement and to
take service under this Part IV of this Tariff when it uses its Transmission System
in connection with wholesale sales of capacity and energy from multiple
generating units on a contract demand basis.

36.3 Term:

The minimum term of Network Contract Demand Transmission Service shall be one day. The term shall be specified in the Service Agreement.

36.4 Reservation Priority:

Long-Term Network Contract Demand Transmission Service and Long-Term
Firm Point-To-Point Transmission Service shall be available on a first-come,
first-served basis i.e., in the chronological sequence in which each Transmission
Customer has reserved service. Reservations for Short-Term Network Contract
Demand Transmission Service and Short-Term Firm Point-To-Point Transmission
Service will be conditional based upon the length of the requested transaction. If
the Transmission System becomes oversubscribed, requests for longer term
service may preempt requests for shorter term service up to the following
deadlines; one day before the commencement of daily service, one week before
the commencement of weekly service, and one month before the commencement
of monthly service. Before the deadline, if available transmission capability is

insufficient to satisfy all Applications, an Eligible Customer with a reservation for shorter term service has the right of first refusal to match any longer term reservation before losing its reservation priority. A longer term competing request for Short-Term Firm Point-To-Point Transmission Service or Short-Term Network Contract Demand Transmission Service will be granted if the Eligible Customer with the right of first refusal does not agree to match the competing request within 24 hours (or earlier if necessary to comply with the scheduling deadlines provided in Sections 13.8 or 36.9) from being notified by the Transmission Provider of a longer-term competing request for Short-Term Firm Point-To-Point Transmission Service or Short-Term Network Contract Demand Transmission Service. After the conditional reservation deadline, service will commence pursuant to the terms of Part IV of the Tariff. Network Contract Demand Transmission Service will always have a reservation priority equal to that of Firm Point-To-Point Transmission Service and over that of Non-Firm Point-To-Point Transmission Service under the Tariff. All Long-Term Firm Network Contract Demand Transmission Service will have equal reservation priority with Native Load Customers, Long-Term Firm Point-To-Point Customers and Network Customers. Reservation priorities for existing firm service customers are provided in Section 2.2.

36.5 Use of Network Contract Demand Transmission Service by the Transmission Provider:

The Transmission Provider will be subject to the rates, terms and conditions of Part II or Part IV of the Tariff when making Third-Party Sales. The Transmission Provider will maintain separate accounting, pursuant to Section 8, for any use of Point-To-Point Transmission Service or Network Contract Demand Transmission Service to make Third-Party Sales.

36.6 Service Agreements:

The Transmission Provider shall offer a standard form Network Contract Demand Transmission Service Agreement (Attachment R) to an Eligible Customer when it submits a Completed Application for Long-Term Network Contract Demand Transmission Service. The Transmission Provider shall offer a standard form Network Contract Demand Transmission Service Agreement (Attachment R) to an Eligible Customer when it first submits a Completed Application for Short-Term Network Contract Demand Transmission Service pursuant to the Tariff. Executed Service Agreements that contain the information required under the Tariff shall be filed with the Commission in compliance with applicable Commission regulations.

36.7 Transmission Customer Obligations for Facility Additions or Redispatch Costs:

In cases where the Transmission Provider determines that the Transmission

System is not capable of providing Firm Network Contract Demand Transmission

Service without (1) degrading or impairing the reliability of service to Native

Load Customers, Network Customers, Firm Point-To-Point Transmission

Customers and other Transmission Customers taking Network Contract Demand

Transmission Service, or (2) interfering with the Transmission Provider's ability

to meet prior firm contractual commitments to others, the Transmission Provider

will be obligated to expand or upgrade its Transmission System pursuant to the

terms of Section 40. The Transmission Customer must agree to compensate the

Transmission Provider for any necessary transmission facility additions pursuant to the terms of Section 45. To the extent the Transmission Provider can relieve any system constraint more economically by redispatching the Transmission Provider's resources than through constructing Network Upgrades, it shall do so, provided that the Eligible Customer agrees to compensate the Transmission Provider pursuant to the terms of Section 45. Any redispatch, Network Upgrade or Direct Assignment Facilities costs to be charged to the Transmission Customer on an incremental basis under the Tariff will be specified in the Service Agreement prior to initiating service.

36.8 Classification of Network Contract Demand Transmission Service:

The Transmission Provider shall provide firm deliveries of capacity and energy from the Point(s) of Receipt to the Point(s) of Delivery. Each Point of Receipt at which firm capacity is to be obtained from a Network Resource pursuant to Section 39.1 shall be set forth in the Network Contract Demand Service Agreement for Long-Term Network Contract Demand Transmission Service. Each Point of Delivery at which firm capacity is reserved by the Transmission Customer shall be set forth in the Network Contract Demand Service Agreement for Long-Term Network Contract Demand Transmission Service, along with the information required by Section 37.2(iii). Points of Receipt and Points of Delivery shall be as mutually agreed upon by the Parties for Short-Term Network Contract Demand Transmission. The maximum coincident capacity reservations at all Points of Delivery during the contract term shall be the Network Contract Demand Customer's Reserved Capacity. The Network Contract Demand Customer will be billed for its Reserved Capacity under the terms of Schedule 12.

The Network Contract Demand Customer shall not exceed its total capacity reserved from the Points of Receipt and shall not exceed its total capacity reserved at the Points of Delivery. In the event that a Network Contract Demand Customer (including Third-Party Sales by the Transmission Provider) exceeds its firm Reserved Capacity at the Points of Receipt or the Points of Delivery, the Network Contract Demand Customer shall pay the rate for unauthorized use as specified in Schedule 12.

36.9 Scheduling of Firm Network Contract Demand Transmission Service:

Schedules for the provision of Network Contract Demand Transmission Service to the Transmission Customer's Point of Delivery must be submitted to the Transmission Provider no later than 10:00 a.m. of the day prior to commencement of such service. Schedules submitted after 10:00 a.m. will be accommodated, if practicable. Hour-to-hour schedules of any capacity and energy that are to be delivered must be stated in increments of 1,000 kW per hour. Scheduling changes will be permitted up to ten (10) minutes before the start of the next clock hour provided that the Delivering Party and Receiving Party also agree to the schedule modification and that the transaction can be reasonably accommodated on the transmission system. The Transmission Provider will furnish to the Delivering Party's system operator, hour-to-hour schedules equal to those furnished by the Receiving Party (unless reduced for losses) and shall deliver the capacity and energy provided by such schedules. Should the Network Contract Demand Customer, Delivering Party or Receiving Party revise or terminate any schedule, such party shall immediately notify the Transmission Provider, and the

Transmission Provider shall have the right to adjust accordingly the schedule for capacity and energy to be received and to be delivered.

36.10 Integration of Delivery Points:

Subject to the availability of transmission capacity, when the Network Contract
Demand Transmission Service Customer submits its daily transmission schedule,
it may schedule transmission to any Point of Delivery listed in its Application for
service under this Part IV in an amount different from that set out in its
Application, up to its Reserved Capacity, provided that the sum of the schedules
for that day at all such Points of Delivery may not exceed the Customer's
Reserved Capacity. Once scheduled, such service shall be firm transmission
service for that day.

36.11 Real Power Losses:

Real Power Losses are associated with all transmission service. The

Transmission Provider is not obligated to provide Real Power Losses. The

Network Contract Demand Customer is responsible for replacing losses

associated with all transmission service as calculated by the Transmission

Provider. The applicable Real Power Loss factors in the FPC Zone are 2.05% for delivery at transmission voltages and 3.05% for delivery at distribution voltages.

Procedures for annual changes to the Real Power Loss factors in the FPC Zone are set out in Attachment Q.

37 Procedures for Initiating Network Contract Demand Transmission Service

37.1 Condition Precedent for Receiving Service:

Subject to the terms and conditions of Part IV of the Tariff, the Transmission Provider will provide Network Contract Demand Transmission Service to any Eligible Customer, provided that (i) the Eligible Customer completes an Application for service as provided in section 37.2, (ii) the Eligible Customer meets the creditworthiness criteria set forth in Attachment O, (iii) the Eligible Customer and the Transmission Provider complete the technical arrangements set forth in Sections 37.3 and 38.1, (iv) the Eligible Customer executes a Service Agreement pursuant to Attachment R for service under Part IV of the Tariff or requests in writing that the Transmission Provider file a proposed unexecuted Service Agreement with the Commission pursuant to Section 37.7, and (v) the Eligible Customer executes a Network Operating Agreement with the Transmission Provider pursuant to Attachment G or requests in writing that the Transmission Provider file a proposed unexecuted Network Operating Agreement.

37.2 Application Procedures:

An Eligible Customer requesting Network Contract Demand Transmission

Service under Part IV of the Tariff must submit an Application to the

Transmission Provider. Requests for service for periods of one year or more shall
be submitted at least sixty (60) days in advance of the month in which service is
to commence. The Transmission Provider will consider such requests for service
on shorter notice when feasible. Requests for service for periods of less than one
year shall be subject to expedited procedures that shall be negotiated between the
Parties. Applications should be submitted by entering the information listed
below on the Transmission Provider's OASIS.

A Completed Application shall provide all of the information included in 18 C.F.R. § 2.20 including but not limited to the following:

- (i) The identity, address, telephone number and facsimile number of the party requesting service;
- (ii) A statement that the party requesting service is, or will be upon commencement of service, an Eligible Customer under the Tariff;
- (iii) The firm transmission capacity reserved at each Point of Delivery, and the electrical location of each ultimate load;
- (iv) A description of the Network Resources that will be utilized to supply the capacity and energy that will be transmitted over the Transmission Provider's Transmission System for the lesser of the contract term or ten years, which shall include, for each Network Resource:
 - Location of the generating facility
 - Unit size and amount of capacity from that unit to be designated as a Network Resource
 - VAR capability (both leading and lagging) of all generators
 - Operating restrictions
 - Any periods of restricted operations throughout the lesser of one year or the contract term
 - Maintenance schedules
 - Minimum loading level of unit
 - Normal operating level of unit
 - Any must-run unit designations required for system reliability or contract reasons
 - Approximate variable generating cost (\$/MWH) for redispatch computations
 - Description of purchased power designated as a Network Resource including source of supply, Control Area location, transmission arrangements and delivery point(s) to the Transmission Provider's Transmission System;
- (v) Service Commencement Date and the term of the requested Network Contract Demand Transmission Service.

The Network Contract Demand Transmission Customer shall update the information contained in its Application at least once each calendar year and when material changes occur. The Transmission Provider shall treat all information provided under this Section consistent with the standards of conduct contained in Part 37 of the Commission's regulations.

37.3 Technical Arrangements to be Completed Prior to Commencement of Service:

Network Contract Demand Transmission Service shall not commence until the Transmission Provider and the Network Contract Demand Customer, or a third party, have completed installation of all equipment specified under the Network Operating Agreement consistent with Good Utility Practice and any additional requirements reasonably and consistently imposed to ensure the reliable operation of the Transmission System. The Transmission Provider shall exercise reasonable efforts, in coordination with the Network Contract Demand Customer, to complete such arrangements as soon as practicable taking into consideration the Service Commencement Date.

37.4 Deposit:

A Completed Application for Network Contract Demand Transmission Service also shall include a deposit of either one month's charge for Reserved Capacity or the full charge for Reserved Capacity for service requests of less than one month. If the Application is rejected by the Transmission Provider because it does not meet the conditions for service as set forth herein, or in the case of requests for service arising in connection with losing bidders in a Request For Proposals (RFP), said deposit shall be returned with interest less any reasonable costs incurred by the Transmission Provider in connection with the review of the losing bidder's Application. The deposit also will be returned with interest less any reasonable costs incurred by the Transmission Provider if the Transmission Provider is unable to complete new facilities needed to provide the service. If an Application is withdrawn or the Eligible Customer decides not to enter into a

Service Agreement for Network Contract Demand Transmission Service, the deposit shall be refunded in full, with interest, less reasonable costs incurred by the Transmission Provider to the extent such costs have not already been recovered by the Transmission Provider from the Eligible Customer. The Transmission Provider will provide to the Eligible Customer a complete accounting of all costs deducted from the refunded deposit, which the Eligible Customer may contest if there is a dispute concerning the deducted costs. Deposits associated with construction of new facilities are subject to the provisions of Section 40. If a Service Agreement for Network Contract Demand Transmission Service is executed, the deposit, with interest, will be returned to the Transmission Customer upon expiration of the term of service. Applicable interest shall be computed in accordance with the Commission's regulations at 18 C.F.R. § 35.19a(a)(2)(iii), and shall be calculated from the day the deposit check is credited to the Transmission Provider's account. Notwithstanding the foregoing, the Transmission Provider shall on a non-discriminatory basis waive the requirement that a deposit accompany an Application for an Eligible Customer that has met the conditions of Sections 1.2 or 1.3 of Attachment O to this Tariff.

37.5 Notice of Deficient Application:

If an Application fails to meet the requirements of the Tariff, the Transmission Provider shall notify the entity requesting service within fifteen (15) days of receipt of the reasons for such failure. The Transmission Provider will attempt to remedy minor deficiencies in the Application through informal communications with the Eligible Customer. If such efforts are unsuccessful, the Transmission Provider shall return the Application, along with any deposit, with interest. Upon

receipt of a new or revised Application that fully complies with the requirements of Part IV of the Tariff, the Eligible Customer shall be assigned a new priority consistent with the date of the new or revised Application.

37.6 Determination of Available Transmission Capability:

Following receipt of a Completed Application for Network Contract Demand Transmission Service, the Transmission Provider shall make a determination of available transmission capability. The Transmission Provider shall notify the Eligible Customer as soon as practicable, but not later than thirty (30) days after the date of receipt of a Completed Application, either (i) if it will be able to provide service without performing a System Impact Study or (ii) if such a study is needed to evaluate the impact of the Application pursuant to Section 40.

Responses by the Transmission Provider must be made as soon as practicable to all completed applications (including applications by its own merchant function) and the timing of such responses must be made on a non-discriminatory basis. A description of the Transmission Provider's specific methodology for assessing available transmission capability posted on the Transmission Provider's OASIS (Section 4) is contained in Attachment C-2 (FPC Zone) of the Tariff.

37.7 Execution and Filing of Service Agreement:

Whenever the Transmission Provider determines that a System Impact Study is not required and that the service can be provided, it shall notify the Eligible Customer as soon as practicable but no later than thirty (30) days after receipt of the Completed Application. Where a System Impact Study is required, the provisions of Section 40 will govern the execution of a Service Agreement.

Failure of an Eligible Customer to execute and return the Service Agreement or

request the filing of an unexecuted service agreement pursuant to Section 37.7, within fifteen (15) days after it is tendered by the Transmission Provider will be deemed a withdrawal and termination of the Application and any deposit submitted shall be refunded with interest. Nothing herein limits the right of an Eligible Customer to file another Application after such withdrawal and termination. The Transmission Provider will file the Service Agreement in compliance with applicable Commission regulations.

37.8 Initiating Service in the Absence of an Executed Service Agreement:

If the Transmission Provider and the Transmission Customer requesting Network Contract Demand Transmission Service cannot agree on all the terms and conditions of the Network Contract Demand Transmission Service Agreement, the Transmission Provider shall file with the Commission, within thirty (30) days after the date the Transmission Customer provides written notification directing the Transmission Provider to file, an unexecuted Network Contract Demand Transmission Service Agreement containing terms and conditions deemed appropriate by the Transmission Provider for such requested Transmission Service. The Transmission Provider shall commence providing Transmission Service subject to the Transmission Customer agreeing to (i) compensate the Transmission Provider at whatever rate the Commission ultimately determines to be just and reasonable, and (ii) comply with the terms and conditions of the Tariff including posting appropriate security deposits in accordance with the terms of Section 37.4.

37.9 Obligation to Provide Transmission Service that Requires Expansion or Modification of the Transmission System:

If the Transmission Provider determines that it cannot accommodate a Completed Application for Network Contract Demand Transmission Service because of insufficient capability on its Transmission System, the Transmission Provider will use due diligence to expand or modify its Transmission System to provide the requested service, provided the Transmission Customer agrees to compensate the Transmission Provider for such costs pursuant to the terms of Section 44. The Transmission Provider will conform to Good Utility Practice in determining the need for new facilities and in the design and construction of such facilities. The obligation applies only to those facilities that the Transmission Provider has the right to expand or modify.

37.10 Deferral of Service:

The Transmission Provider may defer providing service until it completes construction of new transmission facilities or upgrades needed to provide Network Contract Demand Transmission Service whenever the Transmission Provider determines that providing the requested service would, without such new facilities or upgrades, impair or degrade reliability to any existing firm services.

37.11 Extensions for Commencement of Service:

The Network Contract Demand Customer can obtain up to five (5) one-year extensions for the commencement of service. The Transmission Customer may postpone service by paying a non-refundable annual reservation fee equal to one-month's charge for Network Contract Demand Transmission Service for each year or fraction thereof. If during any extension for the commencement of service an

Eligible Customer submits a Completed Application for Firm Point-To-Point
Transmission Service or Network Contract Demand Transmission Service, and
such request can be satisfied only by releasing all or part of the Transmission
Customer's Reserved Capacity, the original Reserved Capacity will be released
unless the following condition is satisfied. Within thirty (30) days, the original
Transmission Customer agrees to pay the Network Contract Demand transmission
rate for its Reserved Capacity concurrent with the new Service Commencement
Date. In the event the Transmission Customer elects to release the Reserved
Capacity, the reservation fees or portions thereof previously paid will be forfeited.

37.12 Changes in Service Requests:

Under no circumstances shall the Network Contract Demand Customer's decision to cancel or delay the commencement of Network Contract Demand Transmission Service in any way relieve the Network Contract Demand Customer of its obligation to pay the costs of transmission facilities constructed by the Transmission Provider and charged to the Network Contract Demand Customer as reflected in the Service Agreement. However, the Transmission Provider must treat any requested change in Network Contract Demand Transmission Service in a non-discriminatory manner.

38 Transmission Customer Responsibilities

38.1 Network Customer Facilities:

The provision of Network Contract Demand Transmission Service shall be conditioned upon the Network Contract Demand Customer's constructing, maintaining and operating the facilities on its side of each Point of Delivery necessary to reliably deliver capacity and energy from the Transmission

Provider's Transmission System to the Network Contract Demand Customer. The Network Contract Demand Customer shall be solely responsible for constructing or installing all facilities on the Network Contract Demand Customer's side of each such Point of Delivery.

38.2 Transmission Customer Responsibility for Third-Party Arrangements:

Any scheduling arrangements that may be required by other electric systems shall be the responsibility of the Transmission Customer requesting service. The Transmission Customer shall provide, unless waived by the Transmission Provider, notification to the Transmission Provider identifying such systems and authorizing them to schedule the capacity and energy to be transmitted by the Transmission Provider pursuant to Part IV of the Tariff on behalf of the Receiving Party at the Point of Delivery or the Delivering Party at the Point of Receipt. However, the Transmission Provider will undertake reasonable efforts to assist the Transmission Customer in making such arrangements, including without limitation, providing any information or data required by such other electric system pursuant to Good Utility Practice.

39 Designation Of Network Resources

39.1 Limitation on Designation of Network Resources:

The Network Contract Demand Customer must demonstrate that it owns generation or has committed to purchase or has leased generation pursuant to an executed contract, that can be called upon to meet the Customer's Network Contract Demand on a non-interruptible basis in order to designate such generation as a Network Resource for Network Contract Demand Transmission Service. Alternatively, the Network Contract Demand Customer may establish

that execution of a contract is contingent upon the availability of transmission service under Part IV of the Tariff.

39.2 Transmission Arrangements for Network Resources Not Physically Interconnected With the Transmission Provider:

The Network Contract Demand Customer shall be responsible for any arrangements necessary to deliver capacity and energy from a Network Resource not physically interconnected with the Transmission Provider's Transmission System. The Transmission Provider will undertake reasonable efforts to assist the Transmission Customer in obtaining such arrangements, including without limitation, providing any information or data required by such other entity pursuant to Good Utility Practice.

39.3 Termination of Network Resources:

The Network Contract Demand Customer may terminate the designation of all or part of a generating resource as a Network Resource at any time but should provide notification to the Transmission Provider as soon as reasonably practicable.

39.4 Operation of Network Resources:

The Network Contract Demand Customer shall not operate its designated

Network Resources located in the Network Contract Demand Customer's or

Transmission Provider's Control Area such that the output of those facilities

exceeds its Network Contract Demand and its Network Load under Part III plus

non-firm sales delivered pursuant to Part II of the Tariff, plus losses. This

limitation shall not apply to changes in the operation of Transmission Customer's

Network Resources at the request of the Transmission Provider to respond to an

emergency or other unforeseen condition which may impair or degrade the reliability of the Transmission System.

39.5 Network Contract Demand Customer Redispatch Obligation:

As a condition to receiving Network Contract Demand Transmission Service, the Network Contract Demand Customer agrees to redispatch its Network Resources as requested by the Transmission Provider pursuant to Section 42.2. To the extent practical, the redispatch of resources pursuant to this section shall be on a least cost, non-discriminatory basis between all Network Integration Transmission Service Customers, Network Contract Demand Customers, and the Transmission Provider.

39.6 Use of Interface Capacity by the Network Customer:

There is no limitation upon a Network Contract Demand Customer's use of the Transmission Provider's Transmission System at any particular interface to integrate the Network Contract Demand Customer's Network Resources with its Points of Delivery.

40 Additional Study Procedures for Network Contract Demand Transmission Service Requests

40.1 Notice of Need for System Impact Study:

After receiving a request for Network Contract Demand Transmission Service, the Transmission Provider shall determine on a non-discriminatory basis whether a System Impact Study is needed. A description of the Transmission Provider's methodology for completing a System Impact Study is provided in Attachment D. If the Transmission Provider determines that a System Impact Study is necessary to accommodate the requested service, it shall so inform the Eligible Customer, as

soon as practicable. In such cases, the Transmission Provider shall within thirty (30) days of receipt of a Completed Application, tender a System Impact Study Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for performing the required System Impact Study. For a service request to remain a Completed Application, the Eligible Customer shall execute the System Impact Study Agreement and return it to the Transmission Provider within fifteen (15) days. If the Eligible Customer elects not to execute the System Impact Study Agreement, its Application shall be deemed withdrawn and its deposit shall be returned with interest.

40.2 System Impact Study Agreement and Cost Reimbursement:

- Transmission Provider's estimate of the actual cost, and time for completion of the System Impact Study. The charge shall not exceed the actual cost of the study. In performing the System Impact Study, the Transmission Provider shall rely, to the extent reasonably practicable, on existing transmission planning studies. The Eligible Customer will not be assessed a charge for such existing studies; however, the Eligible Customer will be responsible for charges associated with any modifications to existing planning studies that are reasonably necessary to evaluate the impact of the Eligible Customer's request for service on the Transmission System.
- (ii) If in response to multiple Eligible Customers requesting service in relation to the same competitive solicitation, a single System Impact Study is sufficient for the Transmission Provider to accommodate the service

- requests, the costs of that study shall be pro-rated among the Eligible Customers.
- (iii) For System Impact Studies that the Transmission Provider conducts on its own behalf, the Transmission Provider shall record the cost of the System Impact Studies pursuant to Section 8.

40.3 System Impact Study Procedures:

Upon receipt of an executed System Impact Study Agreement, the Transmission Provider will use due diligence to complete the required System Impact Study within a sixty (60) day period. The System Impact Study shall identify any system constraints and redispatch options, additional Direct Assignment Facilities or Network Upgrades required to provide the requested service. In the event that the Transmission Provider is unable to complete the required System Impact Study within such time period, it shall so notify the Eligible Customer and provide an estimated completion date along with an explanation of the reasons why additional time is required to complete the required studies. A copy of the completed System Impact Study and related work papers shall be made available to the Eligible Customer. The Transmission Provider will use the same due diligence in completing the System Impact Study for an Eligible Customer as it uses when completing studies for itself. The Transmission Provider shall notify the Eligible Customer immediately upon completion of the System Impact Study if the Transmission System will be adequate to accommodate all or part of a request for service or that no costs are likely to be incurred for new transmission facilities or upgrades. In order for a request to remain a Completed Application, within fifteen (15) days of completion of the System Impact Study the Eligible

Customer must execute a Service Agreement or request the filing of an unexecuted Service Agreement, or the Application shall be deemed terminated and withdrawn.

40.4 Facilities Study Procedures:

If a System Impact Study indicates that additions or upgrades to the Transmission System are needed to supply the Eligible Customer's service request, the Transmission Provider, within thirty (30) days of the completion of the System Impact Study, shall tender to the Eligible Customer a Facilities Study Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for performing the required Facilities Study. For a service request to remain a Completed Application, the Eligible Customer shall execute the Facilities Study Agreement and return it to the Transmission Provider within fifteen (15) days. If the Eligible Customer elects not to execute the Facilities Study Agreement, its Application shall be deemed withdrawn and its deposit shall be returned with interest. Upon receipt of an executed Facilities Study Agreement, the Transmission Provider will use due diligence to complete the required Facilities Study within a sixty (60) day period. If the Transmission Provider is unable to complete the Facilities Study in the allotted time period, the Transmission Provider shall notify the Eligible Customer and provide an estimate of the time needed to reach a final determination along with an explanation of the reasons that additional time is required to complete the study. When completed, the Facilities Study will include a good faith estimate of (i) the cost of Direct Assignment Facilities to be charged to the Eligible Customer, (ii) the Eligible Customer's appropriate share of the cost of any required Network Upgrades, and

(iii) the time required to complete such construction and initiate the requested service. The Eligible Customer shall provide the Transmission Provider with a letter of credit or other reasonable form of security acceptable to the Transmission Provider equivalent to the costs of new facilities or upgrades consistent with commercial practices as established by the Uniform Commercial Code. The Eligible Customer shall have thirty (30) days to execute a Service Agreement or request the filing of an unexecuted Service Agreement and provide the required letter of credit or other form of security or the request no longer will be a Completed Application and shall be deemed terminated and withdrawn.

40.5 Facilities Study Modifications:

Any change in design arising from inability to site or construct facilities as proposed will require development of a revised good faith estimate. New good faith estimates also will be required in the event of new statutory or regulatory requirements that are effective before the completion of construction or other circumstances beyond the control of the Transmission Provider that significantly affect the final cost of new facilities or upgrades to be charged to the Transmission Customer pursuant to the provisions of Part IV of the Tariff.

40.6 Due Diligence in Completing New Facilities:

The Transmission Provider shall use due diligence to add necessary facilities or upgrade its Transmission System within a reasonable time. The Transmission Provider will not upgrade its existing or planned Transmission System in order to provide the requested Network Contract Demand Transmission Service if doing so would impair system reliability or otherwise impair or degrade existing firm service.

40.7 Partial Interim Service:

If the Transmission Provider determines that it will not have adequate transmission capability to satisfy the full amount of a Completed Application for Network Contract Demand Transmission Service, the Transmission Provider nonetheless shall be obligated to offer and provide the portion of the requested Network Contract Demand Transmission Service that can be accommodated without addition of any facilities and through redispatch. However, the Transmission Provider shall not be obligated to provide the incremental amount of requested Network Contact Demand Transmission Service that requires the addition of facilities or upgrades to the Transmission System until such facilities or upgrades have been placed in service.

40.8 Coordination of Third-Party System Additions:

In circumstances where the need for transmission facilities or upgrades is identified pursuant to the provisions of Part IV of the Tariff, and if such upgrades further require the addition of transmission facilities on other systems, the 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. The Transmission Provider shall notify the Transmission Customer in writing of the basis for any decision to defer construction and the specific problems which must be resolved before it will initiate or resume construction of new facilities. Within sixty (60) days of receiving written notification by the Transmission

Provider of its intent to defer construction pursuant to this section, the

Transmission Customer may challenge the decision in accordance with the

dispute resolution procedures pursuant to Section 12 or it may refer the dispute to
the Commission for resolution.

40.9 Expedited Procedures for New Facilities:

In lieu of the procedures set forth above, the Eligible Customer shall have the option to expedite the process by requesting the Transmission Provider to tender at one time, together with the results of required studies, an "Expedited Service Agreement" pursuant to which the Eligible Customer would agree to compensate the Transmission Provider for all costs incurred pursuant to the terms of the Tariff. In order to exercise this option, the Eligible Customer shall request in writing an Expedited Service Agreement covering all of the above-specified items within thirty (30) days of receiving the results of the System Impact Study identifying needed facility additions or upgrades or costs incurred in providing the requested service. While the Transmission Provider agrees to provide the Eligible Customer with its best estimate of the new facility costs and other charges that may be incurred, such estimate shall not be binding and the Eligible Customer must agree in writing to compensate the Transmission Provider for all costs incurred pursuant to the provisions of the Tariff. The Eligible Customer shall execute and return such an Expedited Service Agreement within fifteen (15) days of its receipt or the Eligible Customer's request for service will cease to be a Completed Application and will be deemed terminated and withdrawn.

41 Procedures if the Transmission Provider is Unable to Complete New Transmission Facilities for Network Contract Demand Transmission Service

41.1 Delays in Construction of New Facilities:

If any event occurs that will materially affect the time for completion of new facilities, or the ability to complete them, the Transmission Provider shall promptly notify the Network Contract Demand Customer. In such circumstances, the Transmission Provider shall within thirty (30) days of notifying the Customer of such delays, convene a technical meeting with the Customer to evaluate the alternatives available to the Customer. The Transmission Provider also shall make available to the Customer studies and work papers related to the delay, including all information that is in the possession of the Transmission Provider that is reasonably needed by the Customer to evaluate any alternatives.

41.2 Alternatives to the Original Facility Additions:

When the review process of Section 41.1 determines that one or more alternatives exist to the originally planned construction project, the Transmission Provider shall present such alternatives for consideration by the Network Contract Demand Customer. If, upon review of any alternatives, the Customer desires to maintain its Completed Application subject to construction of the alternative facilities, it may request the Transmission Provider to submit a revised Service Agreement for Network Contract Demand Transmission Service. If the alternative approach solely involves Firm or Non-Firm Point-To-Point Transmission Service, the Transmission Provider shall promptly tender a Service Agreement for Point-To-Point Transmission Service providing for the service. In the event the

Customer disagrees, the Customer may seek relief under the dispute resolution procedures pursuant to Section 12 or it may refer the dispute to the Commission for resolution.

41.3 Refund Obligation for Unfinished Facility Additions:

If the Transmission Provider and the Network Contract Demand Customer mutually agree that no other reasonable alternatives exist and the requested service cannot be provided out of existing capability under the conditions of Part IV of the Tariff, the obligation to provide the requested Firm Network Contract Demand Transmission Service shall terminate and any deposit made by the Transmission Customer shall be returned with interest pursuant to Commission regulation 18 C.F.R. § 35.19a(a)(2)(iii). However, the Network Contract Demand Customer shall be responsible for all prudently incurred costs by the Transmission Provider through the time construction was suspended.

42 Load Shedding and Curtailments

42.1 Procedures:

Prior to the Service Commencement Date, the Transmission Provider and the Network Contract Demand Customer shall establish Load Shedding and Curtailment procedures pursuant to a Network Operating Agreement with the objective of responding to contingencies on the Transmission System and on systems directly or indirectly interconnected with the Transmission Provider's Transmission System. The Parties will implement such programs during any period when the Transmission Provider determines that a system contingency exists and such procedures are necessary to alleviate such contingency. The

Transmission Provider will notify all affected Network Contract Demand Customers in a timely manner of any scheduled Curtailment.

42.2 Transmission Constraints:

During any period when the Transmission Provider determines that a transmission constraint exists on the Transmission System, and such constraint may impair the reliability of the Transmission Provider's system, the Transmission Provider will take whatever actions, consistent with Good Utility Practice, that are reasonably necessary to maintain the reliability of the Transmission Provider's system. To the extent the Transmission Provider determines that the reliability of the Transmission System can be maintained by redispatching resources, the Transmission Provider will initiate procedures pursuant to the Network Operating Agreement to redispatch all Network Resources of Network Integration Transmission Customers and Network Contract Demand Transmission Customers and the Transmission Provider's own resources on a least-cost basis without regard to the ownership of such resources. Any redispatch under this section may not unduly discriminate between the Transmission Provider's use of the Transmission System on behalf of its Native Load Customers, any Network Integration Transmission Customer's use of the Transmission System to serve its designated Network Load and any Network Contract Demand Customer's use of the Transmission System to serve its Network Contract Demand Points of Delivery.

42.3 Cost Responsibility for Relieving Transmission Constraints:

Whenever the Transmission Provider implements least-cost redispatch procedures in response to a transmission constraint, the Transmission Provider, Network

Integration Transmission Customers and Network Contract Demand Customers will each bear a proportionate share of the total redispatch cost based on their respective Load Ratio Shares or contract demands, as appropriate.

42.4 Curtailments of Scheduled Deliveries:

If a transmission constraint on the Transmission Provider's Transmission System cannot be relieved through the implementation of least-cost redispatch procedures and the Transmission Provider determines that it is necessary to Curtail scheduled deliveries, the Parties shall Curtail such schedules in accordance with the Network Operating Agreement or pursuant to the Transmission Loading Relief procedures specified in Attachment L.

42.5 Allocation of Curtailments:

In the event that a Curtailment on the Transmission Provider's Transmission

System, or a portion thereof, is required to maintain reliable operation of such
system, Curtailments will be made on a non-discriminatory basis to the

transaction(s) that effectively relieve the constraint. If multiple transactions
require Curtailment, to the extent practicable and consistent with Good Utility

Practice, the Transmission Provider will curtail service to Network Integration

Customers, Network Contract Demand Transmission Customers and

Transmission Customers taking Firm Point-To-Point Transmission Service on a

basis comparable to the curtailment of service to the Transmission Provider's

Native Load Customers. All Curtailments will be made on a non-discriminatory

basis, however, Non-Firm Point-To-Point Transmission Service, Network

Contract Demand Transmission Service from secondary generating resources and

to secondary Points of Receipt pursuant to Sections 43.1 and 43.2, secondary

service pursuant to Section 28.4 and service at secondary Points of Receipt and Delivery pursuant to Section 22.1 shall be subordinate to Network Contract Demand Transmission Service.

42.6 Load Shedding:

To the extent that a system contingency exists on the Transmission Provider's

Transmission System and the Transmission Provider determines that it is

necessary for the Transmission Provider, the Network Integration Customer and
the Network Contract Demand Customer to shed load, the Parties shall shed load
in accordance with previously established procedures under the Network

Operating Agreement.

42.7 System Reliability:

Notwithstanding any other provisions of this Tariff, the Transmission Provider reserves the right, consistent with Good Utility Practice and on a not unduly discriminatory basis, to Curtail Network Contract Demand Transmission Service without liability on the Transmission Provider's part for the purpose of making necessary adjustments to, changes in, or repairs on its lines, substations and facilities, and in cases where the continuance of Network Contract Demand Transmission Service would endanger persons or property. In the event of any adverse condition(s) or disturbance(s) on the Transmission Provider's Transmission System or on any other system(s) directly or indirectly interconnected with the Transmission Provider's Transmission System, the Transmission Provider, consistent with Good Utility Practice, also may Curtail Network Contract Demand Transmission Service in order to (i) limit the extent or damage of the adverse condition(s) or disturbance(s), (ii) prevent damage to

generating or transmission facilities, or (iii) expedite restoration of service. The Transmission Provider will give the Network Contract Demand Customer as much advance notice as is practicable in the event of such Curtailment. Any Curtailment of Network Contract Demand Transmission Service will be not unduly discriminatory relative to the Transmission Provider's use of the Transmission System on behalf of its Native Load Customers. The Transmission Provider will notify all affected Transmission Customers in a timely manner of any scheduled Curtailments. In the event that a Network Contract Demand Customer fails to implement a Curtailment within ten minutes as required by the Transmission Provider the Customer shall pay, in addition to any other charges for service, a charge equal to two times the amount of transmission service which the Customer fails to curtail multiplied by the maximum charge for Network Contract Demand Transmission Service for the lesser of the transaction term or one month.

43 Changes In Service Specifications

43.1 Secondary Service:

The Network Contract Demand Transmission Customer may use the

Transmission Provider's Transmission System to deliver energy to its Points of

Delivery from generating resources that have not been designated as Network

Resources in its Application. Such energy shall be transmitted, on an as-available basis, at no additional charge, provided that the deliveries to the Points of

Delivery do not exceed the Reserved Capacity. Deliveries from alternate generating resources will have a higher priority than any Non-Firm Point-To
Point Transmission Service under Part II of the Tariff.

43.2 Non-Firm Service at Secondary Points of Delivery:

The Network Contract Demand Transmission Customer may request the Transmission Provider to provide transmission service on a non-firm basis to Delivery Points other than those specified in the Service Agreement ("Secondary Delivery Points"), in amounts not to exceed its firm capacity reservation, without incurring an additional Network Contract Demand Transmission Service charge, executing a new Service Agreement or filing a new Application, subject to the following conditions.

- (a) Service provided to Secondary Delivery Points will be non-firm only, on an as-available basis, and will not displace any firm or non-firm service reserved or scheduled by third parties under the Tariff or by the Transmission Provider on behalf of its Native Load Customers.
- (b) The sum of all Network Contract Demand Transmission Service provided to the Transmission Customer at any time at all Points of Delivery shall not exceed the Reserved Capacity in the relevant Service Agreement under which Network Contract Demand Transmission Service is being provided.
- (c) The Transmission Customer shall retain its right to schedule Network

 Contract Demand Transmission Service at the Delivery Points specified in
 the relevant Service Agreement in the amount of its original capacity
 reservation.

43.3 Modification on a Firm Basis:

Any request by a Network Contract Demand Transmission Customer to modify its Network Resources and/or Delivery Points on a firm basis shall be treated as a new request for service in accordance with Section 37 hereof, except that such

Customer shall not be obligated to pay any additional deposit if the capacity reservation does not exceed the amount reserved in the existing Service Agreement. While such new request is pending, the Network Contract Demand Customer shall retain its priority for service at the existing firm Receipt and Delivery Points specified in its Service Agreement.

44 Sale or Assignment of Transmission Service

44.1 Procedures for Assignment or Transfer of Service:

Subject to Commission approval of any necessary filings, a Network Contract Demand Customer may sell, assign, or transfer all or a portion of its rights under its Service Agreement, but only to another Eligible Customer (the Assignee). The Transmission Customer that sells, assigns or transfers its rights under its Service Agreement is hereafter referred to as the Reseller. Compensation to the Reseller shall not exceed the higher of (i) the original rate paid by the Reseller, (ii) the Transmission Provider's maximum rate on file at the time of the assignment, or (iii) the Reseller's opportunity cost capped at the Transmission Provider's cost of expansion. If the Assignee does not request any change in the Point(s) of Receipt or the Point(s) of Delivery, or a change in any other term or condition set forth in the original Service Agreement, the Assignee will receive the same services as did the Reseller and the priority of service for the Assignee will be the same as that of the Reseller. A Reseller should notify the Transmission Provider as soon as possible after any assignment or transfer of service occurs but in any event, notification must be provided prior to any provision of service to the Assignee. The Assignee will be subject to all terms and conditions of this Tariff. If the

Assignee requests a change in service, the reservation priority of service will be determined by the Transmission Provider pursuant to Sections 43.1, 43.2 and 43.3.

44.2 Limitations on Assignment or Transfer of Service:

If the Assignee requests a change in the Point(s) of Receipt or Point(s) of Delivery, or a change in any other specifications set forth in the original Service Agreement, the Transmission Provider will consent to such change subject to the provisions of the Tariff, provided that the change will not impair the operation and reliability of the Transmission Provider's generation, transmission, or distribution systems.

The Assignee shall compensate the Transmission Provider for performing any System Impact Study needed to evaluate the capability of the Transmission

System to accommodate the proposed change and any additional costs resulting from such change. The Reseller shall remain liable for the performance of all obligations under the Service Agreement, except as specifically agreed to by the Parties through an amendment to the Service Agreement.

44.3 Information on Assignment or Transfer of Service:

In accordance with Section 4, Resellers may use the Transmission Provider's OASIS to post transmission capacity available for resale.

45 Rates and Charges

The Network Contract Demand Customer shall pay the Transmission Provider for any Direct Assignment Facilities, Ancillary Services, and applicable study costs, consistent with Commission policy, along with the following:

45.1 Demand Charge:

The Network Contract Demand Customer shall pay Demand Charges as determined pursuant to Schedule 12.

45.2 Compensation for New Facilities and Redispatch Costs:

Whenever a System Impact Study performed by the Transmission Provider for a Transmission Customer under Section 40 in connection with the provision of Network Contract Demand Transmission Service identifies the need for new facilities, the Transmission Customer shall be responsible for such costs to the extent consistent with Commission policy. Whenever a System Impact Study performed by the Transmission Provider identifies capacity constraints that may be relieved more economically by redispatching the Transmission Provider's resources than by building new facilities or upgrading existing facilities to eliminate such constraints, the Transmission Customer shall be responsible for the redispatch costs to the extent consistent with Commission policy. To the extent that the Transmission Provider incurs an obligation to the Network Contract Demand Customer for redispatch costs in accordance with Section 39.5, such amounts shall be credited against the Network Contract Demand Customer's bill for the applicable month.

45.3 Redispatch Charge:

The Network Contract Demand Customer shall pay a proportionate share of any redispatch costs allocated among Network Integration Customers, Network Contract Demand Customers and the Transmission Provider pursuant to Section 42. To the extent that the Transmission Provider incurs an obligation to the Network Contract Demand Customer for redispatch costs in accordance with Section 42, such amounts shall be credited against the Network Contract Demand Customer's bill for the applicable month.

45.4 Stranded Cost Recovery:

The Transmission Provider may seek to recover stranded costs from the Network Contract Demand Customer pursuant to this Tariff in accordance with the terms, conditions and procedures set forth in FERC Order No. 888. However, the Transmission Provider must separately file any proposal to recover stranded costs under Section 205 of the Federal Power Act.

46 Operating Arrangements

46.1 Operation Under the Network Operating Agreement:

The Network Contract Demand Customer shall plan, construct, operate and maintain its facilities in accordance with Good Utility Practice and in conformance with the Network Operating Agreement.

46.2 Network Operating Agreement:

The terms and conditions under which the Network Contract Demand Customer shall operate its facilities and the technical and operational matters associated with the implementation of Part IV of the Tariff shall be specified in the Network Operating Agreement. The Network Operating Agreement shall provide for the Parties to (i) operate and maintain equipment necessary for integrating the Network Contract Demand Customer within the Transmission Provider's Transmission System (including, but not limited to, remote terminal units, metering, communications equipment and relaying equipment), (ii) transfer data between the Transmission Provider and the Network Contract Demand Customer (including, but not limited to, heat rates and operational characteristics of Network Resources, generation schedules for units outside the Transmission Provider's Transmission System, interchange schedules, unit outputs for

redispatch required under Section 42, voltage schedules, loss factors and other real time data), (iii) use software programs required for data links and constraint dispatching, (iv) exchange data on forecasted resources necessary for long-term planning, and (v) address any other technical and operational considerations required for implementation of Part IV of the Tariff, including scheduling protocols. The Network Operating Agreement will recognize that the Network Contract Demand Customer shall either (i) operate as a Control Area under applicable guidelines of the North American Electric Reliability Council (NERC) and the regional reliability council, (ii) satisfy its Control Area requirements, including all necessary Ancillary Services, by contracting with the Transmission Provider, or (iii) satisfy its Control Area requirements, including all necessary Ancillary Services, by contracting with another entity, consistent with Good Utility Practice, which satisfies NERC and regional reliability council requirements. The Transmission Provider shall not unreasonably refuse to accept contractual arrangements with another entity for Ancillary Services. The Network Operating Agreement is included in Attachment G.

46.3 Network Operating Committee:

A Network Operating Committee (Committee) shall be established to coordinate operating criteria for the Parties' respective responsibilities under the Network Operating Agreement. Each Network Contract Demand Customer shall be entitled to have at least one representative on the Committee. The Committee shall meet from time to time as need requires, but no less than once each calendar year.

SCHEDULE 1

SCHEDULING, SYSTEM CONTROL AND DISPATCH SERVICE

This service is required to schedule the movement of power through, out of, within, or into a Control Area. This service can be provided only by the operator of the Control Area in which the transmission facilities used for transmission service are located. Scheduling, System Control and Dispatch Service is to be provided directly by the Transmission Provider (if the Transmission Provider is the Control Area operator) or indirectly by the Transmission Provider making arrangements with the Control Area operator that performs this service for the Transmission Provider's Transmission System. The Transmission Customer must purchase this service from the Transmission Provider or the Control Area operator. The charges for Scheduling, System Control and Dispatch Service are to be based on the rates set forth below. To the extent the Control Area operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that Control Area operator.

Charges:

The charge for Scheduling, System Control and Dispatch Service shall be based on the Zone in which the load is located or, if the energy is transmitted to an interface with another transmission provider, the last Zone in which transmission service is reserved by the Transmission Customer, except in the case of energy being transmitted to serve Network Load under Part III of this Tariff in which case the applicable charge will be under Section 34 of the Tariff.

The applicable zonal charges are set out below.

A. CP&L Zone

- A.1.1 The base rates for scheduling and dispatch services are as follows:
 - A.1.1.1 For Point-to-Point service reserved for an Annual Period or a Monthly Period, the charge for service supplied in a Monthly Period shall not exceed the Transmission Customer's Monthly Period transmission reservation multiplied by \$36.50 per MW-month. For a Network Integration Transmission Service Customer, the charge for service supplied in a month shall be the Customer's load coincident with the hour of the CP&L monthly Transmission System Peak during the month, multiplied by \$36.50 per MW.
 - A.1.1.2 For service reserved for a Weekly Period, the charge for service supplied in a Weekly Period shall not exceed the Transmission Customer's Weekly Period transmission reservation multiplied by \$8.42 per MW-week. However, the sum of the charges for Weekly Period service supplied in a Monthly Period shall not exceed the charges for the same amount of capacity reserved for a Monthly Period.
 - A.1.1.3 For service reserved for a Daily Period, the charge for service supplied in a Daily Period shall not exceed the Transmission Customer's Daily Period transmission reservation multiplied by \$1.68 per MW-day for on-peak days and \$1.20 per MW-day for off-peak days. However, the sum of the charges for Daily Period service supplied in a Weekly Period shall not exceed the charges for the same amount of capacity reserved for a Weekly Period.
 - A.1.1.4 For service reserved for an Hourly Period, the charge for service supplied in an Hourly Period shall not exceed the Transmission Customer's Hourly Period

transmission reservation multiplied by \$0.11 per MW-hour for on-peak hours and \$0.05/MW-hour for off-peak hours. However, the sum of the charges for Hourly Period service supplied in a Daily Period shall not exceed the charges for the same amount of capacity reserved for a Daily Period.

A.1.2 The billing determinant shall be the Transmission Customer's Reserved Capacity for

Point-To-Point Transmission Service or the Transmission Customer's Network Load for
the applicable month for Network Integration Transmission Service.

B. FPC Zone

- B.1.1 The charge for Scheduling, System Control and Dispatch Service is
 - B.1.1.1 \$67/MW month for service in a Monthly Period or an Annual Period.
 - B.1.1.2 \$15.57/MW week for service in a Weekly Period.
 - B.1.1.3 \$3.11/MW day, for service in a Daily Period for on-peak days and \$2.22/MW day for off-peak days, provided that the maximum charge in any Weekly Period shall be no greater than the product of the maximum service reserved in any Daily Period in that Weekly Period and the maximum charge for Weekly Period service.
 - B.1.1.4 \$0.19/MW hour for service in an Hourly Period for on-peak hours and \$0.09/MW hour for off-peak hours. The maximum charge in any Daily Period shall not exceed the product of the maximum service reserved in any Hourly Period in that Daily Period and the maximum charge for Daily Period service; and the maximum charge in any Weekly Period shall not exceed the product of the maximum service reserved in any Hourly Period in that Weekly Period and the maximum charge for Weekly Period service.

B.1.2 The billing determinant shall be the Transmission Customer's Reserved Capacity for Point-To-Point Transmission Service or Network Contract Demand Transmission Service or the Transmission Customer's Network Load for the applicable month for Network Integration Transmission Service.

C. DEC Zone

- C.1.1 The Point to Point Transmission Service Customer shall compensate the Transmission Provider each month for Scheduling, System Control and Dispatch Service at the sum of the applicable charges set forth below:
 - C.1.1.1 For Yearly service, one-twelfth of the Annual Schedule 1 Rate determined pursuant to Exhibit A to this Schedule, multiplied by the amount of Reserved Capacity per year (expressed in kW).
 - C.1.1.2 For Monthly service, the Monthly Schedule 1 Rate determined pursuant to Exhibit A to this Schedule, multiplied by the amount of Reserved Capacity per month (expressed in kW).
 - C.1.1.3 For Weekly service, the Weekly Schedule 1 Rate determined pursuant to Exhibit A to this Schedule, multiplied by the amount of Reserved Capacity per week (expressed in kW).
 - C.1.1.4 For service on on-peak days, the Daily Schedule 1 On-Peak Rate determined pursuant to Exhibit A to this Schedule, multiplied by the amount of Reserved Capacity per day (expressed in kW).
 - C.1.1.5 For service on off-peak days, the Daily Schedule 1 Off-Peak Rate determined pursuant to Exhibit A to this Schedule, multiplied by the amount of Reserved Capacity per day (expressed in kW).

- C.1.1.6 For service on on-peak hours, the Hourly Schedule 1 On-Peak Rate determined pursuant to Exhibit A to this Schedule, multiplied by the amount of Reserved Capacity per hour (expressed in kW).
- C.1.1.7 For service on off-peak hours, the Hourly Schedule 1 Off-Peak Rate determined pursuant to Exhibit A to this Schedule, multiplied by the amount of Reserved Capacity per hour (expressed in kW).

The Schedule 1 Annual Revenue Requirement for purposes of Scheduling, System

Control and Dispatch Service for Network Integration Transmission Service shall be as

determined in Schedule 10-B, Exhibit B. The Network Integration Transmission Service

Customer shall compensate the Transmission Provider each month at the Transmission

Customer's monthly Load Ratio Share calculated on a rolling twelve month basis multiplied by one-twelfth of the annual revenue requirements as determined in Schedule 10-B, Exhibit B.

Exhibit A to Schedule 1

Scheduling, System Control and Dispatch Service Rates in the DEC Zone

- 1. The Annual Schedule 1 Rate for a calendar year is equal to A / B, where:
 - A = the Schedule 1 Annual Revenue Requirement for the calendar year as determined in Schedule 10-B, Exhibit B
 - B = the average of the Transmission Provider's twelve Monthly Transmission System Peaks (expressed in kilowatts) for the calendar year as defined in Section 34.3 of the Tariff
- 2. The Monthly Schedule 1 Rate is equal to the Annual Schedule 1 Rate divided by twelve (12).
- 3. The Weekly Schedule 1 Rate is equal to the Annual Schedule 1 Rate divided by fifty-two (52).
- 4. The Daily Schedule 1 On-Peak Rate is equal to the Weekly Schedule 1 Rate divided by five (5).
- 5. The Daily Schedule 1 Off-Peak Rate is equal to the Weekly Schedule 1 Rate divided by seven (7).
- 6. The Hourly Schedule 1 On-Peak Rate is equal to the Daily Schedule 1 On-Peak Rate divided by sixteen (16).
- 7. The Hourly Schedule 1 Off-Peak Rate is equal to the Daily Schedule 1 Off-Peak Rate divided by twenty-four (24).

SCHEDULE 2

REACTIVE SUPPLY AND VOLTAGE CONTROL FROM GENERATION OR OTHER SOURCES SERVICE

In order to maintain transmission voltages on the Transmission Provider's transmission facilities within acceptable limits, generation facilities and non-generation resources capable of providing this service that are under the control of the control area operator are operated to produce (or absorb) reactive power. Thus, Reactive Supply and Voltage Control from Generation or Other Sources Service must be provided for each transaction on the Transmission Provider's transmission facilities. The amount of Reactive Supply and Voltage Control from Generation or Other Sources Service that must be supplied with respect to the Transmission Customer's transaction will be determined based on the reactive power support necessary to maintain transmission voltages within limits that are generally accepted in the region and consistently adhered to by the Transmission Provider.

Reactive Supply and Voltage Control from Generation or Other Sources Service is to be provided directly by the Transmission Provider (if the Transmission Provider is the Control Area operator) or indirectly by the Transmission Provider making arrangements with the Control Area operator that performs this service for the Transmission Provider's Transmission System. The Transmission Customer must purchase this service from the Transmission Provider or the Control Area operator. The charges for such service will be based on the rates set forth below. To the extent the Control Area operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by the Control Area operator. Although the Transmission Customer is required to take this ancillary service from the Transmission Provider, the Transmission Customer Transmission Provider the Charge for this service to the extent that the Transmission Customer

can supply reactive power and voltage control to the Transmission Provider's Transmission System.

Charges:

The charge for Reactive Supply and Voltage Control from Generation Sources Service shall be based on the Zone in which the energy being transmitted is consumed or, if the energy is transmitted to an interface with another transmission provider, the Zone in which transmission service is last provided by the Transmission Provider, except in the case of energy being transmitted to serve Network Load under Part III of this Tariff in which case the applicable charge will be under Section 34 of the Tariff.

The applicable zonal charges are set out below.

A. CP&L Zone

- A.2.1 The applicable rates for Reactive Supply and Voltage Control from Generation Sources (RSVC) Service shall be as follows:
 - A.2.1.1 For service reserved for an Annual Period or a Monthly Period, the rate shall not exceed \$88.80 per MW-month.
 - A.2.1.2 For service reserved for a Weekly Period, the rate shall not exceed \$20.49 per MW-week.
 - A.2.1.3 For service reserved for a Daily Period, the rate shall not exceed \$4.10 per MW-day for on-peak days and \$2.93 per MW-day for off-peak days.
 - A.2.1.4 For service reserved for an Hourly Period, the rate shall not exceed \$0.26 per MW-hour for on-peak hours and \$0.12 per MW-hour for off-peak hours.
- A.2.2 The charge for RSVC Service required for a customer will be as follows:

- A.2.2.1 For a Network Integration Transmission Service customer, the charge in a month shall be the customer's load coincident with the hour of the CP&L Monthly Transmission System Peak during the month multiplied by the monthly rate for RSVC Service.
- A.2.2.2 For a Point-to-Point reservation, the charge shall be as follows:
 - A.2.2.2.1 For service reserved for an Annual Period or a Monthly Period, the charge for service supplied in a Monthly Period shall be the customer's Monthly Period transmission reservation multiplied by the Monthly Period rate for RSVC Service.
 - A.2.2.2.2 For service reserved for a Weekly Period, the charge for service supplied in a Weekly Period shall be the customer's Weekly Period transmission reservation multiplied by the Weekly Period rate for RSVC Service. However, the sum of the charges for Weekly Period service supplied in a Monthly Period shall not exceed the charges for the same amount of capacity reserved for a Monthly Period.
 - A.2.2.2.3 For service reserved for a Daily Period, the charge for service supplied in a Daily Period shall be the Customer's Daily Period transmission reservation multiplied by the Daily Period rate for RSVC Service. However, the sum of the charges for Daily Period service supplied in a Weekly Period shall not exceed the charges for the same amount of capacity reserved for a Weekly Period.

- A.2.2.2.4 For service reserved for an Hourly Period, the charge for service supplied in an Hourly Period shall be the Customer's Hourly Period transmission reservation multiplied by the Hourly Period rate for RSVC Service. However, the sum of the charges for Hourly Period service supplied in a Daily Period shall not exceed the charges for the same amount of capacity reserved for a Daily Period.
- A.2.3 A Transmission Customer purchasing Reactive Supply and Voltage Control from
 Generating Sources Service shall purchase an amount of service equal to the
 Transmission Customer's Reserved Capacity for Point-To-Point Transmission Service or
 the Transmission Customer's Network Load for the applicable month for Network
 Integration Transmission Service.

B. FPC Zone

- B.2.1 A Transmission Customer purchasing Reactive Supply and Voltage Control from
 Generating Sources Service shall purchase an amount of service equal to the
 Transmission Customer's Reserved Capacity for Network Contract Demand
 Transmission Service or Point-To-Point Transmission Service or the Transmission
 Customer's Network Load for the applicable month for Network Integration
 Transmission Service.
- B.2.2 The charge for Reactive Supply and Voltage Control from Generation Sources Service is no greater than:
 - B.2.2.1 \$110/MW month for service for an Annual Period or a Monthly Period.
 - B.2.2.2 \$25.40/MW week for service for a Weekly Period.

- B.2.2.3 \$5.08/MW day for service in a Daily Period for on-peak days and \$3.62/MW day for off-peak days; provided that the maximum charge in any Weekly Period shall be no greater than the product of the maximum service reserved in any Daily Period in that Weekly Period and the maximum charge for Weekly Period service.
- B.2.2.4 \$0.32/MW hour for service in an Hourly Period for on-peak hours and \$0.15/MW hour for off-peak hours. The maximum charge in any Daily Period shall not exceed the product of the maximum service reserved in any Hourly Period in that Daily Period and the maximum charge for Daily Period service; and the maximum charge in any Weekly Period shall not exceed the product of the maximum service reserved in any Hourly Period in that Weekly Period and the maximum charge for Weekly Period service.

C. DEC Zone

- C.2.1 The Point to Point Transmission Service Customer shall compensate the Transmission Provider each month for Reactive Supply and Voltage Control from Generation Sources Service at the sum of the applicable charges set forth below:
 - C.2.1.1 For Monthly service, \$.20/kW of Reserved Capacity per month.
 - C.2.1.2 For Weekly service, \$.046/kW of Reserved Capacity per week.
 - C.2.1.3 For service on on-peak days, \$.009/kW of Reserved Capacity per on peak days.
 - C.2.1.4 For service on off-peak days, \$.0066/kW of Reserved Capacity per off peak days.

- C.2.1.5 For service on on-peak hours, \$.0006/kW of Reserved Capacity per on peak hours.
- C.2.1.6 For service on off-peak hours, \$.00027/kW of Reserved Capacity per off peak hours.

The annual revenue requirements for purposes of Reactive Supply and Voltage Control from Generation Sources Service for Network Integration Transmission Service shall be \$40,152,000. The Network Integration Transmission Service Customer shall compensate the Transmission Provider each month at the sum of the Transmission Customer's monthly Load Ratio Share calculated on a rolling twelve month basis multiplied by one-twelfth of the annual revenue requirements of \$40,152,000.

SCHEDULE 3

REGULATION AND FREQUENCY RESPONSE SERVICE

Regulation and Frequency Response Service is necessary to provide for the continuous balancing of resources (generation and interchange) with load and for maintaining scheduled Interconnection frequency at sixty cycles per second (60 Hz). Regulation and Frequency Response Service is accomplished by committing on-line generation whose output is raised or lowered (predominantly through the use of automatic generating control equipment) and by other non-generation resources capable of providing this service as necessary to follow the momentby-moment changes in load. The obligation to maintain this balance between resources and load lies with the Transmission Provider (or the Control Area operator that performs this function for the Transmission Provider). The Transmission Provider must offer this service when the transmission service is used to serve load within its Control Area. The Transmission Customer must either purchase this service from the Transmission Provider or make alternative comparable arrangements to satisfy its Regulation and Frequency Response Service obligation. The amount of and charges for Regulation and Frequency Response Service are set forth below. To the extent the Control Area operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that Control Area operator. If the Transmission Customer elects to provide this service itself or by contracting with a third party, the Transmission Customer or the third party provider shall meet the applicable NERC, FRCC, SERC, and VACAR requirements for this service.

Charges:

The charge for Regulation and Frequency Response Service shall be based on the Zone in which the load is located. The applicable zonal charges are set out below.

A. CP&L Zone

- A.3.1A Transmission Customer purchasing Regulation and Frequency Response Service will be required to purchase an amount of Customer Regulation and Frequency Response Capacity (TCLoad) equal to 1.2 percent of the Transmission Customer's reserved capacity for Point-to-Point Transmission Service or 1.2 percent of the Network Integration Transmission Customer's maximum hourly network load responsibility during each service period (e.g., Daily Period or Weekly Period) for service periods of less than one month or 1.2 percent of the Network Integration Transmission Customer's hourly network load coincident with the hour of the Transmission Provider's monthly transmission peak for Network Integration Transmission Customers subscribing to service periods of a month or longer. The billing determinants for this service shall be reduced by any portion of the 1.2 percent purchase obligation that a Transmission Customer obtains from third parties or supplies itself; provided, however, that the Transmission Customer shall be responsible for installing any telemetering or other equipment necessary for multiple parties to provide Regulation and Frequency Response Service in a manner that is consistent with Good Utility Practice.
- A.3.2 The maximum rates for Regulation and Frequency Response (RFR) Service shall be as follows for the service periods indicated:
 - a. For service provided for an Annual or Monthly Period, the rate shall not exceed
 \$3,960 per MW-month.

- For service provided for a Weekly Period, the rate shall not exceed \$913.85 per
 MW-week.
- c. For service provided for a Daily Period, the rate shall not exceed \$182.77 per MW-day for on-peak days and \$130.55 per MW-day for off-peak days.
- A.3.3 The charge for Regulation and Frequency Response Service will be as follows:

 $RFRC = RFRR \times TCLoad$

Where: RFRC is the charge the Transmission Customer would pay for Regulation and Frequency Response Service.

RFRR is the applicable Regulation and Frequency Response capacity rate.

TCLoad is 1.2% of Transmission Customer's load or reservation for which CP&L is supplying Regulation and Frequency Response Service during the service period as determined in Section A.3.1.

- 1.2% is the percentage of regulating reserves that CP&L carries for the CP&L system.
- A.3.3.1 The sum of the charges for Weekly Period service supplied during a Monthly Period shall not exceed the charges for the same amount of TCLoad purchased for a Monthly Period.
- A.3.3.2 The sum of the charges for Daily Period service supplied during a Weekly

 Period shall not exceed the charges for the same amount of TCLoad purchased

 for a Weekly Period.
- A.3.4 Regulation Service with Customer Dispatch of Customer Resource
 - A.3.4.1 A Transmission Customer who wishes to assume dispatch responsibilities for all or a portion of the Transmission Customer's resource(s) must demonstrate that it supplies such service in accordance with NERC and SERC criteria.

The Transmission Customer will be charged as stated in Section A.3.3 above. If CP&L reasonably believes that the Transmission Customer's Regulation and Frequency Response requirement is excessive, such that the Transmission Customer will impose costs that are substantially dissimilar to those imposed by other Transmission Customers and CP&L, CP&L may file for approval of a separate Regulation and Frequency Response charge, pursuant to § 205 of the Federal Power Act; such separate charge to be set out in the Transmission Customer's Service Agreement. CP&L will provide the requested transmission service to the Transmission Customer pending a final determination as to the proposed charges.

A.3.4.2 Telemetry of load and generation information to CP&L's Energy Control

Center (ECC), or its successor facility, for the purposes of control and
metering of services is required for Transmission Customer dispatch of
resources. The Transmission Customer may provide a means to minimize the
amount of Regulation and Frequency Response Service required through the
installation and use of automatic generating controls and load control
computers at the Transmission Customer's facilities to match the Transmission
Customer's generation and load in real time. CP&L will make reasonable
efforts to accommodate such Transmission Customer equipment. Expenses
associated with telemetry of information to the ECC and any other
accommodation of a Transmission Customer's control system shall be covered
under Direct Assignment Facilities. The Transmission Customer's load and
resource energy shall be telemetered and measured regardless of whether the

Transmission Customer purchases Regulation and Frequency Response

Service from CP&L or contracts with another entity for such service unless
otherwise mutually agreed upon by CP&L and the Transmission Customer in
which case such arrangements will be included in the Service Agreement.

Continuous measurement is necessary to ensure that CP&L is compensated
for any Regulation and Frequency Response Service provided, either as a
contracted service or as a service provided to make up for loss of such service
from another source.

A.3.5 Regulation Service with Dynamic Scheduling

- A.3.5.1 In some instances a Transmission Customer may have a resource supply agreement which permits all or a portion of its load to be served from another control area. In such instances and with the cooperation and assistance of such control area operator, the Transmission Customer may employ dynamic scheduling to serve its load from such control area provided the required technical and operating agreements can be reached and approved by the applicable regulatory agencies. For a Transmission Customer with dynamic scheduling of all or a portion of its load to another control area, the following cost allocations shall apply for Regulation and Frequency Response service:
 - A.3.5.1.1 For normal operation, Regulation and Frequency Response service is not required for a Transmission Customer with dynamic scheduling as described herein, provided that telemetry is operational and transmission paths are available to the supplying control area.

- A.3.5.1.2 For telemetry failures as defined in the Transmission Customer's

 Service Agreement, the Transmission Customer must rely on

 manually implemented power schedules to meet its estimated load.

 The Service Agreement shall set out the terms and conditions

 under which CP&L will, upon such telemetry system failure,

 provide the Transmission Customer with Regulation and

 Frequency Response Service at those telemetry point(s)

 experiencing the failure.
- A.3.5.1.3 Telemetry of load and generation information to the ECC, for the purposes of control and metering of services is required for dynamic scheduling of resources. CP&L will make reasonable efforts to accommodate such Transmission Customer equipment required for dynamic scheduling. Expenses associated with telemetry of information to the ECC and any other accommodation of a Transmission Customer's control system shall be covered under Direct Assignment Facilities.

B. FPC Zone

- B.3.1 The charge for Regulation and Frequency Response Service is no greater than:
 - B.3.1.1 \$4,699/MW month for service in an Annual Period or a Monthly Period.
 - B.3.1.2 \$1,084.40/MW week for service in a Weekly Period.
 - B.3.1.3 \$216.88/MW day for service in a Daily Period for on-peak days and
 \$154.49/MW day for off-peak days, provided that the maximum charge in any
 Weekly Period shall be no greater than the product of the maximum service

- reserved in any Daily Period in that Weekly Period and the maximum charge for Weekly Period service.
- B.3.1.4 \$13.55/MW hour for service in an Hourly Period for on-peak hours and \$6.44/MW hour for off-peak hours. The maximum charge in any Daily Period shall not exceed the product of the maximum service reserved in any Hourly Period in that Daily Period and the maximum charge for Daily Period service; and the maximum charge in any Weekly Period shall not exceed the product of the maximum service reserved in any Hourly Period in that Weekly Period and the maximum charge for Weekly Period service.
- B.3.2 A Transmission Customer purchasing Regulation and Frequency Response Service shall purchase an amount of service equal to 1.5 percent of the Transmission Customer's Reserved Capacity for Network Contract Demand Transmission Service or Point-To-Point Transmission Service or 1.5 percent of the Transmission Customer's Network Load for the applicable month for Network Integration Transmission Service. The billing determinants for this service shall be reduced by any portion of the 1.5 percent purchase obligation that Transmission Customer obtains from third parties or supplies itself.

B.3.3 Self-Supply of Service

A Transmission Customer located in the Transmission Provider's Control Area shall purchase Regulation and Frequency Response Service from the Transmission Provider unless it provides the service itself or purchases it from a third party through automatic generation control or dynamic scheduling.

C. DEC Zone

- C.3.1 The Point to Point Transmission Service Customer shall compensate the Transmission

 Provider each month for Regulation and Frequency Response Service provided by the

 Transmission Provider at the sum of the applicable charges set forth below:
 - C.3.1.1 For Monthly service, \$.038/kW of Reserved Capacity per month.
 - C.3.1.2 For Weekly service, \$.009/kW of Reserved Capacity per week.
 - C.3.1.3 For service on on-peak days, \$.002/kW of Reserved Capacity per on peak days.
 - C.3.1.4 For service on off-peak days, \$.0013/kW of Reserved Capacity per off peak days.
 - C.3.1.5 For service on on-peak hours, \$.0001/kW of Reserved Capacity per on peak hours.
 - C.3.1.6 For service on off-peak hours, \$.00005/kW of Reserved Capacity per off peak hours.

The annual revenue requirements for purposes of Regulation and Frequency Response Service for Network Integration Transmission Service shall be \$7,628,880. The Network Integration Transmission Service Customer shall compensate the Transmission Provider each month for Regulation and Frequency Response Service provided by the Transmission Provider at the sum of the Transmission Customer's monthly Load Ratio Share calculated on a rolling twelve month basis multiplied by one-twelfth of the annual revenue requirements of \$7,628,880.

SCHEDULE 3A

Generator Regulation Service

[FPC Zone]

Generator Regulation Service is necessary to provide for on-line generation which is available to respond to schedule ramps required to start, change or end a transmission schedule to another Control Area and for maintaining scheduled interconnection frequency at sixty cycles per second (60 Hz). Generator Regulation Service is accomplished by committing on-line generation whose output is raised or lowered (predominantly through the use of automatic online generation equipment) as necessary to follow the moment-by-moment differences between the generator's output and the ramping transmission schedule. The obligation to provide on-line resources to implement schedules with other Control Areas lies with the Transmission Provider (or the Control Area operator that performs this function for the Transmission Provider). The Transmission Provider must offer this service when transmission service is provided for a generator located in the Control Area that is not identified in Appendix 1 to this Schedule to an interface with another Control Area. The Transmission Customer that schedules service from a generator located in the Transmission Provider's Control Area that is not identified in Appendix 1 to an interface with another Control Area must either purchase this service from the Transmission Provider or make alternative comparable arrangements to satisfy its Generator Regulation Service obligation. The amount of and charges for Generator Regulation Service are set forth below. To the extent the Control Area operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that Control Area operator.

Charges:

The charge for Generator Regulation Service is no greater than:

\$4,699/MW month for service in an Annual Period or a Monthly Period.

\$1,084.40/MW week for service in a Weekly Period.

\$216.88/MW day for service in a Daily Period for on-peak days and \$154.49/MW day for off-peak days; provided that the maximum charge in any Weekly Period shall be no greater than the product of the maximum service reserved in any Daily Period in that Weekly Period and the maximum charge for Weekly Period service.

\$13.55/MW hour for service in an Hourly Period for on-peak hours and \$6.44/MW hour for off-peak hours. The maximum charge in any Daily Period shall not exceed the product of the maximum service reserved in any Hourly Period in that Daily Period and the maximum charge for Daily Period service; and the maximum charge in any Weekly Period shall not exceed the product of the maximum service reserved in any Hourly Period in that Weekly Period and the maximum charge for Weekly Period service.

A Transmission Customer purchasing Generator Regulation Service shall purchase an amount of service equal to 1.5 percent of the Transmission Customer's Reserved Capacity for Network Contract Demand Transmission Service or Point-To-Point Transmission Service or 1.5 percent of the Transmission Customer's Network Load for the applicable month for Network Integration Transmission Service. The billing determinants for this service shall be reduced by any portion of the 1.5 percent purchase obligation that Transmission Customer obtains from third parties or supplies itself.

Self-Supply of Service

A Transmission Customer located in the Transmission Provider's Control Area shall purchase Generator Regulation Service from the Transmission Provider unless it provides the service itself or purchases it from a third party through automatic generation control or dynamic scheduling.

Appendix 1 to Schedule 3A

Generators in the FPC Zone for Which Generator Regulation Service Is Provided Pursuant to a Separate Agreement

The Transmission Provider has entered into agreements with the following generators that provide for the continuous balancing of generation with energy schedules to other Control Areas:

Orange Cogeneration Limited Partnership

Central Power & Lime, Inc.

City of Tallahassee (C.H. Corn Hydro)

Southeastern Power Administration (Woodruff Dam)

SCHEDULE 4

ENERGY IMBALANCE SERVICE

Energy Imbalance Service is provided when a difference occurs between the scheduled and the actual delivery of energy to a load located within a Control Area over a single hour. The Transmission Provider must offer this service when the transmission service is used to serve load within its Control Area. The Transmission Customer must either purchase this service from the Transmission Provider or make alternative comparable arrangements, which may include use of non-generation resources capable of providing this service, to satisfy its Energy Imbalance Service obligation. To the extent the Control Area operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that Control Area operator. The Transmission Provider may charge a Transmission Customer a penalty for either hourly energy imbalances under this Schedule or a penalty for hourly generator imbalances under Schedule 13 for imbalances occurring during the same hour, but not both unless the imbalances aggravate rather than offset each other.

4.1 The Transmission Provider shall establish charges for energy imbalance based on the deviation bands as follows: (i) deviations within +/- 1.5 percent (with a minimum of 2 MW) of the scheduled transaction to be applied hourly to any energy imbalance that occurs as a result of the Transmission Customer's scheduled transaction(s) will be netted on a monthly basis and settled financially, at the end of the month, at 100 percent of incremental or decremental cost; (ii) deviations greater than +/- 1.5 percent up to 7.5 percent (or greater than 2 MW up to 10 MW) of the scheduled transaction to be applied hourly to any energy imbalance that occurs as a result of the Transmission Customer's scheduled transaction(s) will be settled financially, at the end of

each month, at 110 percent of incremental cost or 90 percent of decremental cost, and (iii) deviations greater than +/- 7.5 percent (or 10 MW) of the scheduled transaction to be applied hourly to any energy imbalance that occurs as a result of the Transmission Customer's scheduled transaction(s) will be settled financially, at the end of each month, at 125 percent of incremental cost or 75 percent of decremental cost.

4.2 CP&L Zone and FPC Zone

For purposes of this Schedule, incremental cost and decremental cost represent the Transmission Provider's actual average hourly cost of the last 10 MW dispatched for any purpose, e.g., to supply the Transmission Provider's Native Load Customers, correct imbalances, or make off-system sales, based on the replacement cost of fuel, unit heat rates, start-up costs (including any commitment and redispatch costs), incremental operation and maintenance costs, and purchased and interchange power costs and taxes, as applicable. Start-up cost will also include the cost to cycle a unit back on-line that was removed from service to accommodate an excess Energy Imbalance purchase. CP&L and FPC utilize the PCI GenTrader generation resource optimization model to determine the incremental and decremental cost. CP&L and FPC use actual generation and load parameters and spot value of relevant commodities as data for this optimization model.

4.2.1 Credits for Energy Imbalance Revenues in the CP&L Zone and FPC Zone

The Transmission Provider will credit revenues that it receives in excess of the incremental costs it incurs to accommodate energy imbalances ("penalty revenues") to all non-offending Transmission Customers (including Affiliated Transmission Customers) and to the Transmission Provider on behalf of its own customers (Native Load Customers). The credits shall be calculated and allocated as set out below.

The penalty revenues for which the Transmission Provider provides credits consist of the following: for each undersupply energy imbalance in excess of the deviation band in an hour, the amount by which the Transmission Provider's revenues for such imbalance pursuant to Section 4.1 exceed the incremental cost incurred to supply that imbalance.

The imbalance penalty revenues calculated for each hour shall be credited based on the ratio of the transmission revenues from each Network Transmission Customer or Point-to-Point Transmission Customer that did not experience an energy imbalance in excess of the deviation band in an hour to the sum of the transmission revenues from all Transmission Customers that did not experience energy imbalances in the hour. A Transmission Customer that experiences an energy imbalance in excess of the first tier deviation band in an hour shall not receive a credit for that hour.

4.2.2 The Transmission Provider shall disburse accumulated penalty revenues, plus interest calculated in accord with 18 C.F.R. § 35.19a, when the accumulated amount of penalty revenues collected under Section 4.1 of this Schedule and Schedule 13 reaches \$100,000. However, effective as of April 1, 2009 and every April 1st thereafter, if a distribution has not been made within the previous twelve-month period, a distribution will be made no later than April 1 of that calendar year.

4.3. DEC Zone

In the DEC Zone, for purposes of this Schedule 4 and Schedule 13, incremental cost and decremental cost represent the Transmission Provider's actual average hourly cost of the last 10 MW dispatched for any purpose, e.g., to supply the Transmission Provider's Native Load Customers, correct imbalances, or make off-system sales. The cost calculation is based on

individual generating unit heat rates, start up costs (including any commitment and redispatch costs), variable cost of fuel, variable cost of emissions (SO2 and NOx), variable operation and maintenance costs, purchased and interchange power costs and taxes, as applicable. The following is a detailed description of the elements of incremental/decremental cost and the process used to derive the value:

- PACE modeling PACE (Post Analysis Cost Evaluation) software is used to calculate the variable cost of generation for each hour of each day. PACE is integrated with the Transmission Provider's energy accounting database and utilizes logic that identifies each generating unit that was online for the hour and then ranks the generating units from highest to lowest cost based on the variable operating cost of the individual generating units. The software logic also has the ability to bifurcate hourly data and takes into account individual heat rates of the generating units. Variable costs include start up, fuel, emissions and operations and maintenance costs which are further described below.
- <u>Unit heat rate</u> is a measure of the thermal efficiency of a generating unit and is typically calculated by dividing the total Btu content of fuel burned (or heat released from a nuclear reactor) by the resulting net Kwh generated. The optimal heat rate, which is the theoretical most efficient level of operation, is achieved after a start up period and is generally represented by a curve linear mathematical progression.
- <u>Variable cost of fuel</u> is based on actual inventory and/or acquisition cost of fuel
 used to produce energy. Fuel cost is measured at each plant location and includes
 the cost of the fuel commodity (e.g., coal, gas) plus delivery costs such as rail or

pipeline transportation cost. Fuel cost related to coal fired generation is calculated by taking the average value of coal inventory at the beginning of the month adding the value of shipments received less the average value of the inventory at the end of the month (beginning inventory plus shipments minus ending inventory = fuel cost of energy produced). With respect to natural gas fired generation, the Transmission Provider does not currently maintain an inventory of natural gas. The variable cost of natural gas fuel is the actual cost of the gas fuel consumed during the month. The variable cost of nuclear fuel is based on the weighted average inventory cost of nuclear fuel including enrichment costs and other ancillary costs necessary to bring the fuel to a usable state. Total fuel cost for each plant is divided by the actual MWh's produced by the plant. The resulting cost per MWh is input to PACE which is then used to calculate variable fuel cost for each generating unit based on the number of MWh's that the generating unit produced during the month.

Variable cost of emissions - is based on the weighted average inventory cost of SO2 and NOx emissions allowances consumed in the production of the energy. Actual emissions, generally measured in tons emitted, are measured at each plant utilizing gauges and other devices installed in plant components where emissions occur (e.g., smokestacks). Variable cost is based on the weighted average cost of SO2 and NOx emissions and is calculated as follows: total inventory cost of emissions / tons of allowances in inventory = average cost per ton (SO2 and NOx are calculated separately). The average cost per ton is then multiplied by the tons emitted by each plant for the month. Total emissions cost for the plant is then

divided by the MWh's produced by the plant for the month to derive a cost per MWh. PACE then calculates variable emissions cost for each generating unit that was online during the month.

- Variable operations and maintenance cost (VO&M) operations and maintenance costs are categorized into three principal types fixed, variable and start up. Both the variable and start up components are utilized in the calculation of incremental / decremental cost. Variable and start up operations and maintenance costs include but are not limited to:
 - The cost of materials and labor expended to maintain the Transmission

 Provider's generation assets (boilers, turbines, reactors, etc) in accordance with manufacturer specifications, warranties and recommendations. In addition, for equipment that has no associated manufacturer specifications, warranties or recommendations, maintenance is performed based on management judgment.
 - o Ash disposal costs.
 - Reagent costs.

Variable and start up operations and maintenance costs are generally expended on the following assets and activities:

- o Electric generation assets such as boilers, electric plant, turbines, reactors and hydro plant facilities.
- o Coal handling and other inventory type equipment that is integrated with generation assets.
- o Environmental equipment utilized in the production of electricity.

• Purchased power - the Transmission Provider purchases power from third parties in normal course of business. Purchases are typically initiated based on economic merit as compared to the current cost of generation. The cost of purchased power, including the transmission service required for delivery to the Transmission Provider's service territory border, is included in incremental/decremental cost calculations. Purchased power is measured on a cost per MWh and is incorporated into the PACE model algorithm. Purchased power cost is weighted equally with the variable operating costs of the Transmission Provider's generation assets.

For DEC, the variable costs described above, including purchased power, are input to the PACE model each month. PACE then "stacks" the generation that was online each hour from highest to lowest cost. The incremental and decremental cost is calculated each hour as follows:

(Total variable cost of generation for the hour - total variable cost of generation - 10MW for the hour)/10MW = incremental decremental cost per MWh.

4.3.1 Credits for Energy and Generation Imbalance Penalty Revenues:

On a monthly basis, the Transmission Provider will credit revenues that it receives in excess of the costs it incurs to accommodate energy and generation imbalances ("penalty revenues") to customers who have not experienced energy or generation imbalances outside the deviation band.

(i) The credits for energy imbalance shall be calculated and allocated as set forth below:

The penalty revenues for which the Transmission Provider provides credits will be calculated every hour. For any underdelivery imbalance in excess of the deviation band in an hour, the penalty revenue shall be the amount by which the Transmission Provider's revenues for such imbalance exceed the incremental cost incurred to supply that imbalance. The energy imbalance penalty revenues shall be credited to Point-to-Point Transmission Customers and to Network Customers that are load serving entities (excluding full requirements customers of the Transmission Provider and Native Load Customers) that did not experience an energy imbalance outside the deviation band during the billing hour (collectively, "Non-Offending Energy Imbalance Customers"). The imbalance penalty revenues shall be credited based on a ratio of the sum of a Non-Offending Customer's schedules (as recorded at the Point of Delivery) for the hour divided by the sum of all schedules (as recorded at the Point of Delivery) of all Non-Offending Customers' during the hour.

(ii) The credits for generation imbalance shall be calculated and allocated as set forth below:

The penalty revenues for which the Transmission Provider provides credits will be calculated every hour. For any underdelivery imbalance in excess of the deviation band in an hour, the penalty revenue shall be the amount by which the Transmission Provider's revenues for such imbalance exceed the incremental cost incurred to supply that imbalance.

The generation imbalance penalty revenues shall be credited to (i) Point-to-Point Transmission Customers, (ii) Network Customers that are load serving entities (excluding full requirements customers of the Transmission Provider and Native Load Customers) that did not experience a generation imbalance outside the deviation band during the billing hour, and (iii) customers taking Generation Imbalance Service under Schedule 13 that did not experience a generation imbalance outside the deviation band for the hour (collectively, "Non-Offending Generation Imbalance Customers"). The imbalance penalty revenues shall be credited based on a ratio of the sum of a Non-Offending Customer's schedules (as recorded at the Point of Delivery) for the hour divided by the sum of all schedules (as recorded at the Point of Delivery) of all Non-Offending Customers' during the hour.

(iii) The Transmission Provider shall disburse accumulated imbalance penalty revenues in the form of credits on a monthly basis.

SCHEDULE 5

OPERATING RESERVE - SPINNING RESERVE SERVICE

Spinning Reserve Service is needed to serve load immediately in the event of a system contingency. Spinning Reserve Service may be provided by generating units that are on-line and loaded at less than maximum output and by non-generation resources capable of providing this service. The Transmission Provider must offer this service when the transmission service is used to serve load within its Control Area. The Transmission Customer must either purchase this service from the Transmission Provider or make alternative comparable arrangements to satisfy its Spinning Reserve Service obligation. The amount of and charges for Spinning Reserve Service are set forth below. To the extent the Control Area operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that Control Area operator. If the Transmission Customer elects to provide this service itself or by contracting with a third party, the Transmission Customer or the third party provider shall meet the applicable NERC, FRCC, SERC, and VACAR requirements for this service.

Charges:

The charge for Spinning Reserve Service shall be based on the Zone in which the load is located. The applicable zonal charges are set out below.

A. CP&L Zone

A.5.1 Spinning Reserve Capacity

A Transmission Customer purchasing Spinning Reserve Service will be required to purchase an amount of Customer Spinning Reserve Capacity (CSR) equal to 1.77 percent of the Transmission Customer's reserved capacity for Point-to-Point Transmission

Service or 1.77 percent of the Network Integration Transmission Customer's maximum hourly network load responsibility during each service period (e.g., Daily Period or Weekly Period) for service periods less than one month or 1.77 percent of the Network Integration Transmission Customer's hourly network load coincident with the hour of the Transmission Provider's monthly transmission peak for Network Integration

Transmission Customers subscribing to service periods of a month or longer. The billing determinants for this service shall be reduced by any portion of the 1.77 percent purchase obligation that a Transmission Customer obtains from third parties or supplies itself.

A.5.2 Spinning Reserve Capacity Rate

The maximum rates for Spinning Reserve Capacity Rate (SRR) shall be as follows for the service periods indicated:

- a. For service provided for an Annual or Monthly Period, the rate shall not exceed
 \$3,960 per MW-month.
- For service provided for Weekly Period, the rate shall not exceed \$913.85 per
 MW-week.
- c. For service provided for a Daily Period, the rate shall not exceed \$182.77 per MW-day for on-peak days and \$130.55 per MW-day for off-peak days.

A.5.3 Spinning Reserve Capacity Charges

The Transmission Customer's Spinning Reserve Capacity Charge for the Monthly Period is as follows:

$$SRC = CSR \times SRR$$

Where:

SRC is the Transmission Customer's Spinning Reserve Capacity Charge. CSR is the amount of Spinning Reserve Capacity purchased by the

Transmission Customer during the service period as determined in Section A.5.1. SRR is the applicable Spinning Reserve Capacity Rate.

- A.5.3.1 The sum of the charges for Weekly Period service supplied during a Monthly Period shall not exceed the charges for the same amount of capacity purchased for a Monthly Period.
- A.5.3.2 The sum of the charges for Daily Period service supplied during a Weekly

 Period shall not exceed the charges for the same amount of capacity purchased
 for a Weekly Period.
- A.5.4 Availability and Application of Spinning Reserve Capacity

Spinning reserve capacity shall be available in an amount up to 50% of the Transmission Customer's capacity reservation for Point-to-Point service or up to the Network Integration Customer's peak network load for network service for the first ten (10) minutes immediately following an unplanned outage of a Transmission Customer's generation resource. If Spinning Reserve Service is purchased from multiple suppliers or self-supplied by the Transmission Customer, the amount of spinning reserve service capacity that CP&L must keep on line shall be reduced by the amount of spinning reserve service purchased elsewhere or self-supplied. A Transmission Customer must purchase or provide both Spinning Reserve and Supplemental Reserve Service in order to cover 100% of the Transmission Customer's load for the first ten (10) minutes following a system contingency.

A.5.5 Notification Requirements

In the event of a system contingency that causes the interruption or curtailment of deliveries from a Transmission Customer's owned or purchased generating resource (i) that is electrically within CP&L's control area and/or (ii) for which the Transmission Customer has made arrangements with CP&L to provide Spinning Reserve Service, the Transmission Customer must use best efforts to notify CP&L within 10 minutes of the occurrence of the contingency or as soon as practicable thereafter.

- A.5.6 Energy Accounting for Spinning Reserve Service
 - In the event of a system contingency for which CP&L provides Spinning Reserve Service hereunder, any energy provided to the Transmission Customer without prior scheduling shall be treated as follows:
 - A.5.6.1 If the Transmission Customer has provided the required notification, contained in Section A.5.5, following the contingency,
 - A.5.6.1.1 Spinning reserve energy provided to the Transmission Customer during the initial 10-minute period will be offset or credited against Energy Imbalances so that the net Energy Imbalance accounts such that Energy Imbalance for that 10-minute period is zero, and
 - A.5.6.1.2 Spinning reserve energy provided to the Transmission Customer for periods longer than the initial 10-minute period will be handled as Energy Imbalance Service under Schedule 4 of this Tariff unless other arrangements exist between CP&L and the Transmission Customer for backup service, or
 - A.5.6.2 If the Transmission Customer has not provided the required notification, contained in Section A.5.5, following a contingency, all energy provided by CP&L will be handled as Energy Imbalance Service under Schedule 4 of this Tariff.

B. FPC Zone

B.5.1 Charges

The maximum charges for Operating Reserve - Spinning Reserve Service are no greater than:

- B.5.1.1 \$6,122/MW month for service in an Annual Period or a Monthly Period.
- B.5.1.2 \$1,412.67/MW week for service in a Weekly Period.
- B.5.1.3 \$282.53/MW day for service in a Daily Period for on-peak days and \$201.26/MW day for off-peak days; provided that the maximum charge in any Weekly Period shall be no greater than the product of the maximum service reserved in any Daily Period in that Weekly Period and the maximum charge for Weekly Period service.
- B.5.1.4 \$17.66/MW hour for service in an Hourly Period for on-peak hours and \$8.39/MW hour for off-peak hours. The maximum charge in any Daily Period shall not exceed the product of the maximum service reserved in any Hourly Period in that Daily Period and the maximum charge for Daily Period service; and the maximum charge in any Weekly Period shall not exceed the product of the maximum service reserved in any Hourly Period in that Weekly Period and the maximum charge for Weekly Period service.
- B.5.2 A Transmission Customer purchasing Spinning Reserve Service will be required to purchase an amount of service equal to 0.7 percent of the Transmission Customer's Reserved Capacity for Network Contract Demand Transmission Service or Point-To-Point Transmission Service or 0.7 percent of the Transmission Customer's Network Load for the applicable month for Network Integration Transmission Service. The billing

determinants for this service shall be reduced by any portion of the 0.7 percent purchase obligation that a Transmission Customer obtains from third parties or supplies itself. If the FRCC assigns a different requirement directly to the customer, then the above percentage would not apply. If the Transmission Customer requires energy from the capacity reserved pursuant to this Schedule, such energy shall be treated as Inadvertent Energy, consistent with the Florida Specific Procedures entitled "Reserve Capacity" and "Inadvertent Accounting" in the FRCC Handbook.

B.5.3 Self-Supply of Service

A Transmission Customer that is located in FPC's Control Area shall purchase Spinning Reserve Service from the Transmission Provider unless it provides comparable service from its own generators or purchases from a third party Spinning Reserve Service that is available from on-line generation located within peninsular Florida in an amount equal to the reserve capability required by the FRCC Operating Committee, as modified from time to time.

C. DEC Zone

- C.5.1 The Point to Point Transmission Service Customer shall compensate the Transmission Provider each month for Operating Reserve - Spinning Reserve Service provided by the Transmission Provider at the sum of the applicable charges set forth below:
 - C.5.1.1 For Monthly service, \$.0815/kW of Reserved Capacity per month.
 - C.5.1.2 For Weekly service, \$.019/kW of Reserved Capacity per week.
 - C.5.1.3 For service on on-peak days, \$.004/kW of Reserved Capacity per on peak days.
 - C.5.1.4 For service on off-peak days, \$.0027/kW of Reserved Capacity per off peak days.

- C.5.1.5 For service on on-peak hours, \$.00025/kW of Reserved Capacity per on peak hours.
- C.5.1.6 For service on off-peak hours, \$.00011/kW of Reserved Capacity per off peak hours.

The annual revenue requirements for purposes of Operating Reserve - Spinning Reserve Service for Network Integration Transmission Service shall be \$16,361,940. The Network Integration Transmission Service Customer shall compensate the Transmission Provider each month for Operating Reserve - Spinning Reserve Service provided by the Transmission Provider at the sum of the Transmission Customer's monthly Load Ratio Share calculated on a rolling twelve month basis multiplied by one-twelfth of the annual revenue requirements of \$16,361,940.

If, in the event of a system contingency, energy must be provided beyond a 10-minute period due to system or unit rampdown, such energy will be priced in accordance with the penalty provisions of Schedule 4, Energy Imbalance Service, unless other arrangements with the Transmission Provider are in place for backup service.

SCHEDULE 6

OPERATING RESERVE SUPPLEMENTAL RESERVE SERVICE

Supplemental Reserve Service is needed to serve load in the event of a system contingency; however, it is not available immediately to serve load but rather within a short period of time. Supplemental Reserve Service may be provided by generating units that are online but unloaded, by quick-start generation or by interruptible load or other non-generation resources capable of providing this service. The Transmission Provider must offer this service when the transmission service is used to serve load within its Control Area. The Transmission Customer must either purchase this service from the Transmission Provider or make alternative comparable arrangements to satisfy its Supplemental Reserve Service obligation. The amount of and charges for Supplemental Reserve Service are set forth below. To the extent the Control Area operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that Control Area operator. If the Transmission Customer elects to provide this service itself or by contracting with a third party, the Transmission Customer or the third party provider shall meet the applicable NERC, FRCC, SERC, and VACAR requirements for this service.

Charges:

The charge for Supplemental Reserve Service shall be based on the Zone in which the load is located. The applicable zonal charges are set out below.

A. CP&L Zone

A.6.1 Supplemental Reserve Capacity

A Transmission Customer purchasing Supplemental Reserve Service will be required to

purchase an amount of Customer Supplemental Reserve Capacity (CSUR) equal to 1.77
percent of the Transmission Customer's reserved capacity for Point-to-Point
Transmission Service or 1.77 percent of the Network Integration Transmission
Customer's maximum hourly network load responsibility during each service period (e.g.,
Daily Period or Weekly Period) for service periods less than one month or 1.77 percent of
the Network Integration Transmission Customer's hourly network load coincident with
the hour of the Transmission Provider's monthly transmission peak for Network
Integration Transmission Customers subscribing to service periods of a month or longer.
The billing determinants for this service shall be reduced by any portion of the 1.77
percent purchase obligation that a Transmission Customer obtains from third parties or
supplies itself.

A.6.2 Supplemental Reserve Capacity Rate

The maximum rates for Supplemental Reserve Capacity Rate (SURR) shall be as follows for the service periods indicated:

- A.6.2.1 For service provided for an Annual or Monthly Period, the rate shall not exceed \$2,830 per MW-month.
- A.6.2.2 For service provided for a Weekly Period, the rate shall not exceed \$653.08 per MW-week.
- A.6.2.3 For service provided for a Daily Period, the rate shall not exceed \$130.62 per MW-day for on-peak days and \$93.30 per MW-day for off-peak days.

A.6.3 Supplemental Reserve Capacity Charges

The Transmission Customer's Supplemental Reserve Capacity Charge for the Monthly Period is as follows:

 $SURC = CSUR \times SURR$

Where: SURC is the Transmission Customer's Supplemental Reserve

Capacity Charge.

CSUR is the amount of Supplemental Reserve Capacity purchased by the Transmission Customer during the service period as

determined in Section A.6.1.

SURR is the applicable Supplemental Reserve Capacity Rate.

- A.6.3.1 The sum of the charges for Weekly Period service supplied during a Monthly Period shall not exceed the charges for the same amount of capacity purchased for a Monthly Period.
- A.6.3.2 The sum of the charges for Daily Period service supplied during a Weekly

 Period shall not exceed the charges for the same amount of capacity purchased
 for a Weekly Period.
- A.6.4 Availability and Application of Supplemental Reserve Capacity

Supplemental reserve capacity shall be available in an amount up to 50% of the Transmission Customer's capacity reservation for Point-to-Point service or up to the Network Integration Customer's peak network load for network service for the first ten (10) minutes immediately following an unplanned outage of a Transmission Customer's generation resource. If Supplemental Reserve Service is purchased from multiple suppliers or self-supplied by the Transmission Customer, the amount of supplemental reserve capacity provided by CP&L shall be reduced by the amount of supplemental reserve capacity purchased elsewhere or self-supplied. A Transmission Customer must purchase or provide both Spinning Reserve and Supplemental Reserve Service in order to

cover 100% of the Transmission Customer's load for the first ten (10) minutes following a system contingency.

A.6.5 Notification Requirements

In the event of a system contingency that causes the interruption or curtailment of deliveries from a Transmission Customer's owned or purchased generating resource (i) that is electrically within CP&L's control area and/or (ii) for which the Transmission Customer has made arrangements with CP&L to provide Supplemental Reserve Service, the Transmission Customer must use best efforts to notify CP&L within 10 minutes of the occurrence of the contingency or as soon as practicable thereafter.

- A.6.6 Energy Accounting for Supplemental Reserve Service
 - In the event of a system contingency for which CP&L provides Supplemental Reserve Service hereunder, any energy provided to the Transmission Customer without prior scheduling shall be treated as follows:
 - A.6.6.1 If the Transmission Customer has provided the required notification, contained in Section A.6.5, following the contingency,
 - A.6.6.1.1 Supplemental reserve energy provided to the Transmission

 Customer during the initial 10-minute period will be offset or credited against Energy Imbalances so that the net Energy

 Imbalance for that 10-minute period is zero, and
 - A.6.6.1.2 Supplemental reserve energy provided to the Transmission

 Customer for periods longer than the initial 10-minute period will be handled as Energy Imbalance Service under Schedule 4 of this

Tariff unless other arrangements exist between CP&L and the Transmission Customer for backup service, or

A.6.6.2 If the Transmission Customer has not provided the required notification, contained in Section A.6.5, following a contingency, all energy provided by CP&L will be handled as Energy Imbalance Service under Schedule 4 of this Tariff.

B. FPC Zone

B.6.1 Charges:

The maximum charges for Operating Reserve - Supplemental Reserve Service are no greater than:

- B.6.1.1 \$2,081/MW month for service in an Annual Period or a Monthly Period.
- B.6.1.2 \$480.13/MW week for service in a Weekly Period.
- B.6.1.3 \$96.03/MW day for service in a Daily Period for on-peak days and \$68.40/MW day for off-peak days; provided that the maximum charge in any Weekly Period shall be no greater than the product of the maximum service reserved in any Daily Period in that Weekly Period and the maximum charge for Weekly Period service.
- B.6.1.4 \$6.00/MW hour for service in an Hourly Period for on-peak hours and \$2.85/MW hour for off-peak hours. The maximum charge in any Daily Period shall not exceed the product of the maximum service reserved in any Hourly Period in that Daily Period and the maximum charge for Daily Period service; and the maximum charge in any Weekly Period shall not exceed the

product of the maximum service reserved in any Hourly Period in that Weekly Period and the maximum charge for Weekly Period service.

B.6.2 A Transmission Customer purchasing Supplemental Reserve Service will be required to purchase an amount of service equal to 2.0 percent of the Transmission Customer's Reserved Capacity for Network Contract Demand Transmission Service or Point-To-Point Transmission Service or 2.0 percent of the Transmission Customer's Network Load for the applicable month for Network Integration Transmission Service. The billing determinants for this service shall be reduced by any portion of the 2.0 percent purchase obligation that a Transmission Customer obtains from third parties or supplies itself. If the FRCC assigns a different requirement directly to the customer, then the above percentage would not apply. If the Transmission Customer requires energy from the capacity reserved pursuant to this Schedule, such energy shall be treated as Inadvertent Energy, consistent with the Florida Specific Procedures entitled "Reserved Capacity" and "Inadvertent Accounting" in the FRCC Handbook.

B.6.3 Self-Supply of Service

A Transmission Customer that is located within the Transmission Provider's Control Area shall purchase Supplemental Reserve Service from the Transmission Provider unless it provides comparable service from its own generation or purchases from a third party Supplemental Reserve Service that is available from on-line, unloaded generation, quick-start generation or interruptible load equal to the reserve capability required by the FRCC Operating Committee, as modified from time to time.

C. DEC Zone

- C.6.1 The Point to Point Transmission Service Customer shall compensate the Transmission

 Provider each month for Operating Reserve Supplemental Reserve Service provided by
 the Transmission Provider at the sum of the applicable charges set forth below:
 - C.6.1.1 For Monthly service, \$.0815/kW of Reserved Capacity per month.
 - C.6.1.2 For Weekly service, \$.019/kW of Reserved Capacity per week.
 - C.6.1.3 For service on on-peak days, \$.004/kW of Reserved Capacity per on peak days.
 - C.6.1.4 For service on off-peak days, \$.0027/kW of Reserved Capacity per off peak days.
 - C.6.1.5 For service on on-peak hours, \$.00025/kW of Reserved Capacity per on peak hours.
 - C.6.1.6 For service on off-peak hours, \$.00011/kW of Reserved Capacity per off peak hours.
- C.6.2 The annual revenue requirements for purposes of Operating Reserve Supplemental

 Reserve Service for Network Integration Transmission Service shall be \$16,361,940. The

 Network Integration Transmission Service Customer shall compensate the Transmission

 Provider each month for Operating Reserve Supplemental Reserve Service provided by

 the Transmission Provider at the sum of the Transmission Customer's monthly Load

 Ratio Share calculated on a rolling twelve month basis multiplied by one-twelfth of the

 annual revenue requirements of \$16,361,940.
- C.6.3 If, in the event of a system contingency, energy must be provided beyond a 10-minute period due to system or unit rampdown, such energy will be priced in accordance with

the penalty provisions of Schedule 4, Energy Imbalance Service, unless other arrangements with the Transmission Provider are in place for backup service.

SCHEDULE 7

LONG-TERM FIRM AND SHORT-TERM FIRM POINT-TO-POINT TRANSMISSION SERVICE

The Transmission Customer shall compensate the Transmission Provider each month for Reserved Capacity at the sum of the applicable charges for a zone set forth below:

Charges:

The charges for Long-Term Firm and Short-Term Firm Point-To-Point Transmission

Service shall be based on the Zone in which the energy being transmitted is consumed or, if the energy is transmitted to an interface with another transmission provider, the Zone in which transmission service is last provided by the Transmission Provider, except in the case of energy being transmitted to serve Network Load under Part III of this Tariff in which case the applicable charge will be under Section 34 of the Tariff.

The applicable zonal charges are set out below.

A. CP&L Zone

- A.7.1 Annual, Monthly, Weekly and Daily Periods: The rates for the Annual Period, the Monthly Period, the Daily Period for on-peak days and the Daily Period for off-peak days are derived from the Formula Rate, which is set forth in OATT Attachment H.1. The Formula Rate is implemented in accordance with the OATT Attachment H.2 Formula Rate Implementation Protocols.
- **A.7.2 Daily Period:** The total demand charge in any Weekly Period, pursuant to a reservation for Daily Period delivery, shall not exceed the Weekly Period rate times the highest amount in kilowatts of Reserved Capacity in any Daily Period during such Weekly Period.

- **A.7.3 Annual Update:** The rates for Schedule 7 shall be updated annually on June 1st of each year in accordance with the OATT Attachment H.2 Formula Rate Implementation Protocols.
- A.7.4 Discounts: Three principal requirements apply to discounts for transmission service as follows: (1) any offer of a discount made by the Transmission Provider must be announced to all Eligible Customers solely by posting on the OASIS, (2) any customer-initiated requests for discounts (including requests for use by one's wholesale merchant or an Affiliate's use) must occur solely by posting on the OASIS, and (3) once a discount is negotiated, details must be immediately posted on the OASIS. For any discount agreed upon for service on a path from point(s) of receipt to point(s) of delivery, the Transmission Provider must offer the same discount transmission service rate for the same time period to all Eligible Customers on all unconstrained transmission paths that go to the same point(s) of delivery on the Transmission System.
- A.7.5 Unauthorized Use: In the event that the Transmission Customer's use of the

 Transmission System during any hour of that day exceeds the amount of the

 Transmission Customer's Reserved Capacity, the Transmission Customer shall pay the

 Transmission Provider a penalty charge based on a rate equal to 200% of the applicable

 rate for Firm Point-to-Point Transmission Service. For unreserved use within a single
 day, the penalty charge shall be based on the daily rate. For unreserved use in two or

 more days within a calendar week, the penalty charge shall be based on the weekly rate.

 For multiple instances of unreserved use in more than one calendar week in a calendar

 month, the penalty charge shall be based on the monthly rate. Losses delivered to the

CP&L Zone by the Transmission Customer will not be included in the Transmission Customer's usage for determination of the charge set out herein.

A.7.6 Credits for Unreserved Use Penalty Revenues: The Transmission Provider shall credit revenues that are collected for unreserved use to all non-offending Transmission

Customers (including Affiliated Transmission Customers) and to the Transmission

Provider on behalf of its own customers (Native Load Customers). The credits shall be calculated and allocated as set forth below.

The penalty revenues collected pursuant to Section A.7.6 of this schedule shall be credited based on the ratio of the transmission revenues collected from each Network Transmission Customer or Point-to-Point Transmission Customer that did not experience unreserved use in an hour to the sum of the transmission revenues collected from all Transmission Customers that did not experience unreserved use in the hour. A Transmission Customer that experiences unreserved use in an hour shall not receive a credit for that hour.

The Transmission Provider shall disburse accumulated penalty revenues, plus interest calculated in accord with 18 C.F.R. § 35.19a, when the accumulated amount of penalty revenues collected under Section A.7.6 of this schedule and Section A.8.6 of Schedule 8 reaches \$50,000. However, if a distribution has not been made within the previous 12 month period, a distribution will be made no later than April 1 of that calendar year.

A.7.7 Additional Charges: The Transmission Customer will compensate CP&L for any facility additions or redispatch costs in accordance with Sections 13.5, 27 and 45.2 of the Tariff.

- A.7.8 Losses: For purposes of billing, the Reserved Capacity to be applied under Sections
 A.7.1 through A.7.4 of this schedule shall not include losses purchased or provided by the Transmission Customer.
- **A.7.9 Resales:** The rates and rules governing charges and discounts stated above shall not apply to resales of transmission service, compensation for which shall be governed by Section 23.1 of the Tariff.

B. FPC Zone

- B.7.1 Monthly, Weekly and Daily Periods: The rates for the Monthly Period, the Weekly Period and the Daily Period for on-peak days and the Daily Period for off-peak days are derived from the Formula Rate, which is set forth in OATT Schedules 10-A.2 and 10-A.3. The resulting rates are posted on the Transmission Provider's OASIS. The Formula Rate is implemented in accordance with the OATT Schedule 10-A.1 Formula Rate Implementation Protocols.
- **B.7.2 Daily Period:** The total demand charge in any Weekly Period, pursuant to a reservation for Daily Period delivery, shall not exceed the Weekly Period rate times the highest amount in kilowatts of Reserved Capacity in any Daily Period during such Weekly Period.
 - **NOTE:** All quantities used in calculating the Transmission Customer's Reserved Capacity shall be established at the transmission system input level, i.e., shall include the transmission capacity amount associated with any losses.
- B.7.3 Annual Update: The rates for Schedule 7 shall be updated annually on June 1st of each year in accordance with the OATT Schedule 10-A.1 Formula Rate Implementation Protocols.

- B.7.4 Discounts: Three principal requirements apply to discounts for transmission service as follows: (1) any offer of a discount made by the Transmission Provider must be announced to all Eligible Customers solely by posting on the OASIS, (2) any customer-initiated requests for discounts (including requests for use by one's wholesale merchant or an Affiliate's use) must occur solely by posting on the OASIS, and (3) once a discount is negotiated, details must be immediately posted on the OASIS. For any discount agreed upon for service on a path from point(s) of receipt to point(s) of delivery, the Transmission Provider must offer the same discount transmission service rate for the same time period to all Eligible Customers on all unconstrained transmission paths that go to the same point(s) of delivery on the Transmission System.
- B.7.5 Unauthorized Use: In the event a Transmission Customer's use of the Transmission System during any hour of that day exceeds the amount of the Transmission Customer's Reserved Capacity, the Transmission Customer shall pay the Transmission Provider a penalty charge based on a rate equal to 200% of the applicable rate for Firm Point-to-Point Transmission Service. For unreserved use within a single day, the penalty charge shall be based on the daily rate. For unreserved use in two or more days within a calendar week, the penalty charge shall be based on the weekly rate. For multiple instances of unreserved use in more than one calendar week in a calendar month, the penalty charge shall be based on the monthly rate.
- B.7.6 Credits for Unreserved Use Penalty Revenues: The Transmission Provider shall credit revenues that are collected for unreserved use to all non-offending Transmission Customers (including Affiliated Transmission Customers) and to the Transmission

Provider on behalf of its own customers (Native Load Customers). The credits shall be calculated and allocated as set forth below.

The penalty revenues collected pursuant to Section B.7.5 of this schedule shall be credited based on the ratio of the transmission revenues collected from each Network Transmission Customer or Point-to-Point Transmission Customer that did not experience unreserved use in an hour to the sum of the transmission revenues collected from all Transmission Customers that did not experience unreserved use in the hour. A Transmission Customer that experiences unreserved use in an hour shall not receive a credit for that hour.

The Transmission Provider shall disburse accumulated penalty revenues, plus interest calculated in accord with 18 C.F.R. § 35.19a, when the accumulated amount of penalty revenues collected under Section B.7.5 of this schedule and Section B.8.6 of Schedule 8 reaches \$50,000. However, if a distribution has not been made within the previous 12 month period, a distribution will be made no later than April 1 of that calendar year.

B.7.7 Regulatory Assessment: The portion of the charge by FERC pursuant to 18 C.F.R.
§ 382.201 related to service under this Tariff. The Regulatory Assessment shall be allocated to the Transmission Customer on an annual basis in the year following the year in which transmission service is rendered, based on the megawatt-hours of service provided to the Transmission Customer or based upon such other method as these fees are assessed by FERC.

B.7.8 Resales: The rates and rules governing charges and discounts stated above shall not apply to resales of transmission service, compensation for which shall be governed by Section 23.1 of the Tariff.

C. DEC Zone

The Transmission Customer shall compensate the Transmission Provider each month for Reserved Capacity at the sum of the applicable charges set forth below:

- **C.7.1** Yearly delivery: one-twelfth of the Annual Demand Charge determined pursuant to Exhibit A to this Schedule, multiplied by the amount of Reserved Capacity per year.
- **C.7.2 Monthly delivery:** the Monthly Demand Charge determined pursuant to Exhibit A to this Schedule, multiplied by the amount of Reserved Capacity per month.
- C.7.3 Weekly delivery: the Weekly Demand Charge determined pursuant to Exhibit A to this Schedule, multiplied by the amount of Reserved Capacity per week.
- **C.7.4 Daily on-peak delivery:** the Daily On-Peak Demand Charge determined pursuant to Exhibit A to this Schedule, multiplied by the amount of Reserved Capacity per on-peak days.
- C.7.5 Daily off-peak delivery: the Daily Off-Peak Demand Charge determined pursuant to Exhibit A to this Schedule, multiplied by the amount of Reserved Capacity per off-peak days. The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the rate specified in section (3) above times the highest amount in kilowatts of Reserved Capacity in any day during such week.
- C.7.6 **Discounts:** Three principal requirements apply to discounts for transmission service as follows (1) any offer of a discount made by the Transmission Provider must be announced to all Eligible Customers solely by posting on the OASIS, (2) any customer-

initiated requests for discounts (including requests for use by one's wholesale merchant or an Affiliate's use) must occur solely by posting on the OASIS, and (3) once a discount is negotiated, details must be immediately posted on the OASIS. For any discount agreed upon for service on a path, from point(s)of receipt to point(s) of delivery, the Transmission Provider must offer the same discounted transmission service rate for the same time period to all Eligible Customers on all unconstrained transmission paths that go to the same point(s) of delivery on the Transmission System.

- C.7.7 Resales: The rates and rules governing charges and discounts stated above shall not apply to resales of transmission service, compensation for which shall be governed by Section 23.1 of the Tariff.
- C.7.8 In the event that the Transmission Customer exceeds its firm Reserved Capacity at any Point of Receipt and/or Point of Delivery (or any combination of such points, together with any Secondary Points of Receipt and Delivery pursuant to Section 22.1), the Transmission Customer shall pay two times the charge under Schedule 7 for the maximum amount during the relevant time period that the Transmission Customer exceeds its firm Reserved Capacity at any Point of Receipt and/or Point of Delivery. The unreserved use penalty for one hour of unreserved use within the same day will be based on the rate for daily firm point-to-point service. If the Transmission Customer incurs more than one assessment for a given duration the penalty period will be increased to the next longest duration. Pursuant to Section 3, Ancillary Services charges will be based on the amount of transmission service used but not reserved for each hour of unreserved use.

Exhibit A to Schedule 7

Long-Term Firm and Short-Term Firm Point-to-Point Transmission Service Rates in the DEC Zone

- 1. The Annual Demand Charge for a calendar year is equal to A / B, where:
 - A = the Transmission Revenue Requirement for the calendar year as determined in Schedule 10-B, Exhibit B.
 - B = the average of the Transmission Provider's twelve Monthly Transmission System Peaks (expressed in kilowatts) for the calendar year as defined in Section 34.3 of the Tariff.
- 2. The Monthly Demand Charge is equal to the Annual Demand Charge divided by twelve (12).
- 3. The Weekly Demand Charge is equal to the Annual Demand Charge divided by fifty-two (52).
- 4. The Daily On-Peak Demand Charge is equal to the Weekly Demand Charge divided by five (5).
- 5. The Daily Off-Peak Demand Charge is equal to the Weekly Demand Charge divided by seven (7).

SCHEDULE 8

NON-FIRM POINT-TO-POINT TRANSMISSION SERVICE

The Transmission Customer shall compensate the Transmission Provider for Non-Firm Point-To-Point Transmission Service up to the sum of the applicable charges set forth below:

Charges:

The charge for Non-Firm Point-To-Point Transmission Service shall be based on the Zone in which the energy being transmitted is consumed or, if the energy is transmitted to an interface with another transmission provider, the Zone in which transmission service is last provided by the Transmission Provider, except in the case of energy being transmitted to serve Network Load under Part III of this Tariff in which case the applicable charge will be under Section 34 of the Tariff.

The applicable zonal charges are set out below.

A. CP&L Zone

- A.8.1 Monthly, Weekly, Daily and Hourly Periods: The rates for the Annual Period, the Monthly Period, the Daily Period for on-peak days and the Daily Period for off-peak days, the Hourly Period for on-peak hours and the Hourly Period for off-peak hours are derived from the Formula Rate, which is set forth in OATT Attachment H.1 and Attachment H.2 Formula Rate Implementation Protocols.
- **A.8.2 Daily Period:** The total demand charge in any Weekly Period, pursuant to a reservation for Daily Period delivery, shall not exceed the Weekly rate times the highest amount in kilowatts of Reserved Capacity in any Daily Period during such Weekly Period.
- **A.8.3 Hourly Period:** The total demand charge in any Daily Period, pursuant to a reservation for Hourly Period delivery, shall not exceed the Daily Period rate times the highest

amount in kilowatts of Reserved Capacity in any Hourly Period during such Daily Period. In addition, the total demand charge in any Weekly Period, pursuant to a reservation for Hourly Period or Daily Period delivery, shall not exceed the Weekly Period rate times the highest amount in kilowatts of Reserved Capacity in any Hourly Period during such Weekly Period.

- A.8.4 Annual Update: The rates for Schedule 8 shall be updated annually on June 1st of each year in accordance with the OATT Attachment H.2 Formula Rate Implementation Protocols.
- A.8.5 Discounts: Three principal requirements apply to discounts for transmission service as follows: (1) any offer of a discount made by the Transmission Provider must be announced to all Eligible Customers solely by posting on the OASIS, (2) any customer-initiated requests for discounts (including requests for use by one's wholesale merchant or an Affiliate's use) must occur solely by posting on the OASIS, and (3) once a discount is negotiated, details must be immediately posted on the OASIS. For any discount, agreed upon for service on a path, from point(s) of receipt to point(s) of delivery, the Transmission Provider must offer the same discount transmission service rate for the same time period to all Eligible Customers on all unconstrained transmission paths that go to the same point(s) of delivery on the Transmission System.
- A.8.6 Unauthorized Use: In the event that the Transmission Customer's use of the

 Transmission System during any hour of that day exceeds the amount of the

 Transmission Customer's Reserved Capacity, the Transmission Customer shall pay the

 Transmission Provider a penalty charge based on a rate equal to 200% of the applicable
 rate for Firm Point-to-Point Transmission Service. For unreserved use within a single

day, the penalty charge shall be based on the daily Firm Point-to-Point Transmission

Service rate. For unreserved use in two or more days within a calendar week, the penalty charge shall be based on the weekly Firm Point-to-Point Transmission Service rate. For multiple instances of unreserved use in more than one calendar week in a calendar month, the penalty charge shall be based on the monthly Firm Point-to-Point Transmission

Service rate.

Losses delivered to the CP&L Zone by the Transmission Customer will not be included in the Transmission Customer's usage for determination of the charge set out herein.

A.8.7 Credits for Unreserved Use Penalty Revenues: The Transmission Provider shall credit revenues that are collected for unreserved use to all non-offending Transmission

Customers (including Affiliated Transmission Customers) and to the Transmission

Provider on behalf of its own customers (Native Load Customers). The credits shall be calculated and allocated as set forth below.

The penalty revenues collected pursuant to Section A.8.6 of this schedule shall be credited based on the ratio of the transmission revenues collected from each Network Transmission Customer or Point-to-Point Transmission Customer that did not experience unreserved use in an hour to the sum of the transmission revenues collected from all Transmission Customers that did not experience unreserved use in the hour. A Transmission Customer that experiences unreserved use in an hour shall not receive a credit for that hour.

The Transmission Provider shall disburse accumulated penalty revenues, plus interest calculated in accord with 18 C.F.R. § 35.19a, when the accumulated amount of penalty revenues collected under Section A.8.6 of this schedule and Section A.7.6 of

- Schedule 7 reaches \$50,000. However, if a distribution has not been made within the previous 12 month period, a distribution will be made no later than April 1 of that calendar year.
- **A.8.8 Additional Charges:** The Transmission Customer will compensate CP&L for any facility additions or redispatch costs in accordance with Sections 13.5, 27 and 45.2 of the Tariff.
- A.8.9 Losses: For purposes of billing, the Reserved Capacity to be applied under Sections

 A.8.1 through A.8.4 of this schedule shall not include losses purchased or provided by the

 Transmission Customer.
- **A.8.10 Resales:** The rates and rules governing charges and discounts stated above shall not apply to resales of transmission service, compensation for which shall be governed by Section 23.1 of the Tariff.

B. FPC Zone

- B.8.1 Monthly, Weekly, Daily and Hourly Periods: The rates for the Monthly Period, the Weekly Period, the Daily Period for on-peak days, the Daily Period for off-peak days, the Hourly Period for on-peak hours and the Hourly Period for off-peak hours are derived from the Formula Rate, which is set forth in OATT Schedules 10-A.2 and 10-A.3. The resulting rates are posted on the Transmission Provider's OASIS. The Formula Rate is implemented in accordance with the OATT Schedule 10-A.1 Formula Rate Implementation Protocols.
- **B.8.2 Daily Period:** The total demand charge in any Weekly Period, pursuant to a reservation for Daily Period delivery, shall not exceed the Weekly Period rate times the highest amount in kilowatts of Reserved Capacity in any Daily Period during such Weekly Period.

B.8.3 Hourly Period: The total demand charge in any Daily Period, pursuant to a reservation for Hourly Period delivery, shall not exceed the Daily Period rate times the highest amount in kilowatts of Reserved Capacity in any Hourly Period during such Daily Period. In addition, the total demand charge in any Weekly Period, pursuant to a reservation for Hourly Period or Daily Period delivery, shall not exceed the Weekly Period rate times the highest amount in kilowatts of Reserved Capacity in any Hourly Period during such Weekly Period.

NOTE: All quantities used in calculating the Transmission Customer's Reserved Capacity shall be established at the transmission system input level, i.e., shall include the transmission capacity amount associated with any losses.

- B.8.4 Annual Update: The rates for Schedule 8 shall be updated annually on June 1st of each year in accordance with the OATT Schedule 10-A.1 Formula Rate Implementation Protocols.
- B.8.5 Discounts: Three principal requirements apply to discounts for transmission service as follows: (1) any offer of a discount made by the Transmission Provider must be announced to all Eligible Customers solely by posting on the OASIS, (2) any customer-initiated requests for discounts (including requests for use by one's wholesale merchant or an Affiliate's use) must occur solely by posting on the OASIS, and (3) once a discount is negotiated, details must be immediately posted on the OASIS. For any discount agreed upon for service on a path, from point(s) of receipt to point(s) of delivery, the Transmission Provider must offer the same discounted transmission service rate for the same time period to all Eligible Customers on all unconstrained transmission paths that go to the same point(s) of delivery on the Transmission System.

- B.8.6 Unauthorized Use: In the event a Transmission Customer's use of the Transmission System exceeds the amount of the Transmission Customer's Reserved Capacity, the Transmission Customer shall pay the Transmission Provider a penalty charge based on a rate equal to 200% of the applicable rate for Firm Point-to-Point Transmission Service. For unreserved use within a single day, the penalty charge shall be based on the daily Firm Point-to-Point Transmission Service rate. For unreserved use in two or more days within a calendar week, the penalty charge shall be based on the weekly Firm Point-to-Point Transmission Service rate. For multiple instances of unreserved use in more than one calendar week in a calendar month, the penalty charge shall be based on the monthly Firm Point-to-Point Transmission Service rate.
- B.8.7 Credits for Unreserved Use Penalty Revenues: The Transmission Provider shall credit revenues that are collected for unreserved use to all non-offending Transmission Customers (including Affiliated Transmission Customers) and to the Transmission Provider on behalf of its own customers (Native Load Customers). The credits shall be calculated and allocated as set forth below.

The penalty revenues collected pursuant to Section B.8.6 of this schedule shall be credited based on the ratio of the transmission revenues collected from each Network Transmission Customer or Point-to-Point Transmission Customer that did not experience unreserved use in an hour to the sum of the transmission revenues collected from all Transmission Customers that did not experience unreserved use in the hour. A Transmission Customer that experiences unreserved use in an hour shall not receive a credit for that hour.

The Transmission Provider shall disburse accumulated penalty revenues, plus interest calculated in accord with 18 C.F.R. § 35.19a, when the accumulated amount of penalty revenues collected under Section B.8.6 of this schedule and Section B.7.5 of Schedule 7 reaches \$50,000. However, if a distribution has not been made within the previous 12 month period, a distribution will be made no later than April 1 of that calendar year.

- **B.8.8 Regulatory Assessment:** The Transmission Customer shall pay a portion of the charge by FERC pursuant to 18 C.F.R. § 382.201 related to service under this Tariff. The Regulatory Assessment shall be allocated to the Transmission Customer on an annual basis in the year following the year in which transmission service is rendered, based on the megawatt-hours of service provided to the Transmission Customer or based upon such other method as these fees are assessed by FERC.
- **B.8.9** Resales: The rates and rules governing charges and discounts stated above shall not apply to resales of transmission service, compensation for which shall be governed by Section 23.1 of the Tariff.

C. DEC Zone

The Transmission Customer shall compensate the Transmission Provider for Non-Firm Point-To-Point Transmission Service up to the sum of the applicable charges set forth below:

- **C.8.1 Monthly delivery:** the Monthly Demand Charge determined pursuant to Exhibit A to this Schedule, multiplied by the amount of Reserved Capacity per month.
- **C.8.2** Weekly delivery: the Weekly Demand Charge determined pursuant to Exhibit A to this Schedule, multiplied by the amount of Reserved Capacity per week.

- **C.8.3 Daily on-peak delivery:** the Daily On-Peak Demand Charge determined pursuant to Exhibit A to this Schedule, multiplied by the amount of Reserved Capacity per on-peak days.
- C.8.4 Daily off-peak delivery: the Daily Off-Peak Demand Charge determined pursuant to Exhibit A to this Schedule, multiplied by the amount of Reserved Capacity per off-peak days. The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the rate specified in section (2) above times the highest amount in kilowatts of Reserved Capacity in any day during such week.
- C.8.5 Hourly delivery: The basic charge shall be that agreed upon by the Parties at the time this service is reserved. For service during On-Peak hours, in no event shall the charge exceed the Hourly On-Peak Demand charge determined pursuant to Exhibit A to this Schedule, multiplied by the amount of Reserved Capacity per on peak hours. For service during Off-Peak hours, in no event shall the charge exceed the Hourly Off-Peak Demand charge determined pursuant to Exhibit A to this Schedule, multiplied by the amount of Reserved Capacity per off-peak hours. The total demand charge in any day, pursuant to a reservation for Hourly delivery, shall not exceed the rate specified in section (3) above times the highest amount in kilowatts of Reserved Capacity in any hour during such day. In addition, the total demand charge in any week, pursuant to a reservation for Hourly or Daily delivery, shall not exceed the rate specified in section (2) above times the highest amount in kilowatts of Reserved Capacity in any hour during such week.
- C.8.6 Discounts: Three principal requirements apply to discounts for transmission service as follows (1) any offer of a discount made by the Transmission Provider must be announced to all Eligible Customers solely by posting on the OASIS, (2) any customer-

initiated requests for discounts (including requests for use by one's wholesale merchant or an Affiliate's use) must occur solely by posting on the OASIS, and (3) once a discount is negotiated, details must be immediately posted on the OASIS. For any discount agreed upon for service on a path, from point(s) of receipt to point(s) of delivery, the Transmission Provider must offer the same discounted transmission service rate for the same time period to all Eligible Customers on all unconstrained transmission paths that go to the same point(s) of delivery on the Transmission System.

- **C.8.7 Resales:** The rates and rules governing charges and discounts stated above shall not apply to resales of transmission service, compensation for which shall be governed by Section 23.1 of the Tariff.
- C.8.8 Billing Credits for Interrupted Non-Firm Point-to-Point Service: Billing relief is provided to Non-Firm Point-to-Point Transmission Customers whose reservations are displaced by higher priority reservations. In these instances, the Transmission Customer's bill (including required Ancillary Services) shall be determined by the percentage of the reservation that was served.
- C.8.9 In the event that the Transmission Customer exceeds its non-firm Reserved Capacity at any Point of Receipt and/or Point of Delivery, the Transmission Customer shall pay, for the contract period (i.e., monthly, weekly, daily, or hourly) for which the Transmission Customer reserves capacity, the charge under Schedule 8 (subject to applicable caps) for the maximum amount that the Transmission Customer exceeds its non-firm Reserved Capacity at any Point of Receipt and/or Point of Delivery. Non-Firm Point-To-Point Transmission Service shall include transmission of energy on an hourly basis and

transmission of scheduled short-term capacity and energy on a daily, weekly or monthly basis, but not to exceed one month's reservation for any one Application, under Schedule 8.

Exhibit A to Schedule 8

Non-Firm Point-to-Point Transmission Service Rates for the DEC Zone

- 1. The Monthly Demand Charge during any month of a calendar year is equal to A / B, where:
 - A = the Annual Transmission Revenue Requirement for the calendar year as determined in Schedule 10-B, Exhibit B.
 - B = the total of the Transmission Provider's twelve Monthly Transmission System Peaks (expressed in kilowatts) for the calendar year as defined in Section 34.3 of the Tariff.
- 2. The Weekly Demand Charge is equal to the Monthly Demand Charge multiplied by twelve (12) and divided by fifty-two (52).
- 3. The Daily On-Peak Demand Charge is equal to the Weekly Demand Charge divided by five (5).
- 4. The Daily Off-Peak Demand Charge is equal to the Weekly Demand Charge divided by seven (7).
- 5. The Hourly On-Peak Demand Charge is equal to the Daily On-Peak Demand Charge divided by sixteen (16).
- 6. The Hourly Off-Peak Demand Charge is equal to the Daily Off-Peak Demand Charge divided by twenty-four (24).

SCHEDULE 9

LOSS COMPENSATION SERVICE

[DEC Zone]

Capacity and energy losses occur when a Transmission Provider delivers electricity across its transmission facilities for a Transmission Customer. A Transmission Customer may elect to (1)supply the capacity and/or energy necessary to compensate the Transmission Provider for such losses, (2) receive an amount of electricity at delivery points that is reduced by the amount of losses incurred by the Transmission Provider, or (3) with the concurrence of the Transmission Provider, have the Transmission Provider supply the capacity and/or energy necessary to compensate for such losses.

The loss factor used to determine the amount of losses associated with the use of facilities other than distribution facilities shall be three (3) percent. The Transmission Provider will determine such losses by dividing the sum of hourly energy scheduled to be delivered to the Transmission Customer's Points of Delivery by 0.97 less the amount scheduled to be delivered. Determination of losses to be supplied by the Transmission Customer by coincident schedules will be done on a daily basis for each schedule. However, in no event shall such determination result in the Transmission Provider being undercompensated after any hour. If the Transmission Provider and Transmission Customer agree to have the Transmission Provider compensate for losses under option 3 above, the Transmission Customer shall be charged for Loss Compensation Service at a rate not to exceed 100 percent of the Transmission Provider's incremental cost to produce energy after serving all other obligations (including economy and opportunity transactions) and a Generation Capacity Loss Adder of \$.006 per kWh.

SCHEDULE 10-A

NETWORK INTEGRATION TRANSMISSION SERVICE

[FPC Zone]

The Transmission Customer shall compensate the Transmission Provider each month for its Network Load for the applicable month as follows:

- 10.1 Monthly delivery: The charge for Network Integration Transmission Service is derived from the Formula Rate, which is set forth in OATT Schedules 10-A.2 and 10-A.3. The resulting rate is posted on the Transmission Provider's OASIS. The Formula Rate is implemented in accordance with the OATT Schedule 10-A.1 Formula Rate Implementation Protocols. The charge for Network Integration Transmission Service shall be updated annually on June 1st of each year in accordance with the OATT Schedule 10-A.1 Formula Rate Implementation Protocols.
 - **NOTE:** All quantities used in calculating the Network Integration Customer's Network

 Load shall be adjusted to the transmission system input level, i.e., shall include

 the transmission capacity amount associated with any applicable losses.
- by FERC pursuant to 18 C.F.R. § 382.201 related to service under this Tariff. The Regulatory Assessment shall be allocated to the Transmission Customer on an annual basis in the year following the year in which transmission service is rendered, based on the megawatt-hours of service provided to the Transmission Customer or based upon such other method as these fees are assessed by FERC.

SCHEDULE 10-A.1

Formula Rate Implementation Protocols

[FPC Zone]

Section 1 The Annual Update Process

- a. The unit charges for transmission service under Schedules 7, 8, 10-A and 12 of the Tariff shall be determined and updated annually through the application of the Formula Rate comprising Schedules 10-A.2 and 10-A.3 of the Tariff in the following manner:
 - (i) Subject to Sections 1.a(iii) and 4 below, the initial unit charges for transmission service shall apply to service provided during the period January 1, 2008 through May 31, 2008 (inclusive), which unit charges reflect the Transmission Provider's actual costs and demands for calendar year 2006. The unit charges for transmission service shall be changed annually beginning June 1, 2008, in accordance with the process set forth in the following Sections 1.a(ii) and 1.a(iii).
 - (ii) Beginning in 2008 and continuing each year thereafter, on or before May

 15 of each year, PEF shall calculate unit charges for transmission service
 reflecting its actual costs and demands for the prior calendar year. Such
 calculation ("Annual Update") shall be made in accordance with the
 Formula Rate comprising Schedules 10-A.2 and 10-A.3. The transmission
 unit charges determined in the Annual Update shall be placed into effect
 beginning on June 1 of the year in which the Annual Update is performed
 (i.e., beginning June 1 of the year following the calendar year upon which

the Annual Update is based). Such transmission unit charges shall continue in effect through May 31 of the following year, unless changed as provided in Section 4. (To put this in a calendar-year context, for any given calendar year, the amounts billed for transmission service provided during the period of January 1 through May 31 of that calendar year shall be computed using the unit charges determined in the Annual Update performed in the prior calendar (reflecting actual costs and demands for the second preceding calendar year), except as such unit charges may be changed as provided in Section 4, and such billed amounts for transmission service provided during the period of June 1 through December 31 of that calendar year shall be computed using the unit charges determined in the Annual Update performed in that calendar year (reflecting actual costs and demands for the preceding calendar year), except as such unit charges may be changed as provided in Section 4.)

(iii) At the time of, and in conjunction with, each Annual Update (beginning in calendar year 2009), amounts billed to all Transmission Customers for Network Integration Transmission Service, Network Contract Demand Service, and Long-Term Firm Point-to-Point Transmission Service (i.e., but not for Short-Term Firm Point-to-Point Transmission Service or Non-Firm Point-to-Point Transmission Service) provided during the calendar year upon which the Annual Update is based (i.e., the calendar year preceding the year in which the Annual Update is performed) shall be "trued up" as follows: (1) The monthly amounts billed to each

Transmission Customer for Network Integration Transmission Service, Network Contract Demand Service, and Long-Term Point-to-Point Transmission Service for service provided during all twelve months of such prior calendar year (i.e., the year being trued-up) shall be recomputed using the transmission unit charges reflecting actual costs and demands, as determined in the Annual Update. (2) The resulting recomputed monthly amounts to each such Transmission Customer shall be compared to the amounts that had been included in that Transmission Customer's monthly billings for service during that calendar year (which shall have been determined using the transmission unit charges that shall have been in effect pursuant to Sections 1.a(i) and 1.a(ii) above). (3) The difference between the recomputed amounts and the previously billed amounts, together with interest determined in accordance with 18 C.F.R. § 35.19, shall, as appropriate, be refunded to the Transmission Customer within 30 days, or charged to the Transmission Customer on the next monthly bill to that Transmission Customer, following the Publication Date (as hereinafter defined) of the Annual Update.

(iv) In the event that the Formula Rate shall have changed one or more times during a calendar year, the Annual True-Up for that year shall have multiple parts, one part for each period in which a different Formula Rate was in effect. Each part shall accomplish the true-up of charges for the portion of the year during which the respective Formula Rate was in effect. For purposes of such true-up, (1) the annual revenue requirements for the

entire year shall be determined as if the respective Formula Rate was in effect for the entire year, (2) the resulting per-unit rates shall be determined from those revenue requirements and billing determinants for the entire year in accordance with the respective Formula Rate, and (3) the resulting unit prices shall be applied to Transmission Customers' billing determinants for the same portion of the year during which the respective Formula Rate was in effect in order to determine the trued-up charges for that time period (i.e., what the charges reflecting actual costs should have been for such time period). Each set of trued-up charges shall be compared to the actual monthly charges for respective Customers during the corresponding time periods to determine refunds or additional charges, along with appropriate interest determined in accordance with the Formula Rate.

- b. Promptly after preparing each Annual Update, but in no event later than May 15
 of the year in which the Annual Update is performed (except as provided in
 Section 1.c below), the Transmission Provider shall:
 - (i) post the results of such Annual Update on Transmission Provider's

 Internet website via link to the Transmission Services page or a similar successor page in both a Portable Document Format and fully-functioning Excel file; and
 - (ii) file the results of such Annual Update with the Federal Energy Regulatory

 Commission ("FERC" or "Commission") as an informational filing

 ("Informational Filing"). Consistent with FERC procedures concerning

informational filings, the Informational Filing will not be noticed for filing and FERC need not issue an acceptance or approval of the Informational Filing for the rates to go into effect. If the Commission issues a Notice in response to the Informational Filings, the Parties shall advise the Commission of the challenge process in the Formula Rate Implementation Protocols and shall seek an abeyance of the Commission proceeding to permit that challenge process to proceed.

- c. If the May 15 deadline set forth above for making the Annual Update posting/filing should fall on a weekend or a holiday recognized by the FERC, then the posting/filing shall be due on the next business day.
- d. Subject to Section 4.e, the date that is the later of (i) the last of the events listed in Sections 1.b. and 1.c., above, or (ii) the date of the actual posting of the Transmission Provider's Annual Update shall be the "Publication Date" of that Annual Update.
- e. The Formula Rate is premised upon the following predicates:
 - (i) the FERC's Uniform System of Accounts ("USoA"),
 - (ii) FERC Form No. 1¹ reporting requirements as applicable,
 - (iii) FERC's orders establishing generally applicable transmission ratemaking policies (including, but not limited to, FERC's policy that all charges

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If the referenced form is superseded, the successor form(s) shall be utilized and supplemented as necessary to provide equivalent information as that provided in the superseded form. If the referenced form(s) is (are) discontinued, equivalent information as that provided in the discontinued form(s) shall be utilized.

- billed under formula rates are subject to prudence challenges and after-thefact refund)² and
- that are consistent with Section 1.e.i. above, as each of such predicates

 ("Fundamental Predicates") exists as of the date of the initial filing by the

 Transmission Provider of the Formula Rate, subject to such Fundamental

 Predicate(s) being changed in accordance with the procedures provided for in this Schedule 10-A.1 or by the FERC.
- f. The Annual Update and the Transmission Provider's associated Informational Filing:
 - shall be based upon the data properly recordable and recorded in (a) the

 Transmission Provider's FERC Form No. 1 report (to the extent the

 Formula Rate specifies Form 1 data as the input source) and (b) the books

 and records of the Transmission Provider maintained in accordance with

 the USoA (as defined above) and other FERC accounting policies (to the

 extent the Formula Rate specifies such data as the input source);
 - (ii) shall, as and to the extent specified in the Formula Rate, provide supporting documentation for data not otherwise available in the FERC Form No. 1 that are used in the Formula Rate;
 - (iii) shall provide notice of material changes in the Transmission Provider's accounting policies, practices and procedures from those in effect for the

² Challenges to prudency of costs shall apply the then-existing criteria and evidentiary burdens established in FERC policy. Nothing in these Protocols alters or changes those criteria and evidentiary burdens. See also Section 3.c. of the Protocols.

- calendar year upon which the immediately preceding Annual Update was based ("Material Accounting Changes");³
- (iv) shall be subject to review and challenge, in accordance with the procedures set forth in this Schedule 10-A.1, to verify that the input data is properly recordable and recorded, and otherwise consistent with Section 1(f)(i) and the Fundamental Predicates, and that the Formula Rate has been applied according to its terms and the procedures in this Schedule 10-A.1 (including terms and procedures related to challenges concerning consistency with and changes in Fundamental Predicates); and
- (v) shall not seek to amend the Formula Rate, and except as provided in Section 1.h, below, shall not be subject to Preliminary or Formal Challenge seeking to amend the Formula Rate (i.e., all amendments to the Formula Rate (including return on common equity and other items specified in Section 1.i., below) shall require, as applicable, a Federal Power Act Section 205 or Section 206 filing).
- g. All change(s) to the Fundamental Predicates set forth in Section 1.e., above, (other than through Ministerial Filings pursuant to Section 5 hereof that update FERC Form 1 or USoA references and do not make substantive changes to the Formula Rate), subsequent to the date specified in Section 1.e., shall warrant a reassessment of all of the elements of the Formula Rate that are affected by the change or changes in one or more Fundamental Predicates to ensure that the Formula Rate operates together to produce a just, reasonable and not unduly

Such notice may also incorporate by reference applicable disclosure statements filed with the Securities and Exchange Commission ("SEC").

- discriminatory or preferential Formula Rate. Changes to the Fundamental Predicates that require a change to the Formula Rate will be perfected by the Transmission Provider through a filing under Federal Power Act Section 205.
- h. Any interested party seeking changes in the application of the Formula Rate (including a change to the Formula Rate itself) due to a change in one or more of the Fundamental Predicates shall raise the matter with the Transmission Provider. If such changes to the application of the Formula Rate for the current Annual Update are not resolved within one hundred and twenty (120) days of the Publication Date, any interested party shall have the right to challenge such application of the Formula Rate, in the manner otherwise provided pursuant to this Schedule 10-A.1, due to the change(s) in such Fundamental Predicates. The final resolution of any such challenge(s), including interest calculated in accordance with 18 C.F.R. § 35.19a, (a) shall be effective on June 1 of the year in which the Annual Update was performed; and, (b) shall be applied to the true up for the calendar year upon which the Annual Update is based.
- i. The values for (i) rate of return on common equity; (ii) depreciation rates, (iii) "Post-Employment Benefits Other Than Pensions" pursuant to Statement of Financial Accounting Standards No. 106, Employers' Accounting for Postretirement Benefits Other Than Pensions ("PBOP"), and (iv) annual storm damage accruals and the maximum storm damage reserve level are deemed an integral part of the Formula Rate, not subject to change except pursuant to an FPA Section 205 or 206 filing.

- j. All data provided pursuant to and in accordance with the procedures set forth in this Schedule 10-A.1 may be used in any challenge to the Annual Update of the Formula Rate.
- k. It is the intent of the Formula Rate, including the supporting explanations and allocations described therein, that each input to the Formula Rate will be either taken directly from the FERC Form No. 1 or reconcilable to the FERC Form No. 1 by the application of clearly identified and supported information. Where the reconciliation is provided through a worksheet included in the filed Formula Rate template, the inputs to the worksheet must meet this transparency standard, and doing so will satisfy this transparency requirement for the amounts that are output from the worksheet and input to the main body of the Formula Rate.

Section 2 Annual Review Procedures

Each Annual Update shall be subject to the following review procedures ("Annual Review Procedures"):

a. Each year the Transmission Provider shall organize a meeting or conference call among interested parties ("Customer Meeting") during which the Transmission Provider shall present details about its Annual Update. The Customer Meeting shall also provide interested parties the chance to seek information and clarifications from the Transmission Provider about the Annual Update. The Customer Meeting shall take place no later than thirty (30) days after the Publication Date, at a date and time posted on the Transmission Provider's internet website on or before the Publication Date but in no event less than fifteen (15) days before such Customer Meeting.

- b. In addition to the informal means of requesting and sharing information about the Annual Update set forth in Section 2(a), any interested party shall have up to one hundred twenty (120) days after the Publication Date (unless such period is extended with the written consent of the Transmission Provider) to review the calculations ("Review Period") and to notify the Transmission Provider in writing of any specific challenges, including challenges related to changes in Fundamental Predicates, to the application of the Formula Rate ("Preliminary Challenge"). Notice of such Preliminary Challenges shall be promptly posted (at the same location as the Annual Update) by the Transmission Provider.
- c. Interested parties shall have up to ninety (90) days after each annual Publication

 Date (unless such period is extended with the written consent of the Transmission

 Provider) to serve reasonable information requests on the Transmission Provider.

 Such information requests shall be limited to what is necessary to determine that
 the input data is properly recordable and recorded, consistent with Section 1(f)(i)
 and the Fundamental Predicates and with the application of the Formula Rate and
 the procedures in this Schedule 10-A.1, and to determine the extent and effect(s)
 of changes in the Fundamental Predicates. In addition, except as to allocation of
 intangible plant and prepayments, such information requests shall not solicit
 information that solely relates to inputs that are stated values or cost allocation
 methods that have been determined by any final order by the FERC pursuant to
 FPA Sections 205, 206, or 306 with respect to the Transmission Provider
 (including an order approving a settlement), except that such information requests
 shall be permitted if they seek to determine if there have been material changed

- circumstances and to confirm consistency with the applicable order (and associated settlement, if any).
- d. The Transmission Provider shall make a good faith effort to respond to information requests pertaining to the Annual Update within fifteen (15) business days of receipt of such requests. Such data responses shall be served on all customers identifying themselves to the Transmission Provider as interested.
- e. Subject to the limitations in Section 3(e), the failure to make a Preliminary

 Challenge to an Annual Update shall not act as a bar with respect to making a

 Formal Challenge as to that Annual Update nor shall failure to make a

 Preliminary Challenge or Formal Challenge as to any Annual Update act as a bar

 to a Preliminary Challenge or Formal Challenge related to any subsequent Annual

 Update.

Section 3 Resolution of Challenges

a. If the Transmission Provider and an interested party who has raised a Preliminary Challenge have not resolved a Preliminary Challenge to an Annual Update, the interested party shall have the right to make a Formal Challenge with the FERC, pursuant to 18 C.F.R. § 385.206, and Sections 206 and/or 306 of the Federal Power Act, at any time after thirty (30) days after the Review Period. All other interested parties shall have the right to make a Formal Challenge at any time as provided in these protocols. Any Formal Challenge shall be served on the Transmission Provider by electronic service on the date of such filing. However, there shall be no need to make a Formal Challenge or to await conclusion of the

- time periods in Section 2 if the FERC already has initiated a proceeding to consider the Annual Update.
- b. Any response by the Transmission Provider to a Formal Challenge must be submitted to the FERC within thirty (30) days of the date of the filing of the Formal Challenge, and shall be served on the filing party(ies) by electronic service on the date of such filing.
- c. In any proceeding initiated by the FERC concerning the Annual Update or in response to a Formal Challenge, the Transmission Provider shall bear the burden of proving that it has reasonably applied the terms of the Formula Rate (including, but not limited to, consistency with the Fundamental Predicates), and the applicable procedures in this Schedule 10-A.1, for that year's Annual Update; provided, however, that challenges to the prudency of costs shall apply then-existing criteria and evidentiary burdens established in FERC policy applicable to prudence challenges in a Section 205 context.
- d. In any proceeding initiated under Federal Power Act Section 206, interested parties seeking to change the Formula Rate shall bear the burden of proof.

 Notwithstanding any refund effective date that may be assigned to such Section 206 proceeding, any change to the Formula Rate or input data that results from such Section 206 proceeding, which was filed during the period when an Annual Update was not yet final pursuant to Section 3(e), shall be implemented using the same procedures included in Section 4.
- e. Subject to judicial review of FERC orders, each Annual Update shall become final and no longer subject to challenge pursuant to these Formula Rate

Implementation Protocols or by any other means by the FERC or any other entity, including the Transmission Provider, on the later to occur of (i) passage of twelve (12) months from the Publication Date (or extended period, if applicable) if no such challenge has been made or the FERC has not initiated a proceeding to consider the Annual Update, or (ii) a final FERC order issued in response to a Formal Challenge or a proceeding initiated by the FERC to consider the Annual Update; provided, however, that if a mistake or error is made in an Annual Update in a given year ("Year X Update") that becomes apparent due to Preliminary or Formal Challenges made to (or FERC-initiated proceeding regarding) the first or second subsequent Annual Update, refunds with interest, in accordance with 18 C.F.R. § 35.19a, will be due relating to the Year X Update.

- f. Except as provided in Section 1.h, no interested party may seek to amend the

 Formula Rate by means of a Preliminary or Formal Challenge. Except as

 specifically provided herein, nothing herein shall be deemed to limit in any way (i)

 the right of the Transmission Provider to file unilaterally, pursuant to FPA Section

 205 and the regulations thereunder, proposed changes to the Formula Rate or any

 of its inputs that are stated values, or (ii) the right of any interested party to

 request such changes pursuant to FPA Section 206 and the regulations thereunder.
- g. It is recognized that resolution of Formal Challenges concerning changes in

 Fundamental Predicates shall necessitate adjustments to the Formula Rate input

 data for the applicable Annual Update or changes to the Formula Rate that are

 affected by the change or changes in one or more Fundamental Predicates to

 ensure that all elements of the Formula Rate that are affected by the change in the

Fundamental Predicate(s) operate together to produce a just, reasonable and not unduly discriminatory or preferential Formula Rate.

Section 4 Changes to Annual Informational Filings

At any time following the Publication Date of an Annual Update, such Annual Update and the unit charges resulting therefrom may be changed (i) to correct errors therein, (ii) to reflect the resolution of Preliminary Challenges or Formal Challenges by settlement, or (iii) to reflect actions by FERC, and the resulting changed Annual Update shall be referred to as a "Revised Annual Update." As to each such Revised Annual Update:

- a. If the unit charges resulting from the Annual Update performed pursuant to

 Section 1.a (i) or (ii) hereof or previous revisions thereto (referred to as the

 "Then-Current Annual Update") are still in effect, the unit charges shall be

 changed to reflect the Revised Annual Update beginning with the next monthly

 billing cycle for which it is practical to do so.
- b. For Network Integration Transmission Service, Network Contract Demand Service, and Long-Term Firm Point-to-Point Transmission Service:
 - (i) If, at the time of the revision to an Annual Update pursuant to Section 4.a above, the amounts billed using the unit charges from such Then-Current Annual Update have not been trued-up to reflect actual costs and demands pursuant to Section 1.a(iii) hereof, such billed amounts shall be recomputed using the unit charges resulting from the Revised Annual Update, and appropriate refunds provided, or additional amounts billed, as soon as practical following the change.

- (ii) If, at the time of the Revised Annual Update, the amounts billed using the unit charges from the Then-Current Annual Update shall have been trued up to reflect actual costs and demands pursuant to Section 1.a(iii) hereof, such true-up shall be recomputed on the basis of each Revised Annual Update, and appropriate additional refunds made or amounts billed as soon as practical following the subject change.
- c. For Short-Term Firm Point-to-Point Transmission Service and Non-Firm Point-to-Point Transmission Service:
 - (i) All billed amounts made to Transmission Customers that shall have been computed using the unit charges resulting from the Then-Current Annual Update at issue (i.e., charges for service provided during the period beginning June 1 immediately following the original preparation of the Annual Update at issue) shall be recomputed using the unit charges resulting from the Revised Annual Update, and appropriate refunds provided, or additional amounts billed, as soon as practical following the change.
- d. All refunds and additional charges to Transmission Customers resulting from changes to an Annual Update (including, but not limited to, changes resulting from a Section 206 filing pursuant to Section 3.d) shall include interest determined in accordance with 18 C.F.R. § 35.19a and (a) shall be effective on June 1 of the year in which the Annual Update was performed; and, (b) shall be applied to the true up for the calendar year upon which the Annual Update is based. All such refunds and additional charges shall also appropriately take into

- account refunds and additional charges, if any, that shall have previously been made in connection with prior changes, if any, to the subject Annual Update.
- e. If the subject change set forth in Section 4.d. above is not the direct result of an order by FERC, the Transmission Provider shall promptly file with FERC the Revised Annual Update in connection with the subject Annual Update and shall promptly update its internet posting associated therewith. The aspects of the Revised Annual Update that are different from the subject Annual Update and any elements affecting those changes or that are affected by such changes will obtain a new Publication Date, which shall be the date of filing of the Revised Annual Update at FERC.

Section 5 <u>Update of Formula Rate for FERC Form No. 1 and USoA References</u>

At such time as the Transmission Provider finds appropriate, it may make a filing with FERC under Section 205 that updates the FERC Form No. 1 and USoA references in its Formula Rate to reflect any FERC-mandated changes in the format for the FERC Form No. 1 or USoA that do not affect the rates for Transmission Service derived from the Annual Update (the "Ministerial Filing"), which proceeding may not be used to raise issues unrelated to the proposed changes ("Limited 205 Proceeding"). Alternatively, the Form 1 and USoA reference changes that could be made in a Ministerial Filing may be filed as part of a filing under Federal Power Act Section 205 to otherwise amend the Formula Rate, in which proceeding any issues related to the Formula Rate may be raised ("Normal 205 Proceeding"). Prior to or between any such Limited 205 Proceeding or Normal 205 Proceeding, to the extent changes in the FERC-mandated format of the Form 1 or USoA cause the then current Form 1 or USoA to depart from the Form 1 or USoA

referenced in the Formula Rate but does not affect the rates for Transmission Service derived from the Annual Update, the Transmission Provider's Annual Update shall include a reconciliation so that interested parties can confirm that the Formula Rate is being applied consistent with the as-filed Formula Rate.

Schedule 10-A.2 Formula Rate Template [FPC Zone]

Exhibit PEF - 2
Page 1 of 6
Year Ending 12/31/yyyy

PROGRESS ENERGY FLORIDA, INC. OATT Transmission Non-Levelized Rate Formula Template Using Form-1 Data

Summary of Rates

Line		Reference	Total	Allocator		OATT Transmission
1	Gross PEF Revenue Requirement	Page 3, Line 35				0
2 3 4	Revenue Credits: Acct 454 - Transmission Related Acct 456 - NF + STF Service (x/ Ancillaries) Total Revenue Credits	Exhibit PEF - 3 Exhibit PEF - 3	0 0	D/A D/A	1.00000 1.00000	0 0
5	Interest Disbursed with Network Prepayment Re	funds				0
6	Revenue Req't - Customer Owned Facilities					0
7	Net Revenue Requirements (Line 1 - Line 4 + Line	e 5 + Line 6)				0
8	Divisor - Sum of Monthly MW Transmission System Peaks (Excludes STF)	p.5, line 15 Total				0
9	Trans. Rev Req't Rate \$/MW-Mon.	Line 7 / Line 8				0
10	Storm Reserve Adder	Page 5, Line 9				140
11	Total Firm Monthly Trans. \$/MW-Month	Line 9 + Line 10				0
12	Annual Firm Trans \$/MW-year	Line 11 * 12				0
13	Weekly Firm/Non-Firm P-t-P Rate \$/MW-Week	Line 12 / 52				0.00
	Daily Firm/Non-Firm P-t-P Rates (\$/MW):					
14	On-Peak Days	Line 13 / 5				0.00
15	Off-Peak Days	Line 13 / 7				0.00
40	Non-Firm Hourly P-t-P Rates (\$/MWh):	Li 44 (40				
16	On-Peak Hours	Line 14 / 16				0.00
17	Off-Peak Hours	Line 15 / 24				0.00

PROGRESS ENERGY FLORIDA, INC. OATT Transmission Non-Levelized Rate Formula Template Using Form -1 Data

Development of Rate Base and Capital Structure

Line	RATE BASE:	Reference	Beginning Balance	Ending Balance	B/E Average	Allocator	OATT Transmission
1	Gross Plant in Service (Note A): Production Plant	205.46.b&g	0	0	0	N/A	
2		_	0	0	0		
2A	Transmission Plant (Note V) Less Direct Assign Radials	207.58.b&g PEF - 7, II 1&5	0		0		
2B	Trans. Plant w/o Direct Assign Radials		_	<u>0</u>	0	TP 0.00000	0
3	Distribution Plant	207.75.b&g	0	0	0	N/A	
4	General Plant	207.99.b&g	0	0	0	OATT LABOR 0.00000	0
5	Intangible Plant	205.5.b&g	0	0	0	OATT LABOR 0.00000	0
6	Total Gross Plant				0	GP = 0.00000	0
7	Accumulated Depreciation: Production Depr. Reserve	219.20 thru 24.c	0	0	0	N/A	
8	Transmission Depr. Reserve (Note V)	219.25.c	0	0	0		
8A 8B	Less Direct Assign Radials Trans. Reserve w/o Direct Assign Radia	PEF - 7, II 7&10 als	<u>0</u>	<u>0</u>	0	TP 0.00000	0
9	Distribution Depr. Reserve	219.26.c	0	0	0	N/A	
10	General Depr. Reserve	219.28.c	0	ō	0	OATT LABOR 0.00000	0
11	Intangible Amort. Reserve	200.21.c	0	0	0	OATT LABOR 0.00000	0
12	Total Accumulated Depr.				0		0
40	Net Plant in Service	line 4 line 7					
13 14	Net Production Plant Net Transmission Plant	Line 1 - Line 7 Line 2 - Line 8			0		0
15	Net Distribution Plant	Line 3 - Line 9			0		
16	Net General Plant	Line 4 - Line 10			0		0
17	Net Intangible Plant	Line 5 - Line 11			0		0
18	Total Net Plant				0	NP = 0.00000	0
	Adjustments to Rate Base - Deferred Ta						
19	ADIT - 190	234.8.b&c	0	0	0	Exhibit PEF - 5	0
20	ADIT - 281 (Negative)	273.8.b&k	0	0	0	Exhibit PEF - 5 Exhibit PEF - 5	0
21 22	ADIT - 282 (Negative) ADIT - 283 (Negative)	275.2.b&k 277.9.b&k	0	0	0	Exhibit PEF - 5	0
23	Total Deferred Tax Adjustments	277.3.500	Ü	Ü	0	EXHIBIT EI - 0	0
24	Unfunded Reserves	Note U	0	0	0	Exhibit PEF-5A	0
25	Net 182.1 (+) / Storm Reserve (-) - Wholesale Transmission (Note B)	230a.5.f	0	0	0	p. 5, I. 16 0.00000	0
26	Plant Held for Future Use	214.47.d	0	0	0	Note C	0
27	Transmission Related CWIP - Identified	d Projects (Note V):	0	-	0	0.50000	0
20	Rate Base Adjustments - Network Upg			ō	0	D/4 /4.00000	0
28 29	Outstanding Balance - Network Prepay Interest Accrued/Capitalized on Networ		0	0	0	D/A (1.00000) D/A 1.00000	0
30	Total Network Upgrade Prepayment Ad					B//\ 1.00000	0
31	Working Capital: Cash Working Capital (1/8 O&M)	Page 3, line 17					0
32	M&S - Transmission	227.8.b&c	0	0	0	TExp 0.00000	0
33	M&S - Stores Expense	227.16.b&c	ō	ō	0	OATT LABOR 0.00000	ō
34	Prepayments (Note L)	111.57.c&d	0	0	0	GP 0.00000	0
35	Total Working Capital						0
36	Rate Base (Sum of Lines 18, 23 thru 27	, 30, and 35)					0
	AVERAGE CAPITALIZATION:						
37	Long Term Debt	112.24.c&d	0	0	0		
38	Less Loss on Reacquired Debt	111.81.c&d	0	0	0		
39	Plus Gain on Reacquired Debt	113.61.c&d	0	0	0		
40 41	Less Securitization Bonds Net Long Term Debt	Note I	0	0	0		
42	Preferred Stock	112.3.c&d	0	0	0		
	Common Stock Development:						
43	Proprietary Capital	112.16.c&d	0	0	0		
44	Less Preferred Stock	112.3.c&d	0	0	0		
45 46	Less Account 216.1	112.12.c&d	0	0	0		
46	Common Stock				0		
47	Total Capitalization (Sum of Lines 41, 4	42, and 46)			0		

PROGRESS ENERGY FLORIDA, INC. OATT Transmission Non-Levelized Rate Formula Template Using Form-1 Data

Development of Revenue Requirements

Line	EXPENSES:	Reference	Total	Allocat	ог	OATT Transmission
	O&M Expense					
1	TOTAL Transmission Expenses	321.112.b	0			
2	Less Account 561	321.84-92.b	0			
3	Less Account 565	321.96.b	0			
4	Net Transmission O&M	Note H	0	TExp	0.00000	0
5	Total Admin & General Expenses (Note S)	323.197.b	0			
6	Less (924) Property Insurance	323.185.b	0			
7	Less (928) Regulatory Commission Expenses	323.189.b	0			
8	Less (930.1) General Advertising Expenses	323.191.b	0			
9	Less Industry Dues and R&D Expense	335.1-3.b	0			
10	Net Labor Related A&G		0	OATTLABOR	0.00000	0
11	(924) Property Insurance	323.185.b	0			
12	Less system storm reserve funding	020.100.0	0			
13	Net Allocated Property Insurance			GP	0.00000	0
13	riet Anocated i Topetty insurance		U	GP	0.00000	U
14	Trans. Related Regulatory Expense	Note D		D/A	1.00000	0
15	Trans. Related Advertising Exp.	Note D		D/A	1.00000	0
16	Adj. to Imputed Whise PBOP Exp System	Page 6	0	OATTLABOR	0.00000	0
17	Total O&M (Sum of Lines 4, 10, and 13 thru 16)					0
	Depreciation Expense					
18	Transmission Depr. Expense (Note V)	336.7.f	0			
18 A	Less Direct Assign Radial Depr Exp	PEF-7, line 8	0			
18B	Trans Depr. w/o Direct Assign Radials		0	TP	0.00000	0
19	General Depr. Expense	336.10.f	0	OATTLABOR	0.00000	0
20	Intangible Amortization (Note E)	336.1.f	0	OATTLABOR	0.00000	0
21	Total Depreciation		0			0
	Taxes Other Than Income (Note F)					
22	Labor Related	263.i	0	OATTLABOR	0.00000	0
23		263.i	0	GP	0.00000	0
	Property Related	203.1		GP	0.00000	
24	Total Other Taxes		0			0
25	Return: Rate Base (Page 2, Line 36) * Rate of Return (Pa	ge 4, Line 27)				0
	Income Taxes:					
00			0.000			
26	State of Florida	Note M	0.00%			
27	Federal	Note M	0.00%			
28	Composite T = State + Federal * (1 - State)		0.00%			
29	Tax Rev.Req't Factor = T / (1 -T) * (1 - Wtd.Debt.	Cost/R ₀)	0.00%			
30	ITC Gross Up Factor = 1 / (1 -T)		0.000			
31	Amortized ITC (Negative)	266.8.f	0			
32	Income Taxes Calculated (Line 25 * Line 29)					0
33	ITC Adjustment (Line 30 * Line 31)		0	NP	0.00000	0
34	Total Income Taxes					0
35	TOTAL REVENUE REQUIREMENT (Sum of Lines 1	17, 21, 24, 25, and 3	4)			0

PROGRESS ENERGY FLORIDA, INC. OATT Transmission Non-Levelized Rate Formula Template Using Form-1 Data

Supporting Allocation Factor and Return Calculations

Line			Reference	Total
1 2 3 4 5	B/E Avg. Transmission Plant Included in OAT Total Transmission Plant w/o D/A Radials Less Gen. Step-up Transformers in 353 Less Interconnection Facilities (Order 2003) Less Energy Control Center Avg.Trans Plant for OATT Rate		p 2, line 2B Exhibit PEF - 4 Exhibit PEF - 4 Note G	0 0 0
6	TP Allocator (Line 5 / Line 1)		Note H	0.00000
7 7A	Add Back ECC to OATT Plant (Line 4 + Line Add back D/A Radials to Total Trans Plt (line	,	2A)	0
8	TExp Allocator (Expenses excluding 561 and	565) (Line	7 / Line 7A)	0.00000
9 10 11 12	Labor Allocation Factor Total Direct Payroll - O&M Labor A&G Labor Adj RCO Labor in A&G Labor Adjusted Labor w/o A&G (Line 9 - Line 10 + 1	Line 11)	354.28.b 354.27.b	0 0 0
13	Transmission O&M Labor	0		
14	Trans Labor Factor (Line 13 / Line 12)			0.00000
15	OATT LABOR Allocator (Line 5 / Line 7A * Lin	e 14)	Note H	0.00000
	Return and Average Capitalization:			
16 17 18	Long Term Interest Expense Less Interest on Securitization Bonds Net Long Term Interest Expense		117.62 thru 67.c Note I	0 0
19	Preferred Dividends (positive)		118.29.c	0
20 21 22 23	Long Term Debt Preferred Stock Common Stock Total Capitalization (sum Lines 20, 21, 22)		p.2, line 41 p.2, line 42 p.2, line 46	0 0 0
24 25 26 27	SUMMARY CAP STRUCTURE Long term Debt Preferred Stock Common Equity Overall Return: R ₀ =	Weight 0.00% 0.00% 0.00%	0.00%	Weighted Cost 0.00% 0.00% 0.00% 0.00%

OATT

PROGRESS ENERGY FLORIDA, INC. OATT Transmission Non-Levelized Rate Formula Template Using Form-1 Data

Wholesale Storm Reserve Funding and Explanatory Notes

Line		Reference	Total	Alloc	ator	OATT Transmission
						Hallsillission
1	Whise Extraordinary Property Loss	230a.5.b	0			
2	Trans. Related Pct of Whise Loss	Note J	0.92011	WEPL-T		
3	Whise Trans. Extraordinary Propery Loss		0	TP2006	0.92366	0
	Components of Storm Amortization/Reserve	e Funding Add	er (2008-2012 Pate	Veare only - N	lote NN:	
	·	=	•	· ·	•	40,007,007
4	Balance 2004 Loss as of Jan 1, 2008	230a.5.f	15,658,702	Fixed	0.84987	13,307,907
_	Rebuild Reserve Equivalent to \$130MM Reta		10.1.000			
5 6	Whise Portion of \$6MM Funding System Total Reserve Reqt = 130MM/(1	ER95-469	434,000 140,136,543	Fixed	0.07233	
7	Whise Reserve Needed = Line 6 - \$130MM	- Lille 5 76)	10,136,543	Fixed	0.84987	8,614,774
			,,			5,511,111
8	Whise Portion of Existing Storm Accrual	ER95-469	434,000	Fixed	0.84987	368,845
9	Levelized Storm Reserve Funding Rate \$/N	W Month (PEE	6 Bags 2)			140
9	Levenzed Storm Reserve Funding Rate wit	i i i i i i i i i i i i i i i i i i i	- 0, 1 age 2)			140
	Denominator for Wholesale Transmission:					
10	Firm Network Service for Self	400.17.e	0		0.00000	0
11	Firm Network Service for Others (Note K)	400.17.f	0		1.00000	0
12	Long-Term Firm P-t-P Reservations	400.17.g	0		1.00000	0
13	Other Long-Term Firm Service	400.17.h	0		1.00000	0
14	Contract Demand Adjustment		0		1.00000	0
15	Total System Long Term Firm Transmission	on Load	U			U
16	Gross-up Factor for OATT Wholesale Reser	ve - System Ba	sis (Total Load/Whis	se Load * 0.849	987)	0.00000
	•					
Note A:	Excludes Asset Retirement Obligations from pl	ant halances				
Note B:	Because the Page 2 Rate Base amounts are to		hers the wholesale	specific loss/re	eserve halance	is grossed up
140LC D.	using the relationship between system and who					
	to the OATT. See also Notes H and J.					o opposite the second
Note C:	FERC Form 1 page 214 excluding non-transmis	ssion related iter	ms			
Note D:	Analysis of Company books. Regulatory expen	se excludes cha	arges by FERC pursi	uant to 18 CFR	§ 382.201	
Note E:	Excludes Retail ECCR and Sebring amortization					
Note F:	Excludes all income and gross receipts taxes.			CA and unemp	oloyment taxes	. Property
NI-+- O	related taxes include county and local property			0		
Note G: Note H:	Investment in Transmission Energy Control Cer The allocator "TP" is the percent of allocated gr				for romoval of	ECC interconnections and
NOLE II.	generator step-up transformer investment.	USS transmissic	on plant that is OATT	related, i.e., a	iller removar or	ECC, interconnections and
Note I:	To the extent PEF is authorized by the Florida	Public Service C	Commission and issu	ies bonds for d	istribution facil	ities to securitize retail
	recovery of extraordinary property losses, asso					
Note J:	Functionalized Transmission part 182.1 Extraol					
	described in Note H above, the OATT-related ar	mount of the trar	nsmission loss is the	en derived using	g the TP alloca	tion factor
Note K:	Includes Network Integration Service and Netwo					
Note L:	Beginning balance excludes \$0 and ending bala					
Note M:	If income tax rates change during a calendar ye	ear, the income t	tax rates will be pro-i	rated based on	the number of	days each income
Note N:	tax rate was in effect. Pursuant to the settlement agreement, annual:	amounto includo	d in line 11 will be a	divisted and re-	ore ed ac nece	coopy to opeuro po
INOLE IN.	overfunding of the wholesale reserve; i.e., the ye					
Note O:						
	in the formula rate regardless of the accounting			- (· · · · · · · · · · · · · · · · · · ·	
Note P:	Target percentages are fixed for 2008 - 2012 an					he MW-month equivalent
	billings for STF and non-firm transmission reven					
Note Q:	Actual LTF OATT MW-Months are the sum of L Long Term Firm Point-to-Point Service	ines 11 and 12	above, as reported in	1 Form-1 for Fir	m Network Se	rvice for Others and
Note R:	Actual STF/Non-Firm equivalent "MW-Months"	are equal to mo	nthly STE/Non-firm to	ranemieeinn ee	nice revenue	divided by the same "Total
1102011.	Firm Monthly Trans. \$\text{\$\}\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{					arraca by the same Total
Note S:	Section 2.12 of Schedule 10.3 states "The Forn					r assignable to one or more
	particular customers, including costs directly a	ssigned or assig	gnable to PEF." Per	Settlement of	2008 Annual U	pdate, the amount specified
	excludes directly assignable retail costs/credits	s booked to Acc	ount 935 and retail s	ales tax portio	n of Florida sal	les tax audit expense booked
	to Account 930.2 from Form-1 reported value.					
Note T:	Network prepayments include interest that has					
Note U:	The inclusion of Line 24, "Unfunded Reserves,"					
	the Formula Rate calculations. The specific tre interested parties from making any argument in					
	Formula Rate as to the appropriate accounting					
Note V:	Adjusted to remove ADUFC accruals from CWI					
	direct assignment radials	,,		woully		
Note W:	Should PEF construct and own radials directly	assignable to w	holesale customers,	PEF shall ma	ke a Section 2	05 filing to amend its Formula
	Rate Template to remove the costs associated	with wholesale	direct assignment ra	dials from the	calculation of th	he OATT base rates. A new
	attachment (e.g., Exhibit PEF-x) shall be added					
	showing the associated monthly balances for g					
	accumulated depreciation reserves be maintain					
	reflect the appropriate effect of the vintage of ea					

reflect the appropriate effect of the whitage of each project. Such Exhibit PEF-2 shall be structured to accommodate direct assignments to multiple wholesale customers. Exhibit PEF-2 shall be modified to remove the direct assignment wholesale radials from the base rate calculations in a manner consistent with retail radials, except that Exhibit PEF-2 shall be further modified to set forth separately the costs allocated to each wholesale customer's direct assignment radials in the aggregate in separate columns. Such Section 205 filing shall be made sufficiently in advance of the first occurrence of a direct assignment wholesale transmission radial to permit the requisite modifications to the Formula Rate Template to become effective with the in-service date of the associated facility.

PROGRESS ENERGY FLORIDA, INC. OATT Transmission Non-Levelized Rate Formula Template Using Form-1 Data

Adjustment to Per Books PBOP Expenses

Reference for System Amount Basis in Wholesale Rates:

FLORIDA POWER CORPORATION FERC Docket No. ER97-4573-000 Part A-T&D Services Cost Support Section B Supplemental Workpaper Page 2 of 4

FLORIDA POWER CORPORATION

PBOPs

In the Company's last wholesale rate case, Docket No. ER95-469-000, accrual amounts of \$1,331,000 for wholesale jurisdictional business and \$22,892,000 for retail jurisdictional business were presented for the test period of calendar year 1995 on the basis of a study performed by Hewitt Associates (See attached sheet Page 3A, lines 63 & 64 for year 1995. The wholesale amount was included in the settlement cost of service for wholesale business.

A fundamental difference between the wholesale and retail components is the recognition that the wholesale component is funded in accordance with Docket No. PL93-1-000, but the retail component is not funded in accordance with Florida Public Service Commission determination.

Since the expense item needs to be stated on a system basis reflecting fully wholesale ratemaking practice for input to the transmission cost of service formula, the appropriate system figure is that imputed by dividing the wholesale component amount by the wholesale wage ratio reflected in Docket No. ER95-469-000 (See attached sheet Page 3B, line 16, total at issue). This imputation is as follows:

\$1,331,000/.05998 = \$ 22,191,000 (Nearest thousand)

It is the Company's understanding that this amount shall remain the same for purposes of wholesale, ratemaking until such time the Company makes a filing which is accepted by FERC that supports a revised wholesale accrual amount.

yyyy Per Book Amount:

vs. Imputed Amount

==> PBOP Expense Adjustment



Exhibit PEF - 3 Page 1 of 2 Year Ending 12/31/yyyy

PROGRESS ENERGY FLORIDA, INC.

Transmission Rate Formula Support - Revenue Credits Account 454

Description	To	otal	Transmission		
Total Account 454	\$	-	\$	-	

Transmission Rate Formula Support - Revenue Credits Account 456

Form 1	Payment by	Classification		Total Revenues
Reference	(Column (b))	(Col (d))	(Col (e))	(Column (n))
р 328				
	Total Transmission for Others			0
	Total Classified as Non-Firm = Revenue Credit			0
	Short Term Firm - Revenue Credit			0
	Total 456 NF + STF Revenue			0
	Less Associated Ancillaries			0
	Net OATT Revenue Credit			0

Exhibit PEF - 4
Page _ of _
Year Ending 12/31/yyyy

PROGRESS ENERGY FLORIDA, INC.

Transmission Rate Formula Support - Account 353 Generator Step-up Transformers

	<u>Plant</u>	<u>Bank</u>	Peaker/ Unit	Book Cost	Vintage
Total				\$0	

Exhibit PEF - 4
Page _ of _
Year Ending 12/31/yyyy

PROGRESS ENERGY FLORIDA, INC.

Transmission Rate Formula Support - Interconnection Facilities Generation In-Service After March 15, 2000 per FERC Order 2003

<u>Unit(s)</u>	<u>Description</u>	Beginning <u>Balance</u>	Ending <u>Balance</u>	B/E Average
Total Interconnection Faciliti	es	0	0	0

					Exhibit PE	F - 5
					Page _ of _	_
					Year Ending	12/31/yyyy
		ENERGY FLORIDA, INC.				
	Accumulated De	ferred Tax Detail - Prior Year				
	1					
		Accumulate d Deferre d	Allocator	Factor	Result	
Account	Description	Tax at 12/31/xxxx				
190						
	Balance in Account 190	0			0	
281						
	Balance in Account 281	0			0	
282						
	Balance in Account 282	0			0	<u> </u>
283						
	Balance in Account 283	0			0	
					_	
	Total Accumulated Deferred Income Tax	0			0	

PROGRESS ENERGY FLORIDA, INC. Accumulated Deferred Tax Detail - Current Year

Account	Description	Accumulated Deferred Tax at 12/31/yyyy	Allocator F	actor	Result
190	Balance in Account 190	0			0
281	Balance in Account 281	0			0
282	Balance in Account 282	0			0
283	Balance in Account 283	0			0
	Total Accumulated Deferred Income Tax	0			

Unfunded Reserves

Account	Description	Beginning Balance	Ending Balance	B/E Average	Allocator	Value	Result
	Identified Reserves:						
	Total Reserves	0	0	0			0
	Less Externally Funded Amounts:						
	Total Externally Funded Amounts	0	0	0			0
	Net Unfunded Reserves	0	0	0			0

PROGRESS ENERGY FLORIDA, INC.

Transmission Rate Formula Support - List of Inputs from FERC Form-1

Page	Row	Column	Description	Reference	Beginning Balance	Ending Balance or Annual Value
= 0:			Action and the American agree of American		Dalance	Amuai value
111	57	c&d	Prepayments	111.57.c&d		
111 112	81 3	c&d c&d	Loss on Reacquired Debt Preferred Stock Issued	111.81.c&d 112.3.c&d		
112	12	c&d	Account 216.1	112.3.c&d		
112	16	c&d	Proprietary Capital	112.16.c&d		
112	24	c&d	Long Term Debt	112.24.c&d		
113	61	c&d	Gain on Reacquired Debt	113.61.c&d		
117	62-67	С	Long Term Interest Expense	117.62-67.c		
118	29	c	Preferred Dividends (positive)	118.29.c		
200	21	С	Intangible Amort. Reserve	200.21.c		
205	5	b&g	Intangible Plant	205.5.b&g		
205	46 58	b&g	Production Plant	205.46.b&g		
207 207	75	b&g b&g	Transmission Plant Distribution Plant	207.58.b&g 207.75.b&g		
207	99	b&g	General Plant	207.99.b&g		
214	47	d	Plant Held for Future Use (Trans. Only)	214.47.d		
219	21-24	c	Production Depr. Reserve	219.21-24.c		
219	25	С	Transmission Depr. Reserve	219.25.c		
219	26	С	Distribution Depr. Reserve	219.26.c		
219	27	С	General Depr. Reserve	219.27.c		
227	8	b&c	M&S - Transmission	227.8.b&c		
227	15	b&c	M&S - Stores Expense	227.15.b&c		
230a 230a	5 5	b e	Total Extraordniary Property Loss - Wholesale	230a.5.b 230a.5.e		
230a 230a	5	f	Total Extraordniary Property Loss - Wholesale Extraordinary Property Losses - Balance	230a.5.e		
234	8	b&c	ADIT - 190	234.8.b&c		
263	3	i	Other Taxes - FICA	263.3.i		
263	4	i	Other Taxes - Federal Unemployment	263.4.i		
263	7	i	Other Taxes - Highway Use	263.7.i		
263	15	į	Other Taxes - State Unemployment	263.15.i		
263	16	į	Other Taxes - Intangibles	263.16.i		
263	22	į	Other Taxes - Property County & Local	263.22.i		
266	8	f beb	Amortized ITC (Negative)	266.8.f		
267 273	8	b&h b&k	Accum Deferred ITC - 255 (Negative) ADIT - 281 (Negative)	267.8.b&h 273.8.b&k		
275	2	b&k	ADIT - 287 (Negative)	275.2.b&k		
277	8	b&k	ADIT - 283 Excluding FAS 109 (Neg.)	277.8.b&k		
321	96	b	(565) Transmission of Electricity by Others	321.96.b		
321	112	b	TOTAL Transmission Expenses	321.112.b		
323	185	b	(924) Property Insurance	323.185.b		
323	189	b	(928) Regulatory Commission Expenses	323.189.b		
323	191	b	(930.1) General Advertising Expenses	323.191.b		
323	197 1	b	Total Admin & General Expenses	323.197.b		
335 336	1	b f	Industry Association Dues Intangible Amortization	335.1.b 336.1.f		
336	7	f	Transmission Depr. Expense	336.7.f		
336	9	f	General Depr. Expense	336.9.f		
354	21	b	Transmission O&M Labor	354.21.b		
354	27	b	A&G Labor	354.27.b		
354	28	b	Total Direct Payroll - O&M Labor	354.28.b		
400	17	е	Firm Network Service for Self	400.17.e		
400	17	f	Firm Network Service for Others	400.17.f		
400	17 17	g	Long-Term Firm P-t-P Reservations	400.17.g		
400 400	17 17	h I	Other Long-Term Firm Service Short-Term Firm P-t-P Reservations	400.17.h 400.17.i		
			r Form 1 (Year End Value Where Not Availabl		ı Balance Abovel	
					,	
200	21	C	Intangible Amort. Reserve	200.21.c		
214	47	d	Plant Held for Future Use (Trans Only)	214.47.d		
219	21-24	c	Production Depr. Reserve	219.21-24.c		
219 219	25 26	c	Transmission Depr. Reserve Distribution Depr. Reserve	219.25.c 219.26.c		
219	26 27	C C	General Depr. Reserve	219.26.c 219.27.c		
230a	5	f	Extraordinary Property Losses - Balance	230a.5.f		

OATT Settlement - 2004 Storm Treatment

Line No.

1	Determination of Levelized Sto	orm Damage Recovery Adder							
2	Total Funding Requiremen	nts							
4									
5	Total Funding Requirements		£42 207 007						
6 7	Amortize Existing Loss	(PEF-2, Page 5, Line 4)	\$13,307,907						
8	Rebuild Reserve Total 2008-2012	(PEF-2, Page 5, Line 7)	8,614,774						
9			\$21,922,681						
1,705	Less:	11 12 27-4 1							
10		ollected from non-OATT service:	6200.045						
11 12	Annual Amount	(PEF-2, Page 5, Line 8)	\$368,845						
	Five-Year Total	(Line 11 * 5)	\$1,844,225						
13 14	Net 5 Vees Demisses est	(line 0. Line 40)	£20.070.45C						
15	Net 5-Year Requirement	(Line 8 - Line 12)	\$20,078,456						
16	Annual Recovery Require	mente	2008	2009	2010	2011	2012	Total	
17	Alliuai Recovery Require	<u>illerits</u>	2000	2009	2010	2011	2012	I Utai	
18	Projected Billing Units (MW-	-months)							
19	LTF on OATT	(Projected and Fixed)	6,593	13,904	30,194	37,331	39,889	127,912	
20	STF/Non-Firm on OATT	(Projected and Fixed)	3,000	3,000	3,000	3,000	3,000	15,000	
21	Total Projected Billing Unit		9,593	16,904	33,194	40,331	42,889	142,912	
22		=	5,555	.5,55.	-5,,5,	. 0,00	.2,000		
23 24	Annual Percentages	(Fixed - Note P)	6.71%	11.83%	23.23%	28.22%	30.01%	100.0%	
25	Annual Recovery Requireme	ents							
26	Amortize Existing Loss	(Ln 23 * Ln 6 / Ln 8 * Ln 14)	\$818,184	\$1,441,693	\$2,831,030	\$3,439,661	\$3,657,824	\$12,188,392	
27	Rebuild Reserve	(Ln 23 * Ln 7 / Ln 8 * Ln 14)	529,645	933,269	1,832,646	2,226,639	2,367,865	7,890,064	
28	Total		\$1,347,829	\$2,374,963	\$4,663,676	\$5,666,300	\$6,025,688	\$20,078,456	
29									
30	Levelized Storm Damage								
31									
	Adder (\$/MW-mo)	(Line 28 / Line 21)	\$140	\$140	\$140	\$140	\$140	\$140	
32			\$140	\$140	\$140	\$140	\$140	\$140	
33	Example Application of Levelia		\$140	\$140	\$140	\$140	\$140	\$140	
33 34	Example Application of Leveliz	zed Adder and Annual True-Up	\$140	\$140	\$140	\$140	\$140	\$140	
33 34 35	Example Application of Levelize Actual Billing Units (MW-mo	zed Adder and Annual True-Up		·	******	****	•		
33 34 35 36	Example Application of Levelize Actual Billing Units (MW-mo	zed Adder and Annual True-Up onths) (Notes Q and R) (Actual MW-Months)	0	0	0	0	0	0	
33 34 35 36 37	Example Application of Levelize Actual Billing Units (MW-mo	zed Adder and Annual True-Up onths) (Notes Q and R) (Actual MW-Months) (Actual Equiv. MW-Months)	0 0	0 <u>0</u>	0 <u>0</u>	0 <u>0</u>	0	0 <u>0</u>	
33 34 35 36 37 38	Example Application of Levelize Actual Billing Units (MW-mo	zed Adder and Annual True-Up onths) (Notes Q and R) (Actual MW-Months)	0	0	0	0	0	0	
33 34 35 36 37	Example Application of Leveliz Actual Billing Units (MW-mo LTF on OATT STF/Non-Firm on OATT Total Billing Units	onths) (Notes Q and R) (Actual MW-Months) (Actual Equiv. MW-Months) (Line 36 + Line 37)	0 <u>0</u> 0	0 <u>0</u>	0 <u>0</u>	0 <u>0</u>	0	0 <u>0</u>	
33 34 35 36 37 38 39	Example Application of Leveliz Actual Billing Units (MW-mo LTF on OATT STF/Non-Firm on OATT Total Billing Units	onths) (Notes Q and R) (Actual MW-Months) (Actual Equiv. MW-Months) (Line 36 + Line 37) g Loss & Reserve Replenishmen	0 <u>0</u> 0	0 <u>0</u>	0 <u>0</u>	0 <u>0</u>	0 <u>0</u> 0	0 <u>0</u> 0	
33 34 35 36 37 38 39 40	Example Application of Leveliz Actual Billing Units (MW-mo LTF on OATT STF/Non-Firm on OATT Total Billing Units Actual Recoveries of Existin LTF on OATT	onths) (Notes Q and R) (Actual MW-Months) (Actual Equiv. MW-Months) (Line 36 + Line 37) g Loss & Reserve Replenishmen (Line 31 * Line 36)	0 0 0 0	0 <u>0</u> 0	0 <u>0</u> 0	0 <u>0</u> 0	0 <u>0</u> 0	0 <u>0</u> 0	
33 34 35 36 37 38 39 40 41	Example Application of Leveliz Actual Billing Units (MW-mo LTF on OATT STF/Non-Firm on OATT Total Billing Units Actual Recoveries of Existin LTF on OATT STF/Non-Firm on OATT	porths) (Notes Q and R) (Actual MW-Months) (Actual Equiv. MW-Months) (Line 36 + Line 37) ag Loss & Reserve Replenishmen (Line 31 * Line 36) (Line 31 * Line 37)	0 0 0	0 <u>0</u> 0	0 <u>0</u> 0	0 0 0 \$0	0 <u>0</u> 0	0 0 0 \$0	
33 34 35 36 37 38 39 40 41 42	Example Application of Leveliz Actual Billing Units (MW-mo LTF on OATT STF/Non-Firm on OATT Total Billing Units Actual Recoveries of Existin LTF on OATT	onths) (Notes Q and R) (Actual MW-Months) (Actual Equiv. MW-Months) (Line 36 + Line 37) g Loss & Reserve Replenishmen (Line 31 * Line 36)	0 0 0	0 0 0 \$0	0 0 0 \$0	0 <u>0</u> 0	0 0 0 \$0	0 <u>0</u> 0	
33 34 35 36 37 38 39 40 41 42 43	Example Application of Leveliz Actual Billing Units (MW-mo LTF on OATT STF/Non-Firm on OATT Total Billing Units Actual Recoveries of Existin LTF on OATT STF/Non-Firm on OATT	onths) (Notes Q and R) (Actual MW-Months) (Actual Equiv. MW-Months) (Line 36 + Line 37) ag Loss & Reserve Replenishmen (Line 31 * Line 36) (Line 31 * Line 37) (Line 41 + Line 42)	0 0 0	0 0 0 \$0	0 0 0 \$0	0 0 0 \$0	0 0 0 \$0	0 0 0 \$0	
33 34 35 36 37 38 39 40 41 42 43	Example Application of Leveliz Actual Billing Units (MW-mo LTF on OATT STF/Non-Firm on OATT Total Billing Units Actual Recoveries of Existin LTF on OATT STF/Non-Firm on OATT Total Collections	onths) (Notes Q and R) (Actual MW-Months) (Actual Equiv. MW-Months) (Line 36 + Line 37) ag Loss & Reserve Replenishmen (Line 31 * Line 36) (Line 31 * Line 37) (Line 41 + Line 42)	0 0 0	0 0 0 \$0	0 0 0 \$0	0 0 0 \$0	0 0 0 \$0	0 0 0 \$0	
33 34 35 36 37 38 39 40 41 42 43 44 45 46	Example Application of Leveliz Actual Billing Units (MW-mo LTF on OATT STF/Non-Firm on OATT Total Billing Units Actual Recoveries of Existin LTF on OATT STF/Non-Firm on OATT Total Collections Over(Under) Recovery to	onths) (Notes Q and R) (Actual MW-Months) (Actual Equiv. MW-Months) (Line 36 + Line 37) ag Loss & Reserve Replenishmen (Line 31 * Line 36) (Line 31 * Line 37) (Line 41 + Line 42)	0 0 0 0	0 0 0 \$0 \$0	0 0 0 \$0 \$0	0 0 0 \$0 \$0	0 0 0 \$0 0 \$0	0 0 0 \$0 \$0	
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47	Example Application of Leveliz Actual Billing Units (MW-mo LTF on OATT STF/Non-Firm on OATT Total Billing Units Actual Recoveries of Existin LTF on OATT STF/Non-Firm on OATT Total Collections Over(Under) Recovery to I	porths) (Notes Q and R) (Actual MW-Months) (Actual Equiv. MW-Months) (Line 36 + Line 37) ag Loss & Reserve Replenishmen (Line 31 * Line 36) (Line 31 * Line 37) (Line 41 + Line 42) Be Reflected (Line 43 - Line 28)	0 0 0 0	0 0 0 \$0 \$0	0 0 0 \$0 \$0	0 0 0 \$0 \$0	0 0 0 \$0 0 \$0	0 0 0 \$0 \$0 \$0	
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47	Example Application of Leveliz Actual Billing Units (MW-mo LTF on OATT STF/Non-Firm on OATT Total Billing Units Actual Recoveries of Existin LTF on OATT STF/Non-Firm on OATT Total Collections Over(Under) Recovery to	porths) (Notes Q and R) (Actual MW-Months) (Actual Equiv. MW-Months) (Line 36 + Line 37) ag Loss & Reserve Replenishmen (Line 31 * Line 36) (Line 31 * Line 37) (Line 41 + Line 42) Be Reflected (Line 43 - Line 28)	0 0 0 0	0 0 0 \$0 \$0	0 0 0 \$0 \$0	0 0 0 \$0 \$0	0 0 0 \$0 0 \$0	0 0 0 \$0 \$0	ordinary Loss
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 49 50	Example Application of Leveliz Actual Billing Units (MW-mo LTF on OATT STF/Non-Firm on OATT Total Billing Units Actual Recoveries of Existin LTF on OATT STF/Non-Firm on OATT Total Collections Over(Under) Recovery to I	porths) (Notes Q and R) (Actual MW-Months) (Actual Equiv. MW-Months) (Line 36 + Line 37) ag Loss & Reserve Replenishmen (Line 31 * Line 36) (Line 31 * Line 37) (Line 41 + Line 42) Be Reflected (Line 43 - Line 28)	0 0 0 0 1 \$0 0	0 0 0 \$0 \$0 0	0 0 0 \$0 \$0 \$0	0 0 0 \$0 \$0 0	0 0 0 \$0 \$0	0 0 0 \$0 0 \$0 0 \$0	ordinary Loss
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 49 50 51 52	Example Application of Leveliz Actual Billing Units (MW-mo LTF on OATT STF/Non-Firm on OATT Total Billing Units Actual Recoveries of Existin LTF on OATT STF/Non-Firm on OATT Total Collections Over(Under) Recovery to I	porths) (Notes Q and R) (Actual MW-Months) (Actual Equiv. MW-Months) (Line 36 + Line 37) ag Loss & Reserve Replenishmen (Line 31 * Line 36) (Line 31 * Line 37) (Line 41 + Line 42) Be Reflected (Line 43 - Line 28)	0 0 0 0	0 0 0 \$0 \$0	0 0 0 \$0 \$0	0 0 0 \$0 \$0	0 0 0 \$0 0 \$0	0 0 0 \$0 \$0 \$0	ordinary Loss
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 49 50 51 52 53	Example Application of Leveling Actual Billing Units (MW-module) LTF on OATT STF/Non-Firm on OATT Total Billing Units Actual Recoveries of Existin LTF on OATT STF/Non-Firm on OATT Total Collections Over(Under) Recovery to it In Annual True-Ups Storm Reserve Balance Tracking	porths) (Notes Q and R) (Actual MW-Months) (Actual Equiv. MW-Months) (Line 36 + Line 37) ag Loss & Reserve Replenishmen (Line 31 * Line 36) (Line 31 * Line 37) (Line 41 + Line 42) Be Reflected (Line 43 - Line 28)	0 0 0 0 \$0 \$0	0 0 0 \$0 0 \$0	0 0 0 \$0 \$0 \$0	0 0 0 \$0 \$0 \$0	0 0 0 \$0 \$0	0 0 0 \$0 0 \$0 0 \$0	ordinary Loss
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 49 50 51 52 53 54	Example Application of Leveliz Actual Billing Units (MW-mo LTF on OATT STF/Non-Firm on OATT Total Billing Units Actual Recoveries of Existin LTF on OATT STF/Non-Firm on OATT Total Collections Over(Under) Recovery to I	porths) (Notes Q and R) (Actual MW-Months) (Actual Equiv. MW-Months) (Line 36 + Line 37) ag Loss & Reserve Replenishmen (Line 31 * Line 36) (Line 31 * Line 37) (Line 41 + Line 42) Be Reflected (Line 43 - Line 28)	0 0 0 0 1 \$0 \$0	0 0 0 \$0 0 \$0	0 0 0 \$0 \$0 \$0	0 0 0 \$0 \$0 \$0	0 0 0 \$0 \$0	0 0 0 \$0 0 \$0 0 \$0	ordinary Loss
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 49 50 51 52 53 53 54 55	Example Application of Leveling Actual Billing Units (MW-module) LTF on OATT STF/Non-Firm on OATT Total Billing Units Actual Recoveries of Existin LTF on OATT STF/Non-Firm on OATT Total Collections Over(Under) Recovery to it In Annual True-Ups Storm Reserve Balance Tracking	porths) (Notes Q and R) (Actual MW-Months) (Actual Equiv. MW-Months) (Line 36 + Line 37) ag Loss & Reserve Replenishmen (Line 31 * Line 36) (Line 31 * Line 37) (Line 41 + Line 42) Be Reflected (Line 43 - Line 28)	0 0 0 0 \$0 \$0	0 0 0 \$0 0 \$0	0 0 0 \$0 \$0 \$0	0 0 0 \$0 \$0 \$0	0 0 0 \$0 \$0	0 0 0 \$0 0 \$0 0 \$0	ordinary Loss
33 34 35 36 37 38 39 40 41 42 43 44 45 50 51 52 53 54 55 56	Example Application of Leveliz Actual Billing Units (MW-mo LTF on OATT STF/Non-Firm on OATT Total Billing Units Actual Recoveries of Existin LTF on OATT STF/Non-Firm on OATT Total Collections Over(Under) Recovery to In Annual True-Ups Storm Reserve Balance Tracki Beginning Balance Funding From OATT Adder Existing Wholesale Accrual	porths) (Notes Q and R) (Actual MW-Months) (Actual Equiv. MW-Months) (Line 36 + Line 37) ag Loss & Reserve Replenishmen (Line 31 * Line 36) (Line 31 * Line 37) (Line 41 + Line 42) Be Reflected (Line 43 - Line 28)	0 0 0 0 1 \$0 \$0 0 (13,307,907)	0 0 0 \$0 \$0	0 0 0 \$0 \$0	0 0 0 \$0 \$0 0	0 0 0 \$0 \$0	0 0 0 \$0 \$0 \$0 0 \$0 0	ordinary Loss
33 34 35 36 37 38 39 40 41 42 43 44 45 50 51 52 53 54 55 56 57	Example Application of Leveliz Actual Billing Units (MW-mo LTF on OATT STF/Non-Firm on OATT Total Billing Units Actual Recoveries of Existin LTF on OATT STF/Non-Firm on OATT Total Collections Over(Under) Recovery to I	porths) (Notes Q and R) (Actual MW-Months) (Actual Equiv. MW-Months) (Line 36 + Line 37) ag Loss & Reserve Replenishmen (Line 31 * Line 36) (Line 31 * Line 37) (Line 41 + Line 42) Be Reflected (Line 43 - Line 28)	0 0 0 0 1 \$0 \$0	0 0 0 \$0 0 \$0	0 0 0 \$0 \$0 \$0	0 0 0 \$0 \$0 \$0	0 0 0 \$0 \$0	0 0 0 \$0 0 \$0 0 \$0	ordinary Loss
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 49 50 51 52 53 54 55 56	Example Application of Leveling Actual Billing Units (MW-modular Example Application of Leveling Units (MW-modular Existing Units) Actual Recoveries of Existing Units Over(Units) Recovery to Italian Annual True-Ups Storm Reserve Balance Tracking Beginning Balance Funding From OATT Adder Existing Wholesale Accrual Ending Balance	porths) (Notes Q and R) (Actual MW-Months) (Actual Equiv. MW-Months) (Line 36 + Line 37) ag Loss & Reserve Replenishmen (Line 31 * Line 36) (Line 31 * Line 37) (Line 41 + Line 42) Be Reflected (Line 43 - Line 28) ang: (Line 28) (Line 28)	0 0 0 0 1 \$0 \$0 0 (13,307,907)	0 0 0 \$0 \$0	0 0 0 \$0 \$0	0 0 0 \$0 \$0 0	0 0 0 \$0 0 \$0	0 0 0 \$0 \$0 \$0 0 \$0 0	ordinary Loss
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 49 50 51 52 53 54 55 56 57 57 58	Example Application of Leveliz Actual Billing Units (MW-mo LTF on OATT STF/Non-Firm on OATT Total Billing Units Actual Recoveries of Existin LTF on OATT STF/Non-Firm on OATT Total Collections Over(Under) Recovery to In Annual True-Ups Storm Reserve Balance Tracki Beginning Balance Funding From OATT Adder Existing Wholesale Accrual	porths) (Notes Q and R) (Actual MW-Months) (Actual Equiv. MW-Months) (Line 36 + Line 37) ag Loss & Reserve Replenishmen (Line 31 * Line 36) (Line 31 * Line 37) (Line 41 + Line 42) Be Reflected (Line 43 - Line 28) ang: (Line 28) (Line 28)	0 0 0 0 1 \$0 \$0 (13,307,907) 0 0	0 0 0 \$0 \$0 \$0	0 0 0 \$0 \$0 \$0	0 0 0 \$0 \$0 \$0	0 0 0 \$0 \$0	0 0 0 \$0 \$0 0 2013 'til Extra 0	ordinary Loss
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 49 50 51 52 53 54 55 56 57 58 59	Example Application of Leveling Actual Billing Units (MW-modular Example Application of Leveling Units (MW-modular Existing Units) Actual Recoveries of Existing Units Over(Units) Recovery to Italian Annual True-Ups Storm Reserve Balance Tracking Beginning Balance Funding From OATT Adder Existing Wholesale Accrual Ending Balance	porths) (Notes Q and R) (Actual MW-Months) (Actual Equiv. MW-Months) (Line 36 + Line 37) ag Loss & Reserve Replenishmen (Line 31 * Line 36) (Line 31 * Line 37) (Line 41 + Line 42) Be Reflected (Line 43 - Line 28) ang: (Line 28) (Line 28)	0 0 0 0 1 \$0 \$0 (13,307,907) 0 0	0 0 0 \$0 \$0 \$0	0 0 0 \$0 \$0 \$0	0 0 0 \$0 \$0 \$0	0 0 0 \$0 0 \$0	0 0 0 \$0 \$0 0 2013 'til Extra 0	ordinary Loss

PROGRESS ENERGY FLORIDA
PREPAYMENTS FOR NETWORK UPGRADES

252 Customer advances for construction.

This account shall include advances by customers for construction which are to be refunded either wholly or in part. When a customer is refunded the entire amount to which he is entitled, according to the agreement or rule under which the advance was made the balance, if any, remaining in this account shall be credited to the respective plant account.

HYPOTHETICAL EXAMPLES

NETWORK UPGRADE COST		\$ 1,000,000
DEPRECIABLE LIFE		40-YRS
ANNUAL FERC INTEREST RATE	ANNUALLY	6%
REFLIND OVER 5 YRS	ANNUALLY	\$ 200,000

SCENARIO 1:

YEAR OF IN-SERVICE:			
DESCRIPTION	FERC	DEBIT	CREDIT
ELEC. PLNT IN-SVC	101	\$ 1,000,000	
CUSTOMER ADVANCES	252		\$ 1,000,000

1st REFUND:

DESCRIPTION	FERC	DEBIT	1	CREDIT
CASH	130		\$	260,000
CUSTOMER ADVANCES	252	\$ 200,000		
INTEREST EXP	431	\$ 60,000		

	RATE BASE	E	KPENSE
FORMULA INPUT - EPIS YR-1	\$ 1,000,000		
BEGINNING BAL.	\$ (1,000,000)		
INTEREST EXPENSE YR-1	\$ (60,000)	\$	60,000
REFUND YR-1	\$ 260,000		
FORMULA INPUT YR-1	\$ (800,000)	\$	60,000
FORMULA INPUT - EPIS YR-2	\$ 1,000,000		
FORMULA ACCUM. DEP YR-2	\$ (25,000)		
BEGINNING BAL.	\$ (800,000)		
INTEREST EXPENSE YR-2	\$ (48,000)	\$	48,000
REFUND YR-2	\$ 248,000		
FORMULA INPUT YR-2	\$ (600,000)	\$	48,000

SCENARIO 2:

RECOVERY OF INTEREST: PER AGREEMENT WITH CUSTOMERS, INTEREST WILL BE RECOVERED UPON PAYMENT AND NOT AS ACCRUED. THIS WILL CREATE A REGULATORY ASSET TO RECOGNIZE THE DEFERRED COST RECOVERY.

YEAR OF IN-SERVICE:				
DESCRIPTION	FERC		DEBIT	CREDIT
ELEC. PLNT IN-SVC	101	\$	1,000,000	
CUSTOMER ADVANCES	252			\$ 1,000,000
YR-1 NO REFUND:				
DESCRIPTION	FERC		DEBIT	CREDIT
CUSTOMER ADVANCES	252			\$ 60,000
INTEREST ACCRUED	431	\$	60,000	
REG ASSET (INTEREST ACCRUED)	182.3	\$ \$	60,000	
INTEREST ACCRUED DEFERRAL	407.4			\$ 60,000
YR-5 WITH REFUND:				
DESCRIPTION	FERC		DEBIT	CREDIT
CUSTOMER ADVANCES	252	\$	1,338,226	
CASH	131			\$ 1,338,226
REG ASSET (INTEREST ACCRUED)	182.3			\$ 338,226
INTEREST ACCRUED DEFERRAL	407.3	\$	338,226	

Y	F	NATE BASE	EXPENSE		
IF NOT REFUNDED UNTIL YR 5, THAN	l:				
BEGINNING BAL.	\$	(1,000,000)			
INTEREST ACCRUED YR-1	\$	(60,000)	\$	(60,000)	
REG. ASSET (INTEREST ACCRUED) YR-1	\$	60,000	\$	60,000	
FORMULA INPUT YR-1	\$	(1,000,000)	\$	-	
INTEREST ACCRUED YR-2	\$	(63,600)	\$	(63,600)	
REG. ASSET (INTEREST ACCRUED) YR-2	\$	63,600	\$	63,600	
FORMULA INPUT YR-2	\$	(1,000,000)	\$	-	
INTEREST ACCRUED YRS	\$	(67,416)	\$	(67,416)	
REG. ASSET (INTEREST ACCRUED) YR-3	\$	67,416	\$	67,416	
FORMULA INPUT YR-3	\$	(1,000,000)	\$		
INTEREST ACCRUED YR-4	\$	(71,461)	\$	(71,461)	
REG. ASSET (INTEREST ACCRUED) YR-4	\$	71,461	\$	71,461	
FORMULA INPUT YR-4	\$	(1,000,000)	\$	ŀ	
INTEREST ACCRUED YR-5	\$	(75,749)	\$	(75,749)	
REG. ASSET (INTEREST ACCRUED) YR-5	\$	75,749	\$	75,749	
REFUND YR-5	\$	1,000,000	\$	338,226	
FORMULA INPUT YR-5	\$		\$	338,226	

PROGRESS ENERGY FLORIDA, INC.

Transmission Rate Formula Support - Direct Assignment Retail Radials in Accordance with OATT Attachment U

Line	Project Description:	Project 1	Project 2	 	 	Project N	Total Projects
	Gross Plant in Service:						
1	Beginning Balance	0	0			0	0
2	Additions	0	0			0	0
3	Retirements	0	0			0	0
4	Adjustm ents	0	0			0	0
5	Ending Balance	0	0			0	0
6	B/E Average	0	0			0	0
	Accumulated Depreciation:						
7	Beginning Balance	0	0			0	0
8	Annual Deprecation Expen	0	0			0	0
9	Adjustm ents	0	0			0	0
10	Ending Balance	0	0			0	0
11	B/E Balance	0	0			0	0

Transmission Rate Formula Support - Depreciation Rates

Depreciation and Amortization Rates by FERC Account	Florida PSC Approved Rate*
STEAM PRODUCTION	
Anclote Steam	
311 Structures and Improvements	1.9
312 Boiler Plant Equipment	2.2
314 Turbogenerator Units	2.8
315 Accessory Electric Equipment	1.6
316 Misc. Power Plant Equipment	1.6
Crystal River 1 & 2 Steam	
311 Structures and Improvements	2.2
312 Boiler Plant Equipment	3.7
314 Turbogenerator Units	2.5
315 Accessory Electric Equipment	2.6
316 Misc. Power Plant Equipment	2.1
Crystal River 4 & 5 Steam	
311 Structures and Improvements	1.5
312 Boiler Plant Equipment	2.5
314 Turbogenerator Units	1.0
315 Accessory Electric Equipment	1.0
316 Misc. Power Plant Equipment	2.1
Suwannee River Steam	
311 Structures and Improvements	2.3

Transmission Rate Formula Support - Depreciation Rates

Depreciation and Amortization Rates by FERC Account	Florida PSC Approved Rate*
312 Boiler Plant Equipment	3.1
314 Turbogenerator Units	2.9
315 Accessory Electric Equipment	2.6
316 Misc. Power Plant Equipment	2.9
Bartow/Ancl. Pipeline	
311 Structures and Improvements	1.8
312 Boiler Plant Equipment	2.6
315 Accessory Electric Equipment	1.4
316 Misc. Power Plant Equipment	3.4
Other Steam Production	
311 Structures and Improvements	1.4
312 Boiler Plant Equipment	0.7
316 Misc. Power Plant Equipment	3.7
NUCLEAR PRODUCTION Crystal River #3	
321 Structures and Improvements	1.5
322 Reactor Plant Equipment	3.3
323 Turbogenerator Units	1.2
324 Accessory Electric Equipment	1.4
325 Misc. Power Plant Equipment	1.7
OTHER PRODUCTION Avon Park Peaking	
341 Structures and Improvements	0.6
342 Fuel Holders, Prod. and Accessories	4.8
343 Prime Movers	3.0
344 Generators	0.1
345 Accessory Electric Equipment	0.5
346 Misc. Power Plant Equipment	3.2
Bartow Peaking	
341 Structures and Improvements	1.7
342 Fuel Holders, Prod. and Accessories	3.0
343 Prime Movers	1.6

Transmission Rate Formula Support - Depreciation Rates

Depreciation and Amortization Rates by FERC Account	Florida PSC Approved Rate*
344 Generators	2.1
345 Accessory Electric Equipment	1.8
346 Misc. Power Plant Equipment	0.4
Bartow Combined Cycle	
342 Fuel Holders, Prod. and Accessories	3.2
343 Prime Movers	3.3
Bayboro Peaking	
341 Structures and Improvements	1.0
342 Fuel Holders, Prod. and Accessories	3.0
343 Prime Movers	2.3
344 Generators	1.4
345 Accessory Electric Equipment	1.8
346 Misc. Power Plant Equipment	1.1
Debary Peaking	
341 Structures and Improvements	2.7
342 Fuel Holders, Prod. and Accessories	2.6
343 Prime Movers	3.0
344 Generators	2.4
345 Accessory Electric Equipment	2.5
346 Misc. Power Plant Equipment	3.3
Debary Peaking P7-1 (New)	
341 Structures and Improvements	3.3
342 Fuel Holders, Prod. and Accessories	4.0
343 Prime Movers	3.7
344 Generators	3.3
345 Accessory Electric Equipment	3.4
346 Misc. Power Plant Equipment	4.2
Higgins Peaking	
341 Structures and Improvements	2.9
342 Fuel Holders, Prod. and Accessories	5.4
343 Prime Movers	2.9

Transmission Rate Formula Support - Depreciation Rates

Depreciation and Amortization Rates by FERC Account	Florida PSC Approved Rate*
344 Generators	2.5
345 Accessory Electric Equipment	3.3
346 Misc. Power Plant Equipment	4.6
Hines Energy Complex	
341 Structures and Improvements	2.9
342 Fuel Holders, Prod. and Accessories	3.2
343 Prime Movers	3.2
344 Generators	2.9
345 Accessory Electric Equipment	3.2
346 Misc. Power Plant Equipment	3.1
Hines Energy Complex Unit # 2	
341 Structures and Improvements	2.9
342 Fuel Holders, Prod. and Accessories	3.2
343 Prime Movers	3.3
344 Generators	2.9
345 Accessory Electric Equipment	3.2
346 Misc. Power Plant Equipment	3.1
Hines Energy Complex Unit # 3	
341 Structures and Improvements	2.9
342 Fuel Holders, Prod. and Accessories	3.2
343 Prime Movers	3.3
344 Generators	2.9
345 Accessory Electric Equipment	3.2
346 Misc. Power Plant Equipment	3.1
Hines Energy Complex Unit # 4	
341 Structures and Improvements	2.9
342 Fuel Holders, Prod. and Accessories	3.2
343 Prime Movers	3.3
344 Generators	2.9
345 Accessory Electric Equipment	3.2
346 Misc. Power Plant Equipment	3.1

Transmission Rate Formula Support - Depreciation Rates

Depreciation and Amortization Rates by FERC Account	Florida PSC Approved Rate*
Intercession City Peak # 11	
341 Structures and Improvements	4.0
342 Fuel Holders, Prod. and Accessories	4.4
343 Prime Movers	4.6
344 Generators	4.0
345 Accessory Electric Equipment	4.0
346 Misc. Power Plant Equipment	3.8
Intercession City Peak P1-P6	
341 Structures and Improvements	2.9
342 Fuel Holders, Prod. and Accessories	6.6
343 Prime Movers	2.7
344 Generators	2.6
345 Accessory Electric Equipment	3.1
346 Misc. Power Plant Equipment	5.5
Intercession City Peak P12-P14	
341 Structures and Improvements	2.8
342 Fuel Holders, Prod. and Accessories	3.0
343 Prime Movers	2.9
344 Generators	2.5
345 Accessory Electric Equipment	2.6
346 Misc. Power Plant Equipment	3.1
Intercession City Peak P7-P10	
341 Structures and Improvements	2.5
342 Fuel Holders, Prod. and Accessories	2.8
343 Prime Movers	2.6
344 Generators	2.5
345 Accessory Electric Equipment	2.5
346 Misc. Power Plant Equipment	2.3

Transmission Rate Formula Support - Depreciation Rates

Depreciation and Amortization Rates by FERC Account	Florida PSC Approved Rate*
Rio Pinar Peaking	
341 Structures and Improvements	3.2
342 Fuel Holders, Prod. and Accessories	4.0
343 Prime Movers	2.3
344 Generators	2.3
345 Accessory Electric Equipment	4.2
346 Misc. Power Plant Equipment	8.6
Suwannee River Peaking	
341 Structures and Improvements	1.3
342 Fuel Holders, Prod. and Accessories	3.3
343 Prime Movers	1.3
344 Generators	1.4
345 Accessory Electric Equipment	1.8
346 Misc. Power Plant Equipment	3.2
Tiger Bay Cogen	
341 Structures and Improvements	1.7
342 Fuel Holders, Prod. and Accessories	1.8
343 Prime Movers	1.4
344 Generators	1.8
345 Accessory Electric Equipment	2.1
346 Misc. Power Plant Equipment	1.4
Turner Peaking	
341 Structures and Improvements	2.0
342 Fuel Holders, Prod. and Accessories	3.0
343 Prime Movers	1.2
344 Generators	2.4
345 Accessory Electric Equipment	3.0
346 Misc. Power Plant Equipment	2.1
University of Fla Cogen	
341 Structures and Improvements	1.8
342 Fuel Holders, Prod. and Accessories	2.0
343 Prime Movers	2.5
344 Generators	1.8
345 Accessory Electric Equipment	1.9

Transmission Rate Formula Support - Depreciation Rates

Depreciation and Amortization Rates by FERC Account	Florida PSC Approved Rate*
346 Misc. Power Plant Equipment	1.5
System-Other	
346 Misc. Power Plant Equipment	1.5
DISTRIBUTION PLANT	
360.10 Land Rights	1.4
361.00 Structures and Improvements	1.4
362.00 Station Equipment	1.8
364.00 Poles, Towers and Fixtures	4.2
365.00 Overhead Conductors and Devices	2.7
366.00 Underground Conduit	1.6
367.00 Underground Conductors and Devices	3.0
368.00 Line Transformers	2.9
369.10 Services-Overhead	4.0
369.20 Services-Underground	2.2
370.00 Meters	6.0
371.00 Installation on Customers Premises	3.6
373.00 Street Lighting and Signal Systems	3.1
TRANSMISSION PLANT	
350.10 Land Rights	1.2
352.00 Structures and Improvements	1.4
353.10 Station Equipment	1.8
353.20 Station Equipment-Station Control	1.1
354.00 Towers and Fixtures	1.3
355.00 Poles and Fixtures	3.3
356.00 Overhead Conductors and Devices	1.9
357.00 Underground Conduit	1.2
358.00 Underground Conductors & Devices	2.0
359.00 Roads and Trails	0.9
General Plant	
390.00 Structures and Improvements	3.7
391.00 Office Furniture and Equipment	14.3

Transmission Rate Formula Support - Depreciation Rates

The rates in the table below are those used in the calculation of depreciation expense and associated accumulated depreciation reserve amounts in the FERC Form 1 and reported and utilized on Exhibit PEF-2.

Depreciation and Amortization Rates by FERC Account	Florida PSC Approved Rate*
Transportation Equipment	
392.10 Passenger Cars	8.7
392.20 Light Trucks	8.7
392.30 Heavy Trucks	4.8
392.40 Special Trucks	5.0
392.50 Trailers	1.7
393.00 Stores Equipment	14.3
394.00 Tools, Shop and Garage Equipment	14.3
395.00 Laboratory Equipment	14.3
396.00 Power Operated Equipment	5.8
397.00 Communication Equipment	14.3
398.00 Miscellaneous Equipment	14.3
Intangible Plant	
302.00 Franchise Costs	3.3
303.00 Intangible Plant	20.0
303.00 Misc Intangible Plant	14.3
303.10 Customer Service System (CSS)	10.0

^{*} All rates are those approved in the FPSC ORDER NO. PSC-10-0131-FOF-EI, DOCKET NOS. 090079-EI, 090144-EI, 090145-EI, with the exception of Intangible Plant which was not addressed in the 2009 Rate Case.

Consistent with Section 1(h)(i) of Schedule 10-A.1 Formula Rate Implementation Protocols, the depreciation rates are not subject to change except pursuant to a Section 205 or 206 filing under the Federal Power Act.

SCHEDULE 10-A.3

Notes for Formula Rate

[FPC Zone]

Section 1 General Instruction

The following notes to the Formula Rate template in Schedule 10-A.2 of the Tariff of the Transmission Provider (also referred to herein as "PEF") shall govern the use and application of the Formula Rate and constitute an integral part of the Formula Rate.

Section 2 Notes

2.1 Order No. 679 Transmission Incentives.

(i) PEF shall not make an Order No. 679 transmission incentives filing for its transmission construction projects during an approximately four-year period of time that extends from the date hereof through December 31, 2011 (the "Order No. 679 Rate Moratorium"). PEF shall have the right to file for Order No. 679 transmission incentives for its transmission construction projects that meet the criteria under Section 2.1(ii) below after December 31, 2011, and the Customers reserve the right to oppose any such filing; provided, however, that a condition precedent to any such filing by PEF is that PEF shall have provided written notice to the Customers at least ninety (90) days prior to such filing of PEF's intent to make such filing. Thus, for example, if PEF intends to make such an Order 679 transmission incentives filing on March 1, 2012, it would be required to provide written notice of such filing on or before December 2, 2011, failing which the filing would be a nullity.

Promoting Transmission Investment through Pricing Reform, Order No. 679, 71 Fed. Reg. 43,294 (July 31, 2006), FERC Stats. & Regs. ¶ 31,222 (2006), order on reh'g, Order No. 679-A, 72 Fed. Reg. 1,152 (January 10, 2007), FERC Stats. & Regs. ¶ 31,236 (2006), order on reh'g, 119 FERC ¶ 61,062 (2007). The reference herein to "Order No. 679" includes any order issued by the FERC prior or subsequent to the filing of this Settlement Agreement that pertains to rate incentives of any sort for construction of transmission facilities.

- (ii) After the Order No. 679 Rate Moratorium expires and provided that proper advance notice is provided in accordance with Section 2.1(i) above, PEF may file at the Commission for any transmission incentives for its transmission construction projects that are permitted by Order No. 679, except that PEF may not file for transmission incentives for any transmission construction project that has reached a point in development in which costs of the transmission project have begun to be capitalized by PEF (i.e., PEF has begun the accrual of costs for the transmission construction project in Account 107 in accordance with generally accepted accounting practices) during the Order No. 679 Rate Moratorium. PEF may not intentionally delay or defer the accrual of costs for a transmission construction project in Account 107 in order to make a transmission construction project eligible for Order No. 679 transmission incentives.
- 2.2 50% CWIP Recovery. The Formula Rate includes 50% recovery of the average of the beginning and end-of-year CWIP balances only for those transmission projects identified in the Formula Rate Filing. PEF agrees that the submission for 50% CWIP recovery shall be filed in accordance with the requirements in the Commission's regulations (18 C.F.R. § 35.25(f)) and existing precedent on the issue (including *Northeast Utilities Service Company*, 114 FERC ¶61,089 (2006); *Boston Edison Company*, 109 FERC ¶61,300 (2004), *order on reh'g*, 111 FERC ¶61,266 (2005); and *United Illuminating Company*, Docket Nos. ER05-1049-000 *et al.*, Letter Order). PEF agrees that the submission shall make CWIP showings and waiver requests that are comparable to the showings and waiver requests that were submitted and accepted by the Commission in the aforementioned cases. Consistent with then applicable Commission regulations and precedent, PEF must make a FPA Section 205 filing if it wishes to request 50% CWIP recovery for any additional transmission projects in the future.

2.3 ROE.

(i) The Formula Rate shall include a 10.8% rate of return on common equity ("ROE"). PEF and each of the Customers shall have no FPA Section 205 or 206 rights, respectively, to seek a change to the ROE in the Formula Rate during the period of the Order No. 679 Rate Moratorium. PEF and each of the Customers shall have FPA Section 205 or 206 rights, respectively, to seek a change to the ROE in the Formula Rate after the expiration of the Order No. 679 Rate Moratorium.

2.4 Storm Damage.

- (i) With respect to the amortization of prior extraordinary property losses recorded in FERC Account 182.1 in connection with the series of four hurricanes that damaged the PEF transmission system during a six-week period in 2004, the Formula Rate shall amortize this existing extraordinary loss over a five-year period beginning January 1, 2008, and the annual amortization shall be calculated in accordance with the methodology included in the Formula Rate.
- (ii) The Formula Rate shall include an accrual to rebuild the wholesale storm reserve balance over a five-year period beginning January 1, 2008, and the accrual shall be calculated in accordance with the methodology included in the Formula Rate. These storm damage reserve accruals are subject to the cap set forth in Section 2.4(iv). The Formula Rate shall not include accruals to rebuild the wholesale storm reserve balance as a result of the 2004 hurricanes after the end of the five-year recovery period.
- (iii) The Formula Rate shall include an ongoing accrual assigned to wholesale customers for storm damage reserve of \$434,000 each year. These ongoing accruals are subject to the cap set forth in Section 2.4(iv).

- (iv) The accruals described in Section 2.4(ii) and(iii) shall be subject to a cap to ensure that there is no over-funding of storm damage reserve funds. Under the cap, the total accruals in each year shall be subject to reduction (and possible reversal to negative amounts) as necessary to avoid over-funding the wholesale portion of the storm damage reserve funds, i.e., in order to maintain the wholesale portion of PEF's storm reserve fund balance at no more than the transmission allocated portion of the \$140.2 million maximum storm damage reserve level.
- (v) To ensure that there is no double recovery of storm damage reserve accruals, the Formula Rate shall exclude the accruals, described in Sections 2.4(i), (ii) and (iii), from FERC Account 924 and all other expenses included in the Formula Rate.
- (vi) The Formula Rate includes a worksheet that illustrates the methodology for the storm damage recovery described in Sections 2.4(i) and (ii).

2.5 Transmission Divisor.

- (i) The transmission load divisor in the Formula Rate shall be determined in the following manner:
 - (1) For Network Integration Service under the OATT and for transmission services similar to Network Integration Service under the OATT (e.g., PEF's service to its native load and service under certain grandfathered agreements), except those services identified in item (2), the transmission load divisor shall include the actual demands of those transmission customers at the time of PEF's monthly transmission system peaks.
 - (2) For Network Contract Demand Service under the OATT and transmission services similar to Network Contract Demand Service under the OATT (e.g., PEF's service under certain grandfathered agreements), the transmission load divisor shall include the contract demands of those transmission customers at the time of PEF's monthly transmission system peaks.
 - (3) For Long-Term Firm Point-to-Point Transmission Service and Conditional Firm Service under the OATT and transmission service similar to Long-Term Firm Point-to-Point Transmission Service or Conditional Firm Service under the OATT (e.g., PEF's service under certain grandfathered agreements), the transmission load divisor shall include the contract demands of those

- transmission customers at the time of PEF's monthly transmission system peaks.
- (4) For Short-Term Firm or Non-Firm Transmission Services under the OATT and transmission service similar to Short-Term Firm or Non-Firm Transmission Services under the OATT (e.g., PEF's service under certain grandfathered agreements), the transmission load divisor shall not include the contract demands of those transmission customers (because revenues from these services are treated as a revenue credit in the Formula Rate, as set forth in Section 2.6(i)(2)).
- (5) All values in the transmission load divisor will be adjusted for losses to the transmission system input level based on the transmission loss factor set forth in the OATT.

2.6 Non-load and Transmission-related Revenue Credits.

- (i) The non-load and transmission-related revenue credits in the Formula Rate shall be determined in the following manner:
 - (1) All revenues associated with facilities allocated to the transmission function, including both direct and indirect allocations (e.g., general and intangible plant and administrative and general expense) shall be treated as revenue credits in the Formula Rate, with the exception that transmission services that are included in the transmission divisor of the Formula Rate, as set forth in Section 2.5, shall not be treated as a revenue credit. Such revenue credits shall include, but shall not be limited to, transmission facilities lease/rental payments, direct assignment facilities charges, pole attachment fees, and general plant-related income.
 - (2) Transmission revenues from Short-Term Firm and Non-Firm Transmission Services under the OATT and transmission service similar to Short-Term Firm or Non-Firm Transmission Services under the OATT (e.g., PEF's service under certain grandfathered agreements) shall be treated as revenue credits in the Formula Rate.
 - (3) Transmission services revenues from FERC Account 456 shall be treated as revenue credits in the Formula Rate, but ancillary services revenues from FERC Account 456 shall not be revenue credits in the Formula Rate.
 - (4) All transmission revenue credits shall be directly assigned to the transmission function in the Formula Rate (i.e., they shall not be allocated in the Formula Rate using a transmission plant allocator).

- (5) Revenues associated with indirect allocations of costs to the transmission function (e.g., general and intangible plant) shall be allocated to the transmission function in the Formula Rate based on the same underlying indirect allocations of costs and treated as a revenue credit.
- 2.7 Average of Beginning and End-of-Year Data: The Formula Rate shall include the average of the beginning and end-of-year balances from PEF's FERC Form No. 1 reports for the rate base items included in the Formula Rate, with the exception that storm damage items shall be included in the Formula Rate in accordance with Section 2.4.
- 2.8 <u>Cash Working Capital</u>. The Formula Rate shall include cash working capital based on a formulary approach as follows: 1/8 multiplied by the total of operation and maintenance expense, as specified in the Formula Rate template at page 3, line 17.
- 2.9 Prepayments for Network Upgrades by Generators. The Formula Rate includes treatment of refundable prepayments made by generators for network upgrades. The Formula Rate includes the amount of the refundable prepayments that PEF has not refunded to the OATT transmission customer in credits to the OATT transmission customer's transmission charges as an offset to rate base in the Formula Rate so that PEF will not earn a return on those funds. Correspondingly, the amount of interest paid to OATT transmission customers as their balances are credited against their transmission service is included as an expense in the Formula Rate. The Formula Rate includes a hypothetical example to illustrate how refundable prepayments for network upgrades are treated in the Formula Rate. The Formula Rate includes a placeholder for any future refundable prepayments for network upgrades.
- 2.10 <u>Credits for Customer-owned Facilities</u>. The Formula Rate includes a placeholder for any future credits for customer-owned facilities to prevent any under-recovery of revenues by PEF due to any credits provided to OATT transmission customers for their own facilities.

- 2.11 <u>Transmission Provider's Compliance with Order No. 2003</u>. In accordance with FERC Order No. 2003,² the Formula Rate excludes any transmission plant that meets the definition of "Interconnection Facilities" and was placed in service for PEF's own generation facilities after March 15, 2000.
- 2.12 <u>Directly Assigned or Assignable Costs</u>. The Formula Rate excludes all costs that are properly directly assigned or assignable to one or more particular customers, including costs directly assigned or assignable to PEF.
- 2.13 PEF Payments to "Affected Transmission Owners" and Receipts from others under the Regional Cost Allocation. FRCC regional transmission expansion cost allocation principles are currently under development. Within thirty days after those principles are filed as part of a FERC Order 890 compliance filing, PEF shall submit to Transmission Customers a proposal to address the treatment under the Formula Rate of PEF payments to Affected Transmission Owners, and payments to PEF as an Affected Transmission Owner, under such principles. If the interested Transmission Customers and PEF reach agreement within ninety days, PEF shall make a filing, pursuant to FPA Section 205, to change the Formula Rate to properly account for such payments. If the interested Transmission Customers and PEF do not reach agreement within ninety days, PEF shall make a filing, pursuant to FPA Section 205, to change the Formula Rate to properly account for such payments, and such filing may be opposed by affected parties. PEF's FPA Section 205 filing to implement the FRCC regional transmission expansion cost allocation principles into the Formula Rate shall be limited to that subject matter

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Standardization of Generator Interconnection Agreements and Procedures, Order No. 2003, 68 Fed. Reg. 49,846 (August 19, 2003), FERC Stats. & Regs., ¶ 31,146 (2003), order on reh'g, Order No. 2003-A, 69 Fed. Reg. 15,932 (March 26, 2004), FERC Stats. & Regs., ¶ 31,160 (2004), order on reh'g, Order No. 2003-B, 70 Fed. Reg. 265 (January 4, 2005), FERC Stats. & Regs. ¶ 31,171 (2004), order on reh'g, Order No. 2003-C, 70 Fed. Reg. 37, 661 (June 30, 2005), FERC Stats. & Regs. ¶ 31,190 (2005), aff'd sub nom. Nat'l Ass'n of Regulatory Util. Comm'rs v. FERC, 475 F.3d 1277 (D.C. Cir. 2007).

and any Transmission Customer opposition to said FPA Section 205 filing shall be limited to disputes as to how to implement the FRCC regional transmission expansion cost allocation principles into the Formula Rate. To the extent necessary, PEF's said Section 205 filing may receive a retroactive effective date to permit PEF to recover costs resulting from the FRCC regional transmission expansion cost allocation principles.

2.14 Accumulated Deferred Income Taxes (ADIT).

The Formula Rate provides for the inclusion of transmission-related ADIT in the rate base. ADIT items unrelated to transmission shall not be allocated to transmission. In each Annual Update (as defined in the Formula Rate Implementation Protocols), PEF shall provide a spreadsheet that identifies the transmission-related costs in the FERC Form No. 1 reported amounts for ADIT. For example, the following ADIT items are not included in the Formula Rate because they are not transmission-related ADIT:

- (i) Income tax deficiency items in ADIT (e.g., Accounts 190 and 283) are assigned to "other" in the Formula Rate.
- (ii) Deferred taxes related to Environmental Cleanup Reserve in ADIT are allocated on the basis of gross plant in the Formula Rate.
- (iii) Pension-related taxes, referred to as "Prepaid Pension per book" and "Reg Asset Minimum Pension Liab," in Account 283 are excluded from rate base in the Formula Rate and, accordingly, there shall be no ADIT balance offset for these items.

2.15 Intangible Plant.

- (i) The Formula Rate includes the treatment of intangible plant.
- (ii) In future Annual Updates, PEF shall provide supporting information concerning gross intangible plant investment and associated depreciation in order to establish net

intangible plant investments so that OATT transmission customers may compare PEF's net intangible plant investments from year to year.

(iii) To the extent that the net intangible plant investment increases from one year to the next, PEF shall supply, in the Annual Update, the supporting information to explain the increase and PEF shall adjust the allocation of net intangible plant investment in the Formula Rate to the extent necessary to reflect an appropriate allocation to transmission. This adjustment shall be submitted by PEF to the Commission in PEF's Annual Informational Filing for the Commission's acceptance. If there is a disagreement between PEF and a transmission customer concerning this matter, such matter shall be resolved through a Preliminary Challenge and/or Formal Challenge under the Formula Rate Implementation Protocols (rather than through an FPA Section 206 complaint).

2.16 <u>Prepaid Pension Expense and Other Prepayments.</u>

- (i) The Formula Rate shall exclude prepaid pension expenses from rate base.
- (ii) To the extent that prepaid pension expenses increase in a given year, PEF shall in the Annual Update provide supporting information for, and shall adjust the allocation of prepaid expenses, to the extent necessary to reflect an appropriate allocation to transmission.

 This adjustment shall be submitted by PEF to the Commission in PEF's Annual Informational Filing for the Commission's acceptance. If there is a disagreement between PEF and a transmission customer concerning this matter, such matter shall be resolved through a Preliminary Challenge and/or Formal Challenge under the Formula Rate Implementation Protocols (rather than through an FPA Section 206 complaint).

- 2.17 <u>Extraordinary Property Loss</u>. If an event meets the requirements for treatment as an Extraordinary Property Loss (FERC Account 182.1), PEF shall seek Commission approval for such treatment, with charges amortized over 3 to 5 years, as appropriate under the circumstances.
- 2.18 Extraordinary Transmission O&M Expenses. O&M expenses allocated or assigned to the transmission function that are extraordinary and non-recurring and have a significant effect on charges shall be amortized in the Formula Rate over three to five years (subject to Commission approval), as appropriate under the circumstances. The Formula Rate shall include the unamortized balance in rate base.
- 2.19 <u>Property Taxes</u>. Property taxes shall be allocated in the Formula Rate using the gross plant allocator.
- 2.20 <u>Property Insurance</u>. After deducting the annual funding of self-insurance for storm damage, property insurance shall be allocated in the Formula Rate using the gross plant allocator.

2.21 PEF Power Marketing Costs.

- (i) To the extent that any labor costs associated with PEF's power marketing operations are included in administrative and general ("A&G") expense accounts, those labor costs shall be excluded from the A&G expenses to be allocated in the Formula Rate.
- (ii) The divisor of the labor allocator in the Formula Rate shall include any such labor costs associated with PEF's power marketing operations.

2.22 FERC Account 561.

(i) Consistent with Order No. 668, the Formula Rate reflects the appropriate treatment of the series of sub-accounts under Account 561 such that the Formula Rate includes

only those items associated with transmission service and excludes all other costs, such as costs properly chargeable to Schedule 1 – Load Control and Dispatch Service.

- (ii) The Formula Rate Filing does not change PEF's existing filed rate forSchedule 1 Load Control and Dispatch Service in the Tariff.
- 2.23 <u>Asset Retirement Obligations</u>. The Formula Rate shall not include asset retirement obligations in any plant investment.
- 2.24 <u>A&G Expenses</u>. The Formula Rate shall exclude industry association dues and research and development fees from administrative and general expenses recovered in the Formula Rate.

SCHEDULE 10-B

NETWORK INTEGRATION TRANSMISSION SERVICE

FORMULA RATE FOR DETERMINATION OF ANNUAL TRANSMISSION REVENUE REQUIREMENT AND SCHEDULE 1 ANNUAL REVENUE REQUIREMENT

[DEC Zone]

This Schedule contains the Formula Rate that the Transmission Provider will use to determine its Annual Transmission Revenue Requirement and its Schedule 1 Annual Revenue Requirement (together, "Formula Rates"), and the implemental protocols for the Formula Rates ("Formula Rate Implementation Protocols"). The Formula Rate Implementation Protocols are included as Exhibit A to this Schedule, and apply to the Transmission Provider's calculation of its Annual Transmission Revenue Requirement and its Schedule 1 Annual Revenue Requirement. The Formula Rate for the Transmission Provider's Annual Transmission Revenue Requirement is included in Exhibit B to this Schedule, and shall be used to calculate the Transmission Provider's charges under Schedule 7 and Attachment H of this Tariff. The Formula Rate for the Transmission Provider's Schedule 1 Annual Revenue Requirement is included in Exhibit B to this Schedule, and shall be used to calculate the Transmission Provider's charges under Schedule 1 Of this Tariff.

EXHIBIT A TO SCHEDULE 10-B DUKE ENERGY CAROLINAS FORMULA RATE IMPLEMENTATION PROTOCOLS

Section 1: General

- Formula Rates. Duke Energy Carolinas employs a Formula to calculate its base a) transmission rates (for Network Integration Transmission Service and Point-to-Point Transmission Service) and a Formula to calculate its rates for Schedule 1-Scheduling, System Control and Dispatch Service ("Schedule 1 Service"), which rates are recalculated annually, based on calendar year costs, by means of the Formulas², in accordance with the Protocols set forth herein. The Formula, the Formula Rate Principles, and these Protocols together comprise the filed rate ("Formula Rate") of Duke Energy Carolinas. Each year Duke Energy Carolinas prepares an Annual Update that trues up the transmission rates calculation by populating the Formula Rate with information from Duke Energy Carolinas' Federal Energy Regulatory Commission ("FERC" or the "Commission") Form No. 1 and its books and records for the preceding calendar year and prepares Estimated Billing Rates for the next Billing Year. Duke Energy Carolinas provides on the last page of these Protocols a time-line/chart illustrating the preparation of the Annual Update, the true-up, and the Estimated Billing Rates. The Annual Update process does not effect change to the Formula Rate itself.
- Energy Carolinas except through an appropriate filing pursuant to Section 205 of the Federal Power Act ("FPA") and FERC's regulations thereunder. Provisions of the Formula Rate may not be changed by any other party except pursuant to an order of FERC issued under Section 206 of the FPA. However, Duke Energy Carolinas may, at its discretion and at a time of its choosing, make a limited filing pursuant to FPA Section 205 to update the references in the Formula Rate to reflect any FERC changes to the format and/or content of the FERC Form No. 1 or the Uniform System of Accounts ("USoA") that affect the calculations set forth in the Formula Rate. The sole issue in any such limited Section 205 filing shall be whether such proposed changes appropriately reflect the changes to the format and/or content of the FERC Form No. 1 or the USoA and whether such changes are just and reasonable, and shall not include other aspects of the Formula Rate.
- c) <u>Stated Values</u>. Values included in the Formula Rate (if any) for the following items (hereinafter, "Stated Values") may not be changed by Duke Energy Carolinas except through a full rate case filing pursuant to FPA Section 205 or by

The descriptive headings of the various Sections and subsections of these Protocols have been inserted for convenience of reference only and in no way shall be deemed to modify or restrict any of the terms or provisions hereof.

Hereafter in these Protocols the term "Formula" is used to refer respectively to the Formula used to calculate base transmission rates (for Network Integration Transmission Service and Point-to-Point Transmission Service) and the Formula used to calculate rates for Schedule 1- Scheduling, System Control and Dispatch Service.

any other party except pursuant to an order of FERC issued under Section 206 of the FPA:³

- (i) rate of return on common equity;
- (ii) cap on equity component of capital structure;
- (ii) the depreciation and/or amortization rates as set forth in the notes to the Formula Rate template, and composite rate methods;
- (iv) Post-Retirement Benefits Other than Pensions ("PBOPs"), pursuant to Statement of Financial Accounting Standards No. 106, Employers' Accounting for PBOP;
- (v) amortization of extraordinary property losses;
- (vi) abandoned plant costs;
- (vii) transmission incentives;
- (viii) construction work in progress;
- (ix) GridSouth costs and amortization; and
- (x) revenue-related tax factor.⁴
- d) <u>Fundamental Predicates</u>. The Formula Rate is premised upon data reported or recorded by Duke Energy Carolinas consistent with the following predicates ("Fundamental Predicates"):
 - (i) FERC's USoA,
 - (ii) applicable FERC Form No. 1 reporting requirements,
 - (iii) FERC's policies governing formula rates for wholesale transmission service, including FERC's policies that all charges billed under formula rates are subject to: (A) challenge on grounds of imprudence, and (B) an order by FERC requiring after-the-fact refunds.
 - (iv) FERC orders establishing transmission ratemaking policies of general application to transmission-owning public utilities, including Duke Energy Carolinas; and
 - (v) the accounting and cost allocation policies, practices and procedures of Duke Energy Carolinas to the extent consistent with the authorities listed in (i) through (iv) above.

The initial Stated Values for amortization of extraordinary property losses, abandoned plant costs, transmission incentives and construction work in progress will be \$0. Duke is required to make a full rate case filing under Section 205 of the Federal Power Act to change these Stated Values.

The initial Stated Values for revenue-related tax factor is will be 1. Duke is required to make a full rate case filing under Section 205 of the Federal Power Act to change this Stated Value.

The Formula Rate is based upon each of these Fundamental Predicates as it existed as of the date these Protocols are filed with FERC. Provisions of the Formula Rate may be modified to conform to changes in these Fundamental Predicates in accordance with Sections 1(b) or 3(c) of these Protocols or as ordered by FERC.

- e) <u>Year, Billing Year</u>. Unless otherwise indicated, the term "year" in these Protocols means a calendar year starting January 1 and ending December 31. The term "Billing Year" means the period starting June 1 and ending May 31.
- f) <u>Interest Rate</u>. The interest rate for all interest calculations provided for under these Protocols shall be the FERC interest rate on refunds set forth in 18 C.F.R. § 35.19a(a)(2)(iii)(A).

Section 2: Annual Update Process

- a) General. On or before May 15 of each year, Duke Energy Carolinas shall
 - (i) recalculate its Annual Transmission Revenue Requirement and its Annual Revenue Requirement for Schedule 1 services for the preceding year (both of which are encompassed by the term "ATRR," as used herein) by populating the Formula Rate with information from Duke Energy Carolinas' FERC Form No. 1 and its books and records for the preceding calendar year ("Annual Update"),
 - (ii) post each such Annual Update on its website via link to the public portion of its OASIS website,
 - (iii) submit such Annual Update to FERC as an informational filing,
 - (iv) perform a true-up of the rates for the immediately preceding year as set forth in Section 2 (h), and
 - (v) establish Estimated Billing Rates for the immediately succeeding Billing Year as set forth in Section 2 (i).
- b) <u>Service on Customers</u>. On the Publication Date, Duke Energy Carolinas will electronically serve on each network transmission customer and each transmission customer that takes point-to-point service under the Tariff pursuant to a contract of one year or longer in duration (collectively "Customers") the following: (i) a "workable," fully-functioning electronic spreadsheet containing that year's Annual Update input data; (ii) transmission load data for the preceding year, showing monthly coincident and non-coincident peak transmission loads for each Customer and other users of the Duke Energy Carolinas transmission system (including company loads); and (iii) a specification of the monthly transmission loads used in developing the updated rate divisor, and an explanation of any adjustments made to the transmission load data in deriving that divisor.
- c) <u>Informational Filing</u>. The informational filing with FERC is not intended to be subject to FERC's notice requirements, but any such lack of notice does not limit FERC's authority to initiate a proceeding on its own motion. If FERC does issue a

- notice of the informational filing, Duke Energy Carolinas shall advise FERC of the challenge process in the Protocols and shall request an abeyance of the noticed FERC proceeding to permit the Protocol challenge process to proceed.
- d) <u>Next Business Day</u>. If the date for making the Annual Update posting/filing should fall on a weekend or a holiday recognized by the FERC, then the posting/filing shall be due on the next business day.
- e) Publication Date. The date on which the last of the events listed in Section 2.a (i) (iii) occurs shall be that year's "Publication Date."
- f) Annual Update. The Annual Update for the year:
 - (i) shall be based upon data properly recordable and correctly recorded in Duke Energy Carolinas' FERC Form No. 1 for the most recent year, and upon the books and records of Duke Energy Carolinas, consistent with FERC accounting policies and FERC's USoA;
 - (ii) shall, to the extent specified in the Formula Rate, provide supporting documentation for data not otherwise available in the FERC Form No. 1 that are used in the Formula Rate;⁵
 - (iii) shall identify any changes in (1) FERC's USoA; (2) FERC Form No. 1 reporting requirements as applicable⁶; and/or (3) Duke Energy Carolinas' accounting policies and practices and procedures, to the extent that such changes have occurred since the posting of the most recent Annual Update, and have a material effect, singularly or in the aggregate, on an annualized basis on the determination of any value(s) included in the Formula Rate or the calculation of the Annual Update, as applicable;
 - (iv) shall be subject to challenge and review only in accordance with the procedures set forth in these Protocols; and
 - (v) shall not result in modifications to the Formula Rate.
- g) Projection. The Annual Update shall include a budgetary projection, broken out on an annual basis, of total transmission plant anticipated to be placed in service over each of the next three years and shall include disclosure of any projected costs associated with Smart Grid activities, including transmission equipment, software, hardware, and operations and maintenance expenses. Such projection shall be based upon Duke Energy Carolinas' then-current estimate of future expenditures but shall not otherwise be binding on Duke Energy Carolinas in any way. For each project with an estimated cost at or above \$5 million, Duke Energy Carolinas shall provide identification of: (1) the name and description of each such project; (2) the anticipated project completion date; (3) identification of the

Each input to the Formula Rate will be either taken directly from the FERC Form No. 1 or reconcilable to the FERC Form No. 1 by the application of clearly identified and supported information.

If the referenced form is superseded, the successor form(s) shall be utilized and supplemented as necessary to provide equivalent information as that provided in the superseded form. If the referenced form(s) is (are) discontinued, equivalent information as that provided in the discontinued form(s) shall be utilized.

transmission constraint, reliability concern or criteria violation that the project is intended to relieve or avoid; and (4) the expected expenditure on each such project, by year for the three-year period.

- h) <u>True-Up</u>. As part of the Annual Update process,
 - (i) Duke Energy Carolinas will calculate separate True-Up Amounts for Network Integration Transmission Service, Point-to-Point Transmission Service, and Schedule 1 Service. Each True-Up Amount shall be equal to the difference between (1) the amount of revenue that Duke Energy Carolinas collected⁷ from its Network Integration Transmission Service customers, Point-to-Point Transmission Service customers, or Schedule 1 Service customers, as applicable, during the immediately preceding calendar year⁸ and (2) the amount of revenue that Duke Energy Carolinas would have collected from such customers under the actual ATRR and transmission rates as calculated pursuant to the Annual Update.
 - (ii) Each annual True-Up Amount will be spread evenly over the calendar year to which the True-Up Amount relates. Thus, each True-Up Amount is divided by 12 and interest is applied to the twelve monthly balances for such calendar year for the appropriate number of months until June 1 of the year in which the Annual Update is performed.
 - (iii) An equal monthly amount is then calculated that will recover each True-Up Amount, plus accrued interest until June 1 as calculated pursuant to subsection (ii), plus interest that will accrue over the next Billing Year (June 1 to May 31). The sum of these 12 monthly amounts ("True-Up Amount With Interest") is then divided by the load ratio share percentage for the immediately preceding year and the result is added to (or subtracted from) the ATRR which will be the basis for Estimated Billing Rates for the immediately subsequent Billing Year.
 - (iv) The Formula Rate contains calculations of a True-Up Amount With Interest for Network Integration Transmission Service and for Schedule 1 Service.
- i) <u>Estimated Billing Rates.</u> No later than May 15 of each year, Duke Energy Carolinas shall prepare estimated billing rates ("Estimated Billing Rates") for the next Billing Year. Duke Energy Carolinas shall post such Estimated Billing Rates on its website via link to the public portion of its OASIS and shall submit such Estimated Billing Rates and supporting information to the FERC in an

Excluding any component of Estimated Billing Rates which is due to the inclusion of the True-Up Amount With Interest from the preceding year in the ATRR.

For the calculation of the first True-Up Amount, if the Formula Rates were not in effect for the entire preceding calendar year, then the calculation shall be performed for the part of the year for which the Formula Rates were in effect and all amounts shall be prorated as appropriate.

Except that the initial Billing Year shall commence on the date that the Formula Rate becomes effective and shall terminate on the immediately subsequent May 31.

informational filing.¹⁰ If the date for making such posting should fall on a weekend or a holiday recognized by the FERC, then the posting shall be made on the next business day. Estimated Billing Rates shall be based upon values determined in accordance with these Protocols and the following:

- (i) for rate base components (other than prepayments) reflected in the ATRR, the end-of-year plant balances for the preceding calendar year;
- (ii) for prepayments reflected in the ATRR, the average of the end-of-month balances over the 13 month period ending with the last month of the preceding calendar year; and
- (iii) for expense components reflected in the ATRR, the actual historical expenses for the preceding calendar year.

The foregoing values shall be determined during the Annual Update process using as-recorded data; provided, however, that the values described in this subparagraph (i) will be adjusted for the True-Up With Interest as described in Section 2(h)(iii) above and may further be adjusted by Duke Energy Carolinas in its reasonable discretion for capital additions projected to be made during the Billing Year, such adjustment (if made) to be based on the projected total capital additions expenditures for that period. During the Billing Year, Duke Energy Carolinas shall bill and the Customers shall pay for transmission service based on the Estimated Billing Rates.

Section 3: Annual Review Procedures

Each Annual Update shall be subject to the following review procedures ("Annual Review Procedures"):

- a) <u>Customer Meeting</u>. With the posting of the Annual Update, Duke Energy Carolinas shall provide notice to Customers that an open Customer meeting will be held, on a date specified in the notice that shall be no earlier than ten (10) business days from the date of posting of the Annual Update and no later than June 15, to discuss the Annual Update ("Customer Meeting"). Duke Energy Carolinas shall provide the opportunity for participation by telephone conference at this Customer Meeting. At the Customer Meeting, Duke Energy Carolinas shall provide
 - (i) an overview of the Annual Update, including, on an informal (i.e., non-binding) basis, information about the updated inputs to the Formula Rate, and including, without limitation, a summary sheet that shows the expiring Estimated Billing Rates for transmission service in \$/MW-Month, the true-up of that rate, and an item-by-item description of the factors that contribute in any material way to the true-up of that rate, referencing the

For the initial year in which the Formula Rate is effective, Duke Energy Carolinas shall prepare and post the Estimated Billing Rates no later than fifteen days prior to date that the Formula Rate becomes effective.

- page and line of the Formula Rate template and associated dollar amount of the change and the rate impact of the change;
- (ii) an opportunity to discuss the factors that contribute in any material way to the true-up of the rate;
- b) <u>Preliminary Challenges</u>. Unless the period is extended with the written consent of Duke Energy Carolinas or is extended as provided for in section 3(e) of these Protocols to resolve discovery disputes, a Customer shall have up to 120 days after the Publication Date ("Review Period") to review the calculations and to notify Duke Energy Carolinas in writing of:
 - (i) any challenge to the Annual Update (or any portion thereof) or the application of the Formula Rate, or
 - (ii) any specific challenge based on
 - (A) changes in the Fundamental Predicates reflected in items (i) through (v) as set forth in Section 1(d) above that may produce changes in the rates and charges produced from the application of the Formula Rate subsequent to such change; and/or
 - (B) the prudence of any costs included in the Annual Update.

A challenge raised on the basis of any of the foregoing grounds shall be referred to as a "Preliminary Challenge."

- Changes to Fundamental Predicates. All change(s) to the Fundamental Predicates (other than through filings pursuant to Section 1(b) of these Protocols that update FERC Form 1 references and do not make substantive changes to the Formula Rate), subsequent to the date specified in Section 1(d), shall warrant a reassessment of all of the elements of the Formula Rate that are affected by the change or changes in one or more Fundamental Predicates to ensure that the Formula Rate operates together to produce a just, reasonable and not unduly discriminatory or preferential Formula Rate. If there is a change to the Fundamental Predicates that requires a change to the Formula Rate to ensure that the Formula Rate operates to produce a just, reasonable and not unduly discriminatory or preferential Formula Rate, Duke Energy Carolinas will effectuate the change in the Formula Rate through a filing under Federal Power Act Section 205.
- d) <u>Information Requests</u>. Unless such period is extended with the written consent of Duke Energy Carolinas or is extended as provided for in Section 3.e of these Protocols to resolve discovery disputes, any Customer shall have up to 90 days after each annual Publication Date to serve reasonable information requests on Duke Energy Carolinas. Such information requests shall be limited to what is reasonably necessary to determine
 - (i) whether Duke Energy Carolinas has calculated the Annual Update under review properly and in accordance with these Protocols;

- (ii) whether Duke Energy Carolinas has applied the Formula Rate according to its terms, including the procedures in these Protocols;
- (iii) whether the costs included in the Annual Update are properly accounted for (e.g., recordable and recorded in the appropriate accounts) under FERC's USoA and otherwise consistent with Duke Energy Carolinas' accounting policies, practices, or procedures;
- (iv) whether the costs are prudent; and
- (v) whether accounting changes or changes in the USoA or in the requirements and contents of the FERC Form No. 1 have affected application of the Formula Rate, and if so, whether the effect of those changes has been properly reflected in the Annual Update.

Such information requests shall not solicit information that solely relates to inputs that are Stated Values or cost allocation methods that have been determined by any final order by the FERC pursuant to FPA Sections 205, 206 or 306 with respect to Duke Energy Carolinas (including an order approving a settlement), except that such information requests shall be permitted if they seek to determine whether there have been material changed circumstances and to confirm consistency with the applicable order (and associated settlement, if any).

- e) Response Period. Duke Energy Carolinas shall respond to information requests pertaining to the Annual Update within 15 business days of receipt of such requests unless impracticable, in which case, Duke Energy Carolinas shall, within such 15-day period, notify the party requesting information of the delay and provide an estimated date for the responses.
- f) <u>Discovery Master</u>. To the extent Duke Energy Carolinas and any Customer are unable to resolve disputes related to information requests submitted in accordance with these Annual Review Procedures, Duke Energy Carolinas or any Customer may petition the FERC to appoint an Administrative Law Judge as a discovery master. The discovery master shall have the power to issue binding orders to resolve discovery disputes and compel the production of discovery, as appropriate, in accordance with the Annual Review Procedures and consistent with the FERC's discovery rules; provided, however, that the Review Period set forth in Section 3.b of these Protocols and the period for discovery provided for in Section 3.d of these Protocols will be tolled during the pendency of any discovery dispute submitted to the discovery master, such tolling period to end ten business days after the date on which the order issued by the discovery master provides for resolution of the discovery dispute pursuant to this subsection.
- g) <u>Use of Information</u>. All information and correspondence produced pursuant to these Protocols may be included in any Preliminary or Formal Challenge, in any other proceeding concerning the Formula Rate initiated at FERC pursuant to the FPA, or in any proceeding before a U.S. Court of Appeals to review a FERC decision.
- h) No Implied Limitations on FPA Rights; Standard of Review. Except as specifically set forth in these Protocols, these Protocols in no way limit the rights

of Duke Energy Carolinas or any Customer to initiate a proceeding at FERC at any time with respect to the Formula Rate, any Stated Value or any Annual Update consistent with the party's full rights under the Federal Power Act, including Sections 205, 206 and 306, and FERC's regulations. Except with respect to proceedings to modify any provisions of the Formula Rate which reflect Specific Settlement Provisions¹¹, in any proceeding initiated sua sponte by the Commission or by a party or parties (other than Duke Energy Carolinas) seeking to modify any portion of the Formula Rate or Stated Value in any respect, the party seeking such modification shall bear the burden of proving that the portion of the Formula Rate or Stated Value that the party seeks to change is no longer just and reasonable without such modification and that the proposed modification is just and reasonable. Except with respect to proceedings to modify any provisions of the Formula Rate which reflect any Specific Settlement Provisions, in any proceeding initiated by Duke Energy Carolinas seeking to modify any portion of the Formula Rate or Stated Value in any respect, Duke Energy Carolinas shall bear the burden of proving that the proposed modification is just and reasonable. In any proceeding seeking to modify any provisions of the Formula Rate which reflect any Specific Settlement Provisions, the initiating party shall bear the burden of proving that the application of such provisions, absent the proposed modification, seriously harms the public interest as set forth in Morgan Stanley Capital Group, Inc. v. Public Util. Dist. No. 1 of Snohomish, Washington, 128 S. Ct. 2733, 171 L. Ed. 2d 607 (2008); see also United Gas Pipeline Co. v. Mobile Gas Service Corp., 350 U.S. 348 (1956). Notwithstanding the foregoing, Duke shall make a Section 205 filing to terminate recovery of GridSouth costs and eliminate the Stated Value for GridSouth from the Formula Rate effective as of the last day of the applicable amortization period (i.e., the period underlying the annual amortization amounts that are the initial Stated Values for this item), and such filing by Duke Energy Carolinas shall be subject to the just and reasonable standard of review.

Section 4: Resolution of Challenges

- a) <u>Challenge in Writing</u>. A party wishing to raise a Preliminary Challenge with Duke Energy Carolinas (hereinafter, "Challenging Party") shall submit its challenge in writing to Duke Energy Carolinas.
- b) <u>Duke Questions</u>. Duke Energy Carolinas shall have the right to ask the Challenging Party questions about the Preliminary Challenge. Such questions shall be submitted to the Challenging Party within ten (10) days after receiving the Preliminary Challenge, and responses shall be due ten (10) days after that.
- c) <u>Response to Challenge</u>. Within fifteen (15) days after receiving such Preliminary Challenge or after receiving responses to questions pursuant to Section 4.b, Duke

"Specific Settlement Provisions" shall mean the provisions of Article II of the Settlement Agreement which is filed in this proceeding.

Energy Carolinas shall provide a written response to the Challenging Party. Such written response shall state whether Duke Energy Carolinas agrees or disagrees with the position raised by the Challenging Party, and what, if any, modifications to the Annual Update Duke Energy Carolina agrees to make in order to resolve the Preliminary Challenge. If Duke Energy Carolinas disagrees with the Preliminary Challenge, it shall include in its written response a statement of its position and any documentation that Duke Energy Carolinas believes supports its position.

- d) <u>Customer Questions</u>. The Challenging Party shall have the right to ask Duke Energy Carolinas questions about its response provided pursuant to Section 4.c. Such questions shall be submitted to Duke Energy Carolinas within ten (10) days after receiving Duke's response to the Preliminary Challenge, and Duke's responses to those questions shall be due ten (10) days after that.
- e) <u>Formal Challenge</u>. If Duke Energy Carolinas and a Challenging Party have not resolved a Preliminary Challenge to an Annual Update within 30 days after receipt of Duke Energy Carolinas' written response to the Preliminary Challenge or, if applicable, its responses to questions regarding its written response, the Challenging Party shall have the right to make a Formal Challenge with the FERC, which shall be served on Duke Energy Carolinas by electronic service on the date of such filing. However, there shall be no need to make a Formal Challenge or to await conclusion of the time periods in Section 3 and 4 if the FERC already has initiated *sua sponte* a proceeding to consider the Annual Update.
- Annual Update or in response to a Formal Challenge, Duke Energy Carolinas shall bear the burden of proving that it has properly calculated the challenged Annual Update and reasonably applied the terms of the Formula Rate for that year's Annual Update (including, but not limited to, consistency with the Fundamental Predicates); and of demonstrating that it has reasonably adopted and applied a change in Duke Energy Carolinas' accounting policies, practices or procedures; provided, however, that challenges to the prudency of costs shall be subject to the then-existing criteria and evidentiary burdens established in FERC policy applicable to prudence challenges in a Section 205 context.
- g) No Implied Limitation on FPA Rights. Nothing herein shall be deemed to limit in any way (i) the right of Duke Energy Carolinas to file unilaterally, pursuant to FPA Section 205 and FERC's regulations thereunder, to change the Formula Rate or any of its inputs (including, but not limited to, Stated Values or to replace the Formula Rate with a stated rate; or (ii) the right of any Customer to request changes to the Formula Rate pursuant to FPA Section 206 and FERC's regulations thereunder.
- h) Adjustments to True-Up Amount and Estimated Billing Rates. The initiation of a Preliminary Challenge or a Formal Challenge will not obligate Duke Energy Carolinas to adjust either the True-Up Amount or the Estimated Billing Rates. However, resolution of Preliminary or Formal Challenges may necessitate

- adjustments to the Formula Rate input data for the applicable Annual Update as set forth in Section 5(c).
- i) Formula Rate Changes Due to Changes in Fundamental Predicates. If the application of the Formula Rate in light of any change to any of the Fundamental Predicates is found by FERC to be unjust, unreasonable, and/or unduly discriminatory or preferential, then the calculation of costs incurred during the year then under review, and any subsequent years, and associated True-Ups, shall not include such change, and shall include any such other remedy prescribed by FERC, including adjustments to the Formula Rate to ensure that the Formula Rate continues to operate in a manner that is just, reasonable, and not unduly discriminatory or preferential.

Section 5: Corrections and Changes Pursuant to Annual Update Process

- a) <u>Corrections to Annual Update</u>. If Duke Energy Carolinas determines or concedes that corrections to the Annual Update are appropriate, Duke Energy Carolinas shall promptly notify the Customers, file a correction to the Annual Update with FERC as an amended informational filing and post the correction on its OASIS.
- b) Review of Corrections. Interested parties shall have the right to review and challenge the corrections. The performance dates under Sections 3 and 4 of these Protocols shall apply to review and challenge, except that these dates shall run from the posting date(s) for each of the corrections. The scope of review and challenge shall be limited to the portions of the Annual Update affected by the corrections.
- c) Adjustments to True-Up Amount and Estimated Billing Rates. Any increase or decrease in the ATRR that results from one of the following events shall be reflected as an increase or reduction in the True-Up Amount and the Estimated Billing Rates (with applicable interest) commencing within thirty (30) days following a determination of the need for the adjustment or such later date as FERC may direct: (i) revisions to Duke Energy Carolinas' accounting and reporting of its costs to correct errors; and/or (ii) revisions to Duke Energy Carolinas' accounting and reporting of its costs to reflect the resolution of Preliminary Challenges or Formal Challenges by FERC order or by settlement or as the result of any FERC proceeding to consider the Annual Update.
- d) <u>Survival of Protocols</u>. In the event Duke Energy Carolinas seeks to replace the Formula Rate with stated rates in a Section 205 filing, the provisions of these Protocols, including the obligation to true-up the ATRR, shall remain applicable notwithstanding FERC's acceptance of the stated rate filing for as long as necessary to ensure that any over/under recoveries required to accommodate the final True-Up for the last effective Billing Year under the Formula Rate can be refunded/surcharged.
- e) <u>Service of 205 Actions</u>. Duke Energy Carolinas shall electronically serve any filing, including unlocked and non-read only (i.e., manipulable and with the

formulas intact) versions of any supporting spreadsheets, in which Duke Energy Carolinas seeks to modify the Formula Rate, or to adopt a stated rate, on all Customers and on all affected state commissions.

RATE IMPLEMENTATION TIMELINE

2011	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
		F	ile Estimati	ed Billing Ro	ites May 15	Begin billi	ng June 1									
								Billin	g Year 2011	l-2 01 2	*					
						Estimated	Billing Rat	tes = Estim	ated based	on 2010 c	alendar ye	ar actuals + estimate	d			
						2011 capit	al addition	S								
2012	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	0ct	Nov	Dec				
		File ATRR	& Estimati	ed Billing Ro	ates May 15	Begin billi	ng June 1									
		Billing Year 2011-2012					Billing Year 2012-2013									
		1				Estimated Billing Rates = Estimated based on 2011 cale					alendar ye	ar actuals + estimate	d			
						2012 capit	al addition	s								
						True-up A	djustment	= Actual 2	011 cal en d	ar year ATI	RR compar	ed to actual amount o	ollect			
						from custo	mers, spr	ead evenly	over 12 m	onth perio	od .					
2013	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
		File ATRR	& Estimat	ed Billing Ro	ates May 15	Begin billi	ng June 1									
		20.000047	g Year 20:	and the same of th	,			Billin	year 2013	-2014						
					· · · · · · · · · · · · · · · · · · ·	Estimated	Billing Ra	ar actuals + estimate	d							
						2013 capit										
						True-up Adjustment = Actual 2012 calendar year ATRR compared to actual										
							Control of the Contro		over 12 m							

EXHIBIT B TO SCHEDULE 10-B DUKE ENERGY CAROLINAS FORMULA RATE TEMPLATE

Duke Energy Carolinas, LLC OATT Transmission Rate Formula Template Using Form 1-Data Utilizing Historic Cost Data for (Historic Years) with Year-End Average Balances Summary of Rates

Page 1 of 6

Summary of Rates							
Line	Reference						
1 Gross Revenue Requirement	Page 3, Line 33	\$	-				
Revenue Credits:							
2 Acct 454 - Allocable to Transmission	Attachment G	\$	-				
3 Acct 456.1 - NF+STF x/Ancillaries, GridSouth	Attachment I	\$	-				
4 Total Revenue Credits		\$	-				
5 Interest Disbursed w/ Network Prepay Refunds	Attachment J	\$	-				
6 Revenue Requirement - Customer Owned Facilities		\$	-				
7 GridSouth System Level for Wholesale Amount (Note N)	Attachment K	\$	-				
8 Transmission Incentives	Note T	\$	-				
9 Total Transmission Revenue Requirement	(Line 1 - Line 4 + Line 5 + Line 6 + Line 7+ Line 8)	\$	-				
10 Transmission Loss Factor	(1- Loss factor stated in OATT)		0%				
11 Revenue Tax Factor	Note U		1				
12 Annual Transmission Revenue Requirement	(Line 9 / Line 10)/Line 11	\$	-				
13 Divisor - 12 Month Average Transmission Peak	Attachment K, Line 10 Total KW/12		-				
14 PTP Trans. Rev Req't Rate \$/kW - Year	Line 12 / Line 13 / 1000	\$	-				
15 PTP Demand Rate \$/kW - Month	Line 14/12	\$	-				
16 Weekly Firm/Non-Firm PTP Rate \$/kW - Week	Line 14/52 weeks	\$	-				
Daily Firm/Non-Firm PTP Rates (\$/kW):							
17 On-Peak Days	Line 16/5 days	\$	-				
18 Off-Peak Days	Line 16 / 7 days	\$	-				
Non-Firm Hourly PTP Rates (\$/kW):							
19 On-Peak Days	Line 17 / 16hrs	\$	-				
20 Off-Peak Days	Line 18/ 24hrs	\$	-				

Duke Energy Carolinas, LLC Page 2of 6 Fansmission Rate Formula Template Using Form 1-Data

Duke Energy Carolinas, LLC OATT Transmission Rate Formula Template Using Form 1-Data Utilizing Historic Cost Data for (Historic Years) with Year End Average Balances Development of Rate Base

						OATT
Line Rate Base:	Reference	Beginning Balance	Ending Balance	Average	Allocator	Amount
Gross Plant In Service: (Note A and I)						
1 Production Plant	204.46.b, 205.46.g	\$ -		\$ -	N/A	
1a Production Contra AFUDC	Attachment P	\$ -		\$ -	N/A	
1b Eliminate Production ARO	205.15g, 205.24g, 205.34g, 205.44.g	\$ -	,	\$ -	N/A	
1c Electric Plant Purchased (Sold)	206.101.b, 207.101.g	\$ -	*	ş -	N/A	
2 Transmission Plant 2a Transmission Contra AFUDC	207.58.b, 207.58.g Attachment P	\$ - \$ -	*	\$ - \$ -	TP - \$	-
2a Transmission Contra AFUDC 3 Distribution Plant	206.75.b, 207.75g	\$ -	,	\$ - \$ -	N/A	-
4 General Plant	206.75.b, 207.75g 206.99.b, 207.99.g	\$ - \$ -		, . 5 -	OATT Labor - \$	
4a Eliminate General ARO	206.98b, 207.98g	\$ -		, ,	OATT Labor - \$	
4b Eliminate System Operating Center (SOC)	Schedule 1 Line 1	š -	· ·	š -	OATT Labor - \$	
5 Intangible Plant	204.5.b, 205.5.g	š -	š -	š -	Attachment L S	
6 Total Gross Plant		\$ -	\$ -	\$ -	GP= - \$	-
Accumulated Depreciation						
7 Production Depr. Reserve	219.20-24.b	\$ -	\$ -	ş -	N/A	
7a Production Contra AFUDC	Attachment P	\$ -	\$ -	ş -	N/A	
7b Eliminate Production ARO Accum Deprediation	Attachment P (Note W)	\$ -	\$ -	\$ -	N/A	
8 Transmission Depr. Reserve	21.9.25.b	\$ -	\$ -	\$ -	TP - \$	-
8a Transmission Contra AFUDC	Attachment P	\$ -	\$ -	\$ -	TP - \$	
9 Distribution Depr. Reserve	21.9. 26. b	\$ -	\$ -	\$ -	N/A	
10 General Depr. Reserve	219. 28. b	\$ -	\$ -	\$ -	OATT Labor - \$	-
10a Eliminate General ARO Accum Deprediation	Attachment P (Note W)	\$ -	\$ -	\$ -	OATT Labor - \$	
10b Eliminate SOC Accum Depreciation	Line 10 * Schedule 1 Line 32	\$ -		\$ -	OATT Labor - \$	
11 Intangible Depr. Reserve	200.21.c	\$ -		\$ -	Attachment M _ \$_	-
12 Total Accumulated Depr.		\$ -	\$ -	\$ -	\$	-
Net Plant in Service						
13 Net Production Plant	Line (1:1c) - Line (7:7b)	\$ -		\$ -	\$	
14 Net Transmission Plant	Line (2: 2a) - Line (8:8a)	\$ -		ş -	\$	-
15 Net Distribution Plant	Line 3 - Line 9	\$ -		\$ -	\$	-
16 Net General Plant	Line (4:4b) - Line (10:10b)	\$ -	*	\$ -	\$	
17 Net Intangible Plant	Line 5 - Line 11	\$ -		\$ -	. \$	· .
18 Total Net Plant		\$ -	\$ -	\$ -	NP= - \$	-
Adjustments to Rate Base - Deferred Taxes						
19 ADIT- 190	234.18b, 234.18 c	\$ -		\$ -	Attachment A \$	-
20 ADIT - 282 (Note O)	274.9.b, 275.9.k	\$ -		\$ -	Attachment B \$	
21 ADIT- 283	276.19.b, 277.19.k		<u> </u>	\$ -	. Attachment C _\$	-
22 Total Deferred Tax Adjustments		\$ -	\$ -	\$ -	\$	-
Adjustments to Rate Base						
23 Accoum Provision for P&B (182.3 & 228.3)	Attachment D and Attachment E	\$ -		\$ -	OATT Labor - \$	-
24 Pension Cost Adj (182.3 & 253.047)	Attachment D and Attachment F	\$ -		\$ -	OATT Labor - \$	
25 General Liability daim (182.3)	232.44.b, 232.44.f	\$ -		\$ -	\$	
26 Accum Provision for I&D (228.2)	112.28c	\$ -		\$ -	<u>\$</u>	<u> </u>
27 Net Rate Base Adjustments		\$ -	\$ -	\$ -	\$	•
28 Plant Held For Future Use	Note B	\$ -	\$ -	ş -	\$	-
29 CWIP for Transmission Projects	Note P	\$ -	\$ -	s -	50.000000 \$	-
30 Unamortized Abandoned Plant	Note Q	\$ -		ş -	TP - \$	-
Rate Base Adjustment - Network Upgrade Prepayment Balance	es (Note J)					
31 Balance - Network Prepayments	Attachment J	\$ -	\$ -	ş -	D/A (1.000000) \$	-
32 Accrued Interest Balance	Attachment J	š -		· \$ -	D/A 1.000000 \$	
32a Reversal of Anson AFUDC per Settlement	Attachment J	· -	\$ -	· \$ -	D/A 1.000000 \$	
33 Total Network Upgrade Prepayment Adjustments		\$ -	\$ -	\$ -	\$	-
Working Capital						
34 Cash Working Captial (1/8 O&M)	Page 3, Line 14 /8	\$ -	\$ -	ş -	TP - \$	=
35 Materials & Supplies - Transmission	227.8.€	\$ -		\$ -	TP - \$	
36 Materials & Supplies - Stores Expense	227.16.c	\$ -		\$ -	OATT Labor - \$	
37 Prepayments	13 Month Average Balance used	\$ -	\$ -	ş	GP - \$	-
38 Total Working Capital		\$ -	\$ -	\$ -	\$	-
39 Rate Base (Sum of lines 18, 22, 27, 28, 29, 30, 33 and 38)		\$ -	\$ -	ş -	\$	-

Duke Energy Carolinas, LLC OATT Transmission Rate Formula Template Using Form 1-Data Utilizing Historic Cost Data for (Historic Years) with Year-End Average Balances Development of Revenue Requirement

Page 3 of 6

OATT

							OATT
Line	Expenses	Reference	Endin	g Balance	Allocator		Amount
1	O&M Expense	321,112,b	\$				
2	TOTAL Transmission Expenses Less Account 561.1, 561.2, 561.3, 561.4 & 565	321.85.b:321.88.b; 321.96.b	\$				
2a	Plus Labor Associated with Transmission Control Center (TCC) booked in above accounts	Schedule 1, Line 8a	\$				
3		Scrieddie 1, Line oa	Ś	<u> </u>	TP	0.0000000 S	
,	Net Hurshission Oday		,			0.000000 3	
4	Total Admin & General Expenses (less PBOP expense)	323.197.b - Line 13	\$	-			
5		323.185.b	\$	-			
6	Less (928) Regulatory Commission Expense	323.189.b	\$	-			
7	Less (930.1) General Advertising Expenses	323.191.b	\$	-			
8	Less Industry Dues, R&D and NucAssocExp	335.1-3.b	\$	-			
9	Net Labor Related A&G		\$	-	OATT Labor	0.000000 \$	-
			_				
10		323.185.b	\$	-	GP	0.0000000 \$	-
10a	Less Property Insurance allocated to SOC	Line 10 * Schedule 1 Line 35	\$	-	GP	0.0000000 \$	-
11		350.11.b	\$ \$	-	TP D/A	0.000000 \$	-
12	0-1	Notes	\$ \$	-	OATT Labor	0.0000000 \$	
13 13a	·	Note L Note L	\$ \$	-	OATT Labor	0.0000000 \$	-
138	Conforming Adj2009 PBOP Expense	Note L	\$	-	OATTE	0.000000 \$	-
14	Total O&M (Sum of lines 3, 9, and 10 thru 13)					\$	-
	Depreciation Expense						
15	Transmission Depr. Expense	336.7.f	\$	-	TP	0.000000 \$	=
15a	Add Transmission Contra AFUDC	Attachment P	\$	-	TP	0.000000 \$	=
15b	Amortization of Abandoned Plant	Note Q	\$	-	TP	0.000000 \$	-
16	General Depr. Expense	336.10.f	\$	-	OATT Labor	0.000000 \$	-
16a	Less General Depreciation allocated to SOC	Line 16 * Schedule 1 Line 35	\$	-	OATT Labor	0.000000 \$	-
17	Intangible Amortization	336.1.f	\$	-		\$	-
18	Extraordinary Property Loss	Note R	\$	-	TP	0.000000 \$	
19	Total Depreciation		\$	-		\$	-
	Taxes Other Than Income (Note C)						
20	Labor Related	263.i, 263.1.i	\$	_	OATT Labor	0.000000 S	_
21	Property Related	263.i - Note D	Ś	-	GP	0.000000 \$	_
21a	Less Property Related allocated to SOC	Line 20 * Schedule 1 Line 32	\$	-	GP	0.000000 \$	-
22	Total Other Taxes		\$	-		\$	-
	Return						
23	Rate Base (Page 2, Line 39) * Rate of Return (Page 4, Line 24)					\$	-
	Income Taxes						
24	N C/SC Composite	Note E		0.00%			
25				0.00%			
26				0.00%			
27	Tax Rev. Req't Factor = T/(1-T) * (1 - Wtd.Debt.Cost/R)			0.00%			
28		255.04		1.000			
29		266.8.f	\$	-			
30			\$ \$	-	ND	\$ 0.000000 \$	-
31	ITC Adjustment (Line 28 * Line 29) Total Income Taxes		>		NP	0.000000 2	
32	TOTAL INTOINE LAKES					,	-
33	TOTAL REVENUE REQUIREMENT (Sum of Lines 14, 19, 22, 23, and 32)					\$	-

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Duke Energy Carolinas, LLC OATT Transmission Rate Formula Template Using Form 1-Data Utilizing Historic Cost Data for (Historic Years) with Year-End Average Balances Supporting Allocation Factor and Return Calculations

Line		Reference			Total
7	Fransmission Plant Included in OATT Rate				
1	Total Transmission Plant	Page 2, Lines 2 & 2a		\$	-
2	Less: Gen. Step-up Transformers and Interconnection Facilities	Note F		\$	-
3	Less: Transmission under 44KV	423.3.16.		\$	-
3a	Less: New Radial Lines	Note X		\$	-
4	Trans Plant for OATT Rate			\$	-
5 1	TP Allocator (Line 4/Line 1)	Note G			0.0000%
ı	abor Allocation Factor				
6	Total Direct Payroll - O&M Labor	355.65.b, Note H		\$	-
7	A&G Labor	35 4.27 .b, N ote H		\$	-
8	Adjusted Labor	(Line 6 - Line 7)		\$	-
9	Transmission O&M Labor	354.21.b		\$	-
107	Frans Labor Factor (Line 9/Line 8)				0.00000%
11 0	DATT Labor Allocator (Line 5*Line 10)				0.00000%
F	Return and Capitalization:				
12	Long Term Interest Expense	117.62-67.c		\$	-
13	Net Long Term Interest Expense			\$	-
14	Long Term Debt	112.24.c		\$	-
15	Less Loss on Reacquired Debt	111.81.c		\$	-
16	Plus Gain on Reacquired Debt	113.61.c		\$	-
17	Net Long Term Debt			\$	-
(Common Stock Development				
18	Proprietary Capital	112.16.c		\$	-
19	Less Account 216.1	112.12.c		\$	-
20	Common Stock			\$	-
21	Total Capitalization (Sum Lines 17 and 20)			\$	-
9	Summary Cap Structure (Note S)	<u>Weight</u>	<u>Cost</u>	We	ighted Cost_
22	Long Term Debt	0.00%	0.00%		0.00%
23	Common Stock (Note V)	0.00%	10.20%		0.00%
24	Overall Return:				0.00%

Page 5 of 6

Duke Energy Carolinas, LLC OATT Transmission Rate Formula Template Using Form 1-Data Utilizing Historic Cost Data for (Historic Years) with Year-End Average Balances Explanatory Notes

NOTES:

- (A) Contra AFUDC adjustments may relate to inclusion of CWIP in rate base for retail jurisdictions but not wholesale,
- or inclusion of CWIP in rate base for wholesale jurisdiction but not retail.
- (B) FERC Form 1 page 214 excluding non-transmission related items
- (C) Excludes all income and gross receipts taxes. Labor related other taxes include FICA and unemployment taxes. Property related taxes include county and local property, highway use, and intangible taxes.
- (D) Includes percentage of SC Franchise tax that is related to property
- (E) Determined by annual apportionment factors provided by Tax Department
- (F) Analysis of Company records of Interconnection facilities built after March 15, 2000.
- (G) The allocator "TP" is the percent of gross transmission plant that is OATT related, i.e., after removal of generator step-up and interconnection investments. It also serves as the basis for deriving the OATT transmission related labor from the Form 1 reported values.
- (H) Excludes from the payroll reported on Form 1 page 354 amounts for which Duke Energy Carolinas is reimbursed by the Catawba Joint Owners
- (I) Amounts in Gross Plant that are not provided by investor funds are excluded. These include FAS 109 and ARO
- (J) Network upgrade balance prepayments is a reduction to rate base, accrued interest balance is an increase to rate base and Anson AFUDC reversal is a reduction.
- (K) Duke Energy Carolinas will retain 50% of net revenues consistent with Pacific Gas and Electric Company, 90 FERC ¶ 61,314.
- (L) PBOP Expense stated at the 2009 expense level and will only be modified with a full section 205 filing at FERC.
- (M) The wholesale allocation factor for GridSouth will be set at the 2009 Transmission peak.
- (N) Beginning June 1, 2018 and each year thereafter, the value of the GridSouth amortization at Attachment Kline 4 will be zero.
- (O) The Company only functionalizes Account 282 during annual tax return process. Will use most recent annual tax return reports to allocate account balance to correct functions.
- (P) DEC must make a full section 205 filing at FERC before inputting or changing amounts associated with CWIP
- (Q) DEC must make a full section 205 filing at FERC before inputting or changing amounts associated with abandoned plant
- (R) DEC must make a full section 205 filing at FERC before inputting or changing amounts associated with extraordinary property loss
- (S) ROE will be supported in the original filing and no change in ROE will be made absent a full section 205 filing at FERC.

 Depreciation rates shown are fixed until changed as the result of a 205 filing at FERC.
- (T) DEC must make the appropriate filing at FERC before inputting or changing amounts associated with Transmission Incentives
- (U) Revenue Tax Rate shall equal 1.0 minus the applicable revenue or gross receipts tax rate(s) to which Duke is subject for the revenue or gross receipts that Duke receives under this agreement. This is subject to change upon the filing of a full section 205 rate case.
- (V) The equity component of the capital structure will be capped at the 2009 year end level of 52.4%.
 A full section 205 filing at FERC is required to change this stated value.
- (W) Account 108.499 from general ledger
- (X) "New Radial Facilities" are lines and facilites that (1) are radially constructed, (2) are placed in service after the effective date of this formula rate, and (3) do not meet the Commission's standard for treating the lines and facilities as integrated with Duke Energy Carolinas' transmission system. New Radial Facilities built for or by a Customer will be presumed to provide benefits to Duke Energy Carolinas' integrated network if such facilities would be treated as part of Duke Energy Carolinas' integrated network if built exclusively to provide service to Duke Energy Carolinas' retail customers.

Duke Energy Carolinas, LLC

OATT Transmission Rate Formula Template Using Form 1-Data
Utilizing Historic Cost Data for (Historic Years) with Year-End Average Balances
Schedule 1 Duke Energy Carolinas Revenue Requirements

Page 6 of 6

S Average Balance			 	. .	% 0	•	1		 	ν. ν.	%0000'0 - -	%0000°0 -
Beginning Balance Ending Balance												
Reference Attachment S1 Attachment L Page 2, Line 10b Attachment M Sum (Line 1: Line 4)	1/8 * [Une 13 - Une 9-Line 10-Line 12] Line 5 + Line 6	321.85.b:321.88.b Attachment Q Attachment Q Attachment Q Page 3, Line 16 a Attachment N Page 3, Line 10a	Line 7 * Page 4, Line 24 Line 14 * Page 3, 5 Line 27	Sum Line 13 + Line 14 + Line 15 Attachment I	(1- Loss factor stated in OATT)	(Line 16 + Line 17) / Line 18	Page 1, Line 14	(tine 19 / tine 20 /1000) (tine 21/12) (tine 21/52) (tine 21/56) (tine 21/8760)	Line 23 / 5 days Line 23 / 7 days	Une 26/16hrs Une 27/24hrs	une 1 Rate Page 2 Line 4 Line 30 / Line 31	ine 1 Rate Page 2 Une 6 - Une 4b Line 33 / Line 34
Line 1 System Operating Center (SOC) Gross Plant 2 SOC Intangible Plant 3 Less: SOC Accumulated Depreciation Gross Plant 4 Less: SOC Accumulated Depreciation Intangible Plant 5 Total Net SOC	6 Working Capital 7 Total Rate Base	8 Total Load Dispatch & Scheduling Expense-Accounts 561.1 - 561.4 8c Less: Costs Associated with TCC 8b Less: NERC/SERC Fees related to Retail Load 8c Less: Scheduling Fees Associated with Off-system Sales 9 Depredation Expense on SOC 10 Amortization Expense on SOC 11 Property Insurance on SOC 12 Property Related Taxes Other than Income on SOC 13 Total Expenses	14 Return on Rate Base 15 Income Taxes	16 Total Revenue Requirement 17 Less: Non- Firm PTP Service Credit (prior year Sched 1 revenue from non-firm PTP transactions)	18 Transmission Loss Factor	19 Schedule 1 Annual Revenue Requirement	20 12 Month Average Transmission Peak	21 Annual Point to Point Rate \$/kW/Year 22 Annual Point to Point Rate \$/kW/mth 23 Annual Point to Point Rate \$/kW/Week 24 Annual Point to Point Rate \$/kW/Day 25 Annual Point to Point Rate \$/kW/Hour	Daily Firm/Non-Firm PTP Rates (\$/kW): 26 On-Peak Days 27 Off-Peak Days	Non-Firm Hourly PTP Rates (\$/kW): 28 On-Peak Days 29 Off-Peak Days	SOC Allocation Factor Calculation 30 SOC Gross Plant 31 Gross General Plant 32 SOC GP Allocation Factor	33 SOC Gross Plant 34 System Gross Plant (Induding SOC) 35 SOC System Allocation Factor

Attachment A

Duke Energy Carolinas, LLC Transmission Rate Formula Support Utilizing Historic Cost Data for (Historic Years) with Year-End Average Balances Deferred Income Tax Balances - GL Account 190

		GL Balance 12/31/2008 <u>Dr(Cr)</u>	GL Balance 12/31/2009 <u>Dr(Cr)</u>			Average <u>Balance</u>	Alloca <u>Fact</u>	OATT Amount		
Amounts Not Allocated to Transmission	\$	-	\$	_	\$	-	Other	0.000000	\$	_
123R stock option	\$	-	\$	-	\$	-	OATT Labor	0.000000	\$	-
Employee Benefits	\$	-	\$	-	\$	-	OATT Labor	0.000000	\$	-
Environmental	\$	-	Ş	-	\$	-	NP	0.000000	\$	-
FAS 112	\$	-	\$	-	\$	-	OATT Labor	0.000000	\$	-
Hedging	\$	-	\$	-	\$	-	NP	0.000000	\$	-
OPEB	\$	-	\$	-	\$	-	OATT Labor	0.000000	\$	-
Original Issue Discount	\$	-	\$	-	\$	-	OATT Labor	0.000000	\$	-
Phantom Stk Awards	\$	-	\$	-	\$	_	OATT Labor	0.000000	\$	-
Prepaid Insurance	\$	-	\$	-	\$	_	OATT Labor	0.000000	\$	-
R & D Tax Credit	s	_	s	-	Ś	-	OATT Labor	0.000000	s	-
Severance Accrual	s	-	s	_	Ś	_	OATT Labor	0.000000	s	-
Surplus Inventory Write-off	Ś	_	s	-	Ś	_	NP	0.000000	Ś	-
Surplus Inventory Write-off - Current	\$	-	\$	-	\$	-	NP	0.000000	\$	-
Total GL Account 190	\$		\$	-	\$	-			\$	-

Duke Energy Carolinas, LLC Transmission Rate Formula Support

Deferred Income Tax Balances - GL Account 190 from Parent Company books

	GL Balance 12/31/2008 <u>Dr(Cr)</u>		GL Balance 12/31/2009 <u>Dr(Cr)</u>		Average <u>Balance</u>	Allocat <u>Fact</u> e	OATT Amount		
FAS 112	\$ -	\$	-	\$	-	OATT Labor	0.00000	\$	-
OPEB	\$ =	\$	=	\$	Ξ	OATT Labor	0.00000	\$	-
Total GL Account 190 - Parent Company	\$ -	\$	-	\$	-			\$	-

Duke Energy Carolinas, LLC Transmission Rate Formula Support Utilizing Historic Cost Data for (Historic Years) with Year-End Average Balances Deferred Income Tax Balances - GL Account 282

Attachment B

	GL Balance 12/31/2008 <u>Dr(Cr)</u>			GL Balance 12/31/2009 <u>Dr(Cr)</u>	Average <u>Balance</u>	Alloca <u>Fac</u> t	OATT Amount		
PP&E - Production & Distribution	\$		\$	-	\$ -	Production	0.000000	\$	-
PP&E - Transmission	\$	-	\$	-	\$ -	TP	0.000000	\$	-
PP&E - General	\$	-	\$	-	\$ -	OATT Labor	0.000000	\$	-
PP&E -Intangible	\$	-	\$	-	\$ -	OATT Labor	0.000000	\$	-
Total GL Account 282	\$		\$		\$ -			\$	

Duke Energy Carolinas, LLC Attachment C

Transmission Rate Formula Support Utilizing Historic Cost Data for (Historic Years) with Year-End Average Balances Deferred Income Tax Balances - GL Account 283

	GL Balance 12/31/2008 <u>Dr(Cr)</u>		GL Balance 12/31/2009 <u>Dr(Cr)</u>			Average <u>Balance</u>	Alloca <u>Fac</u> t	OATT Amount		
Amounts Not Allocated to Transmission	\$	-	\$	-	\$	-	Other	0.000000	\$	-
Auction Rate securities	\$	-	\$	-	\$	-	NP	0.000000	\$	-
Bond Loss Amoritization	\$	-	\$	-	\$	-	NP	0.000000	\$	-
FAS 87 - employee qualified plan	\$	-	\$	-	\$	-	OATT Labor	0.000000	\$	-
Prepaid Insurance	\$	-	\$	-	\$	-	OATT Labor	0.000000	\$	-
Self Insurance	\$	-	\$	-	\$	-	OATT Labor	0.000000	\$	-
Total GL Account 283		-	\$	-	\$	-			\$	-

Duke Energy Carolinas, LLC Transmission Rate Formula Support

Deferred Income Tax Balances - GL Account 283 (Per Parent Company's books for PEC)

	12/	GL Balance 12/31/2008 <u>Dr(Cr)</u>		GL Balance 12/31/2009 <u>Dr(Cr)</u>	Average <u>Balance</u>	Alloca <u>Fact</u>	OAT	「Amount	
FAS 87 - employee qualified plan	\$	-	\$	-	\$ -	OATT Labor	0.000000	\$	-

\$ -

Attachment D

Duke Energy Carolinas, LLC Transmission Rate Formula Support

Utilizing Historic Cost Data for (Historic Years) with Year-End Average Balances
Other Deferred Debits - Acct 182 (Parent Company Books - Accounts Applicable to DEC)

	GL 12,		GL Balance 2/31/2009 <u>Dr(Cr)</u>		Average <u>Balance</u>	Alloca <u>Fact</u>	OATT Amount			
OPEB Pension Cost Adi	\$ \$	-	\$ \$	-	\$ \$	-	OATT Labor OATT Labor	0.000000	s s	-
Total GL Account 182	\$		\$		\$	_			s	_

Duke Energy Carolinas, LLC Transmission Rate Formula Support

Other Regulatory Assets - Acct 182.3

		GL Balance 12/31/2008 <u>Dr(Cr)</u>	GL Balance 12/31/2009 <u>Dr(Cr)</u>	Average <u>Balance</u>	Alloca <u>Fac</u> t		<u>OAT</u>	T Amount
Gridsouth Investment NC Retail	s	_	\$ -	\$ -	Other	0.000000	s	-
FAS 109	s	_	\$ -	\$ -	Other	0.000000	\$	-
ARO	s	_	\$ -	\$ -	Other	0.000000	\$	-
Vacation Accural	\$	=	\$ -	\$ -	Other	0.000000	\$	-
Nantahala Rewind	\$	-	\$ -	\$ -	Production	0.000000	\$	-
Thorpe Rewind	\$	-	\$ -	\$ -	Production	0.000000	\$	-
Section 124	\$	-	\$ -	\$ -	Production	0.000000	\$	-
NC DSM Regulatory Asset	\$	-	\$ -	\$ -	Other	0.000000	\$	-
Allen Environmental Compliance	\$	-	\$ -	\$ -	Production	0.000000	\$	-
Energy Efficiency Program Cost Deferral -SC	\$	-	\$ -	\$ -	Production	0.000000	\$	-
Energy Efficiency Program Cost Deferral -NC	\$	-	\$ -	\$ -	Production	0.000000	\$	-
Injuries and Damages - NP&L	\$	=	\$ =	\$ =	OATT Labor	0.000000	\$	-
Total GL Account 182.3	\$	-	\$ -	\$ -			\$	-

Attachment E

Duke Energy Carolinas, LLC

Transmission Rate Formula Support

Utilizing Historic Cost Data for (Historic Years) with Year-End Average Balances

Accumulated Provisions for Injuries and Damages - GL Account 228.2

	GL Balance 12/31/2008 <u>Dr(Cr)</u>	GL Balance 12/31/2009 <u>Dr(Cr)</u>	Average <u>Balance</u>	А	llocation <u>Factor</u>	<u>oat</u>	T Amount
I and D Extraordinary	\$ -	\$ -	\$ -	Other	0.000000	\$	-
Environmental	\$ -	\$ -	\$ -	NP	0.000000	\$	-
Total GL Account 228.2	\$	\$ _	\$			\$	

Duke Energy Carolinas, LLC Transmission Rate Formula Support

Accumulated Provisions for Pensions and Benefits 228.3 (Parent Company Books - Accounts Applicable to DEC)

	GL Balance 2/31/2008 <u>Dr(Cr)</u>	GL Balance 12/31/2009 <u>Dr(Cr)</u>	Average <u>Balance</u>	Alloca <u>Fact</u>		<u>OAT</u>	T Amount
DPC OPEB FAS 106	\$ -	\$ _	\$ -	OATT Labor	0.0000000	\$	-
DPC Pos EMP FAS 112	\$ -	\$ -	\$ -	OATT Labor	0.000000	\$	-
Total GL Account 228.3	\$ -	\$ -	\$			\$	-

Attachment F

Duke Energy Carolinas, LLC

Transmission Rate Formula Support
Utilizing Historic Cost Data for (Historic Years) with Year-End Average Balances Other Deferred Debits 253.047 (Parent Company Books - Accounts Applicable to DEC)

	12/3	alance 1/2008 r <u>(Cr)</u>	12/3	Balance B1/2009 <u>r(Cr)</u>	verage <u>alance</u>	Alloca <u>Fact</u>		OAT	Γ Amount
Pension Cost Adj (ODC)	\$	-	\$	-	\$ -	OATT Labor	0.000000	\$	-
Total GL Account 253.047	\$		\$		\$			\$	-

Attachment G

Duke Energy Carolinas, LLC Transmission Rate Formula Support Utilizing Historic Cost Data for (Historic Years) with Year-End Average Balances Account 454 Reconciliation - Rents

North Carolina	An	nount	Allocation Factor		OATT Amount	
0454100 - Extra - Facilities	\$	_	Company Records	0.370228		_
0454110 - Inter-connection-Cogeneration	\$	-	Company Records	0.370228		-
0454200 - Pole and Line Attachments	\$	-	Distribution	0.000000		-
0454300 - Tower Lease Revenues	\$	-	Other, Attachment H	0.000000		-
0454400 - Other Electric Rents	\$	-	OATT Labor	0.000000		-
0454500 - Leased Facilities Fee - Catawba	\$	-	Distribution	0.000000		-
0454510 - Return and Dep - Catawba Gen Plt	\$	-	OATT Labor	0.000000		-
Total GL Account 454	\$	-			\$	

Attachment H

Duke Energy Carolinas, LLC Transmission Rate Formula Support Utilizing Historic Cost Data for (Historic Years) with Year-End Average Balances Account 454.3 Reconciliation - Tower Lease Revenues

Tower Lease Revenue Net Margin	Reference	
1 Revenues -0454300	Attachment G	\$ -
2 Less: Direct Costs	Company Records	\$ -
3 Net Revenues Before Taxes	Line 1 - Line 2	\$ -
4 Composite Tax Rate	Page 3, Line 25	0.00%
5 After Tax Net Revenues	Line 3 * Line 4	\$ -
6 TP Allocator	Page 4, Line 5	0.00%
7 Adjusted Net Revenues	Line 5 * Line 6	\$ -
8 Revenue Sharing Percent	Note K	50%
9 Revenue Credit Amount	Line 7 * Line 9	\$ -
Tower Lease Revenue Reported in Formula		
10 Revenues -0454300		\$ -
11 Less: Direct Costs	Line 2 * Page 4, Line 11	\$ -
12 Net Revenues Before Taxes	Line 10 - Line 11	\$ -
13 Composite Tax Rate	Page 3, Line 25	0.00%
14 After Tax Net Revenues	Line 12 - (Line 12*Line 13)	\$ -
15 TP Allocator	Page 4, Line 5	0.00%
16 Adjusted Net Revenues	Line 14 * Line 15	\$ -
17 Revenue Sharing Percent	Note K	50.00%
18 Revenue Gredit Amount	Line 16 * Line 17	\$ -
Tower Lease Revenue Adjustment to Formula		
19 Revenue Credit	Line 9	\$ -
20 Revenue Credit in other components of formula	Line 18	\$ -
21 Adjusted Revenue Credit	Line 19 - Line 20	\$ -

Attachment I

Duke Energy Carolinas, LLC Transmission Rate Formula Support Utilizing Historic Cost Data for (Historic Years) with Year-End Average Balances Transmission of Electricity for Others

Form 1	Payment by	Classification	Demand	Energy	Ancillary/Other	Total Revenue
Reference	(Column (b))	(Column (d))	Charges (Column (k))	Charges (Column (I))	Revenue (Column (m))	(Column (n))
328, line 1	American Electric Power Company, Inc.	os				-
328, line 2 328, line 3	American Electric Power Company, Inc. Arclight Energy Marketing, LLC	SFP OS				-
328, line 4	Bear Energy LP	OS OS				-
328, line 5	Calpine Power Services Company	os				-
328, line 6	Calpine Power Services Company	SFP				-
328, line 7	Cargill-Alliant, LLC	os				-
328, line 8 328, line 9	Cargill-Alliant, LLC Cargill Power Marketer, LLC	SFP LFP				-
328, line 10	Cargill Power Marketer, LLC	OS				-
328, line 11	Cargill Power Marketer, LLC	SFP				-
328, line 12	Carolina Power & Light Company	os				-
328, line 13	Carolina Power & Light Company	SFP				-
328, line 14	Carolina Power & Light Company	LFP				-
328, line 15 328, line 16	Carolina Power & Light Company Carolina Power & Light Company	LFP LFP				-
328, line 17	Otigroup Energy Inc	os				_
328, line 18	OOBB Electric Membership Corporation	os				-
328, line 19	COBB Electric Membership Corporation	SFP				=
328, line 20	ConocoPhillips, Inc.	OS				-
328, line 21	Constellation Commodities Energy Group	os				-
328, line 22 328, line 23	Constellation Commodities Energy Group Coral Power, LLC	SFP OS				-
328, line 24	Eagle Energy Partners	os				-
328, line 25	Eagle Energy Partners	SFP				-
328, line 26	Endure Energy, LLC	os				-
328, line 27	Endure Energy, LLC	SFP				-
328, line 28	Florida Power Corporation	os				-
328, line 29 328, line 30	Florida Power Corporation Fortis Energy Marketing & Trading	SFP OS				=
328, line 31	NextEra Energy Power Marketing, LLC	os				-
328, line 32	J.P. Morgan Ventures Energy Corp.	os				-
328, line 33	Merrill Lynch Commodities, Inc.	os				-
328.1, line 1	Morgan Stanley Captial Group	OS				-
328.1, line 2	Morgan Stanley Captial Group	SFP				-
328.1, line 3	North Carolina Electric Member Corporation	LFP				-
328.1, line 4 328.1, line 5	North Carolina Electric Member Corporation North Carolina Electric Member Corporation	OS SFP				-
328.1, line 6	North Carolina Electric Member Corporation	LFP				-
328.1, line 7	North Carolina Electric Member Corporation	LFP				-
328.1, line 8	Nort Carolina Municpal Power Agency 1	os				-
328.1, line 9	Nort Carolina Municpal Power Agency 1	SFP				-
328.1, line 10	Pwer Ex Corp	SFP				-
328.1, line 11	Rainbow Energy Marketing Corporation	OS OS				-
328.1, line 12 328.1, line 13	South Carolina Electric & Gas Company Southern Wholesale Energy	os os				-
328.1, line 14	Southern Wholesale Energy	SFP				_
328.1, line 15	Tenaska Power Services Co.	os				=
328.1, line 16	Tennesee Valley Authority	os				-
328.1, line 17	The Energy Authority	os				-
328.1, line 18 328.1, line 19	The Energy Authority Virginia Power Marketing	SFP OS				-
328.1, line 20	Westar Energy	os				-
328.1, line 21	Point to Point MWH(s) for all entries above					
328.1, line 22						
328.1, line 23	Blue Ridge Electric Memebership Corporation	LFP				-
328.1, line 24	City of Concord	LFP				-
328.1, line 25 328.1, line 26	Oty of Seneca Town of Dallas	LFP LFP				-
328.1, line 27	Town of Due West	LFP				
328.1, line 28		LFP				-
328.1, line 29	Town of Forest City	LFP				-
328.1, line 30		LFP				-
328.1, line 31		LFP				-
328.1, line 32 328.1, line 33		LFP LFP				-
328.2, line 1	New Horizon Electric Cooperative	LFP				-
328.2, line 2	North Carolina Electric Membership	LFP				-
328.2, line 3	North Carolina Municipal Power Agency 1	LFP				-
328.2, line 4	Piedmont Electric Memebership Corporation	LFP				-
328.2, line 5	Piedmont Municipal Power Agency	LFP LFP				-
328.2, line 6 328.2, line 7	Town of Prosperity Rutherford Electric Memebership Corporation	LFP				-
328.2, line 8	South Carolina Electric & Gas Company	LFP				-
328.2, line 9	South Carolina Public Service Authority					
328.2, line 10	- Network	LFP				-
328.2, line 11	Southeastern Power Administration	LFP				-
328.2, line 12	Western Carolina Energy, LLC	LFP				-
	Total Per Form 1		_	_	_	_
						_
	Total SFP/OS Revenues		-	-	-	-
	Add: Duke Energy Carolinas Bulk Power Marketing					-
	Remove: LFP Transmission	advalina out a total				-
	Remove: Ancillary Services and Loss Compensation & Remove: Non Firm PTP Schedule 1	Couding Schedule 1				-
	SFP/OS Revenues - Net of Ancillary Services					-
	·					

Duke Energy Carolinas, LLC.

Attachment J

Transmission Rate Formula Support - Customer Prepayment for Network Upgrades Detail Utilizing Historic Cost Data for (Historic Years) with Year-End Average Balances NCEMC Anson Co. Project

Balances as of the Beginning of Year:

		Cash Payments	Accrued Interest	Total Liabilit y	
Beginning Balance		\$ -	\$ -	\$ -	
Allocation of Balance Ref	unds	0.00%	0.00%		
AFUDC Reversal Calculation: (Beginning Balance)				(4)=[1-(3)]*	
	(1)	(2) = 12 / (3)	(3) = x / (2)	0	
	Depr. Rate	Avg. Depr. Life (Months)	% Depreciated 12/31/2008	Net AFUDC Reversal	
4	0.00%	0.000	0.0000%	0	
Test Year Refund History:		Alloca	ation of Amount Refu	ınded	
Service Month	Amount Refunded	Current Interest	Cash Prepa y ment	Accrued Interest	Ending Liability Balance
Jan-09 Feb-09 Mar-09 Apr-09 May-09 Jun-09 Jul-09	\$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ - \$ - \$ - \$ - \$ - \$ -		\$ - \$ - \$ - \$ - \$ - \$ -
Aug-09 Sep-09 Oct-09 Nov-09 Dec-09	\$ - \$ - \$ - \$ - \$ -	\$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ - \$ - \$ - \$ - \$ -	\$ -	\$ - \$ - \$ - \$ - \$ -
Interest Disbursed	\$ -	\$ -		\$ -	
Allocation of Ending Balance			\$ -	\$ -	\$ -
AFUDC Reversal Calculation: (Ending Balance)	(1)	(2) = 12 / (1)	(3) = x / (2)	(4)=[1-(3)]* 0	
	Depr. Rate	Avg. Depr. Life (Months)	% Depreciated 12/31/2009	Net AFUDC Reversal	
	0.00%	0.000	0.000%	0	

Duke Energy Carolinas, LLC Transmission Rate Formula Support Utilizing Historic Cost Data for (Historic Years) with Year-End Average Balances GridSouth Amortization

Attachment K

1	Total GridSouth costs as of 12/31/2003	183
2	Wholesale allocated portion of GridSouth Line 1*.2675	(3)
3	Annual Amortization - Wholesale Line 2 / 7 years	(+)
4	Annual Amortization at System Level Line 1 / 7 years	#DIV/01

١	Wholesale Allocation Factor	Reference	Total kW	Allocator	OATT Amount
5 9	ystem Long Term Firm Transmission Peak Demand				
6	Firm Network Service for Self	400.17.e		0.0000	=1
7	Firm Network Service for Others	400.17.f		1.0000	=1
8	Long Term PTP Reservations	400.17.g		1.0000	=1
9	Other Service	400.17.j			-
10	Total System Long Term Firm Transmission Load Peak Demand	Note M	-	0.00000	-

Attachment L

Duke Energy Carolinas, LLC Transmission Rate Formula Support Utilizing Historic Cost Data for (Historic Years) with Year-End Average Balances Intangibles - Gross Plant Accounts 302 and 303

	GL Balance 12/31/2008	:	GL Balance 12/31/2009		Average	Alloca	tion		
Project Description	Dr(Cr)		Dr(Cr)		Balance	<u>Fact</u>	<u>or</u>	OAT	Γ Amount
Amounts Not Allocated to Transmission		-	-	\$	-	Other	0.000000	\$	-
Acquire/Maintain		-	-	\$	-	OATT Labor	0.000000	\$	-
Assistance Agency Portal Capit		-	-	\$	-	OATT Labor	0.000000	\$	-
BPM Software		-	-	\$	-	OATT Labor	0.000000	\$	-
Cgreen Influencing Custs Cont		-	-	\$	-	OATT Labor	0.000000	\$	-
Data Log Aggregation SW		-	-	\$	-	TP	0.000000	\$	-
Database Maintenance Tools		-	-	\$	-	OATT Labor	0.000000	\$	-
DP&S		-	-	\$	-	OATT Labor	0.000000	\$	-
EAM_CAROLINAS PHASE 2		-	-	\$	-	OATT Labor	0.000000	\$	-
Ebill Proj Software		-	-	\$	-	OATT Labor	0.000000	\$	-
Enterprise Asset Management Project		-	-	\$	-	OATT Labor	0.000000	\$	-
Financial System Replacement		-	-	\$	-	OATT Labor	0.000000	\$	-
Fleet Svcs Fleet Management Sy		-	-	\$	-	OATT Labor	0.000000	\$	-
FMIS Rel 3 Accounting		-	_	\$	-	OATT Labor	0.000000	\$	-
FMIS Release 1		-	_	\$	-	OATT Labor	0.000000	\$	-
FMIS Release 2		-	_	s	-	OATT Labor	0.000000	s	-
FMIS Release 3		-	_	s	-	OATT Labor	0.000000	s	-
FOOTPRINTS APPLICATION		-	_	Ś	-	TP	0.000000	s	-
Franklin Franchise		_	_	Ś	_	OATT Labor	0.000000	s	
In House Software-Acct System		_	_	Š	_	OATT Labor	0.000000	Š	_
In House Software-Cash Mgmt		-	_	Š	_	OATT Labor	0.000000	Š	_
In House Software-Cust Billing		_	_	Š	_	OATT Labor	0.000000	Š	_
In House Software-Storm Team		_	_	Š	_	OATT Labor	0.000000	Š	_
Mobile Atlas(MapLink)		_	_	Ś	_	TP	0.000000	Š	_
OE Express Core Pay Track		_	_	Š	_	OATT Labor	0.000000	Š	_
OE Express PE Hardware Costs		_	_	Š	_	OATT Labor	0.000000	Š	_
OE Express Release 1		_	_	Ś	_	OATT Labor	0.000000	Ś	_
OE Express Release 2B		_	_	Š	_	OATT Labor	0.000000	Ś	_
OE Express System Enhancements		_	_	Ś	_	OATT Labor	0.000000	Ś	_
Phoenix Phase 5		_	_	Ś	_	OATT Labor	0.000000	Ś	_
Phoenix Phase 6		_	_	Ś	_	OATT Labor	0.000000	Ś	_
Phoenix Phases 1-4		_	_	Ś	_	OATT Labor	0.000000	Ś	_
Prioritization Tool - Asset		_	_	\$	_	TP	0.000000	\$	_
RELAY TESTING SYSTEM		_	_	Ś	_	TP	0.000000	Ś	_
Special Agency Assisstance Portal			_	Ś	_	OATT Labor	0.000000	\$	_
SOC EMS Blade Srvr Upgrd-Sftwr				\$	_	Schedule 1	0.000000	\$	
SOC Migration				\$	_	Schedule 1	0.000000	\$	
SPOC Tracking System				\$	_	OATT Labor	0.000000	\$	
TCC Migration Phase 1				Ś	_	TP	0.000000	Ś	
Tivoli SW Purchase		_	_	\$	_	OATT Labor	0.000000	Ś	-
Trans Billing System Replace				\$		TP	0.000000	Ś	
TRANS BILLING SYSTEM REPLACE		_	_	\$	-	TP	0.000000	\$	-
TWAMS Capital UT Top		_	-	ڊ \$	-	TP	0.000000	ş S	-
UOF-Charlotte-Software		-	-	\$	-	OATT Labor	0.000000	\$ \$	-
		-	-	\$	-			\$ \$	-
Witness Software		-	-	\$	-	OATT Labor	0.000000	\$	-
YEAR 2000 Platinum Tools		-	-	Ş	-	OATT Labor	0.000000	>	-
TOTAL	\$	- \$	-	\$	-			\$	-

Attachment M

Duke Energy Carolinas, LLC Transmission Rate Formula Support Utilizing Historic Cost Data for (Historic Years) with Year-End Average Balances Intangibles - Accumulated Amortization

	GL Ba	lance	GL Balance						
Broket Deceriation	12/31,		12/31/2009		Average	Alloca Fact		OATT Amour	
Project Description Amounts Not Allocated to Transmission	<u>Dr(</u> \$	- \$	<u>Dr(Cr)</u>		<u>Balance</u> \$ -	Other .	0.000000	\$	<u>u</u> .
Acquire/Maintain	\$	- \$			\$ -	OATTLabor	0.000000	\$	
Assistance Agency Portal Capit	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
BPM Software	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
Brevard Business Office	\$	- \$		-	ş -	OATTLabor	0.000000	\$	-
Brevard Merch/Col Hwy 64W Bulington Bus/Merch Office	\$ \$	- \$ - \$		-	\$ - \$ -	OATT Labor OATT Labor	0.000000	\$ \$	-
Carolina Cntr Lincolnton Merch/Bus Ofc	Š	- s			\$ -	OATTLabor	0.000000	Š	
Cgreen Influencing Custs Cont	\$	- \$		-	\$ -	OATTLabor	0.000000	\$	-
Cgreen Reenginrng Wachovia Ctr	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
Charlotte Sat Off Wilkerson Bl	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
Clemson Office	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
Data Log Aggregation SW Database Maintenance Tools	\$ \$	- \$ - \$			\$ - \$ -	TP OATT Labor	0.000000	\$ \$	-
DP&S	ş.	- \$			\$ -	OATTLabor	0.000000	\$	-
EAM_CAROLINAS PHASE 2	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
Ebill Proj Software	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
Elkin Merch\Coll Ridgeway Cros	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
Enterprise Asset Management Project	\$	- \$		-	ş -	OATTLabor	0.000000	\$	-
Financial System Replacement Fleet Sycs Fleet Management Sy	\$ \$	- \$ - \$			\$ - \$ -	OATT Labor OATT Labor	0.000000	\$ \$	-
FMIS Rel 3 Accounting	Š	- \$			\$ -	OATT Labor	0.000000	\$	-
FMIS Release 1	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
FMIS Release 2	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
FMIS Release 3	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
FOOTPRINTS APPLICATION	\$ c	- \$		-	\$ -	TP TP	0.000000	\$	-
FOOTPRINTS APPLICATION Franklin Franchise	\$ \$	- \$ - \$		-	\$ - \$ -	OATT Labor	0.000000	\$ \$	-
Franklin Square Bus Office	\$	- \$		-	\$ -	OATTLabor	0.000000	\$	-
Gaffney Merch/COII Store	\$	- \$		-	\$ -	OATTLabor	0.000000	\$	
Graham Street Merch/Bus Offices	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
Greenville Merch/Coll	\$	- \$		-	ş -	OATTLabor	0.000000	\$	-
Hendersonville Bus/Merch Office	\$	- \$			\$ -	OATT Labor	0.0000000	\$	-
Hickory Merch/Coll Hickory Plaza High Point Merch/Bus Offices	\$ \$	- \$ - \$			\$ - \$ -	OATT Labor OATT Labor	0.000000	\$ \$	
In House Software-Acct System	Š	- s			\$ -	OATTLabor	0.000000	\$	
In House Software-Cash Mg mt	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
In House Software-Cust Billing	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
In House Software-Storm Team	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
Inman Office	\$	- \$		-	\$ -	OATTLabor	0.000000	\$	-
Kannapolis Office Lancaster Merch/Coll Lancers	\$ \$	- \$ - \$		-	\$ -	OATT Labor	0.000000	\$ \$	-
Marion Business Office	\$	- 5			\$ - \$ -	OATT Labor OATT Labor	0.000000	\$	
Mobile Atlas(MapLink)	Š	- \$			\$ -	TP	0.000000	\$	-
Mocksville Merch/Coll Office	\$	- \$			\$ -	OATT Labor	0.000000	\$	-
Mocksville Office Op	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
Mooresville Bus/Merchandising Office	\$	- \$		-	\$ -	OATTLabor	0.000000	\$	-
N Summit Sq Merch/Bus Office	\$ c	- \$ - \$			\$ -	OATT Labor	0.0000000	\$ \$	
Northeast Shop Cntr Merch/Bus OE Express Core Pay Track	\$ \$	- 5			\$ - \$ -	OATT Labor OATT Labor	0.000000	\$	-
OE Express PE Hardware Costs	ş	- \$			\$ -	OATT Labor	0.000000	\$	-
OE Express Release 1	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
OE Express Release 2B	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
OE Express System Enhancements	\$	- \$		-	ş -	OATTLabor	0.000000	\$	-
Phoenix Phase 5 Phoenix Phase 6	\$ \$	- \$ - \$			\$ - \$ -	OATT Labor OATT Labor	0.000000	\$ \$	
Phoenix Phases 1-4	ş	- 5		-	ş -	OATTLabor	0.000000	Š	-
Print Shop	\$	- \$			\$ -	OATT Labor	0.000000	\$	-
Prioritization Tool - Asset	\$	- \$		-	\$ -	TP	0.000000	\$	-
Randleman Rd. Merch Store	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
Reidsville Merch/Coll Freeway	\$	- \$			\$ -	OATTLabor	0.000000	\$	-
RELAY TESTING SYSTEM Replace Window HVAC North	\$ \$	- \$ - \$		-	\$ - \$ -	TP OATT Labor	0.000000	\$ \$	-
Salisbury Merchand/Bus Off	Š	- \$			\$ -	OATTLabor	0.000000	Š	-
SOC EMS Blade Srvr Upgrd-Sftwr	\$	- \$		-	\$ -	Schedule 1	0.000000	\$	-
SOC Migration	\$	- \$		-	\$ -	Schedule 1	0.000000	\$	-
Special Agency Assisstance Portal	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
SPOC Tracking System ST 27/28 Interior Partmont Panaceti	\$ \$	- \$ - \$		-	\$ - \$ -	OATT Labor OATT Labor	0.000000	\$ \$	-
ST 27/28 Interior Restroom Renovati ST 29/30 Interior Restroom Renovati	\$ \$	- \$ - \$			\$ -	OATT Labor	0.000000	\$	
ST Restroom Renovations	\$	- 5			\$ -	OATTLabor	0.000000	\$	
ST1910 Coil Unit	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
ST27/28 Interior Restroom Reno	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
TCC Migration Phase 1	\$	- \$		-	\$ -	TP OATTI-bee	0.000000	\$	-
Tdvl 5603 Parking Lot Steps Tdvl Resource Recovery Gate	\$ \$	- \$ - \$			\$ - \$ -	OATT Labor OATT Labor	0.000000	\$ \$	
Tdvl Resource Recovery Gate Tivoli SW Purchase	\$	- \$			\$ -	OATTLabor	0.000000	ş 5	
Toddville 5603 Load, DockStrs	\$	- \$		-	\$ -	OATTLabor	0.000000	\$	
Toddville Central Warehouse	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
Toddville Glove Lab Consolidat	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
Toddville HVAC Replacement	\$	- \$		-	\$ -	OATT Labor TP	0.000000	\$	-
Trans Billing System Replace TRANS BILLING SYSTEM REPLACE	\$ \$	- \$ - \$			\$ - \$ -	TP TP	0.000000	\$ \$	
TV 5603 New Dock Fasia/Lights	\$	- \$			\$ -	OATT Labor	0.000000	\$	-
TWAMS Capital UT Top	\$	- \$		-	\$ -	TP	0.000000	\$	-
U OF-Charlotte-Software	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
Wachovia CTR S Tryon	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	•
Wachovia Prod Tech Serv	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
Westridge Square Wilkesboro Merch/Coll Office	\$ \$	- \$ - \$			\$ - \$ -	OATT Labor OATT Labor	0.000000	\$ \$	
Winston Salem Merch/Bus Off Eastway	\$	- \$			\$ -	OATTLabor	0.000000	\$	-
Winston Salem Merch/Bus Off Parkway	\$	- \$		-	\$ -	OATTLabor	0.000000	\$	-
WitnessSoftware	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
Woolco Bldg	\$	- \$		-	\$ -	OATT Labor	0.000000	\$	-
Yadkinville Bus/Merchandising Office YEAR 2000 Platinum Tools	\$ \$	- \$ - \$			\$ - \$ -	OATT Labor OATT Labor	0.000000	\$ \$	-
	*	- >			*	SPLI EGDOI	5.550000	*	
TOTAL	\$	- \$		-	ş -			\$	-

Duke Energy Carolinas, LLC Transmission Rate Formula Support Utilizing Historic Cost Data for (Historic Years) with Year-End Average Balances Intangibles - Amortization Expense

Attachment N

	GL Balance				
	12/31/2009	Alloc	ation		
Project Description	Dr(Cr)	<u>Fac</u>	tor	<u>0A</u>	TT Amount
Amounts Not Allocated to Transmission	\$ -	Other	0.000000	\$	-
Assistance Agency Portal Capit	\$ -	OATT Labor	0.000000	\$	-
BPM Software	\$ -	OATT Labor	0.000000	\$	-
Data Log Aggregation SW	\$ -	TP	0.000000	\$	-
Enterprise Asset Management Project	\$ -	OATT Labor	0.000000	\$	-
Enterprise Asset Management_Carolinas portion in C	\$ -	OATT Labor	0.000000	\$	-
FOOTPRINTS APPLICATION	\$ -	TP	0.000000	\$	-
Franklin Franchise	\$ -	OATT Labor	0.000000	\$	-
Prioritization Tool - Asset	\$ -	TP	0.000000	\$	-
RELAY TESTING SYSTEM	\$ -	TP	0.000000	\$	-
REPLACING CA2001 (NETWORK TRANS) AND P2P (PC	\$ -	TP	0.000000	\$	-
SOC EMS Blade Srvr Upgrd-Sftwr	\$ -	Schedule 1	0.000000	\$	-
Special Agency Assisstance Portal	\$ -	OATT Labor	0.000000	\$	-
Trans Billing System Replace	\$ -	TP	0.000000	\$	-
Trans Outage & Logging App	\$ -	TP	0.000000	\$	-
UOF-Charlotte-Software	\$ -	OATT Labor	0.000000	\$	-
TOTAL	\$ -			\$	

Duke Energy Carolinas, LLC

Attachment O

Weighted Depreciation Rates At December 31, 2008

	Depreciable		
	Group	Description	Rate
1	350	Transmission - Land Rights	1.16%
2	352-359	Transmission	2.03%
3	389	General-Land Rights	1.88%
4	390	General - Structures	3.46%
5	391-398	General	14.35%
6	391.1	General-EDP	12.50%
7	392	Passenger Cars	32.83%
8	392	Light Trucks	37.05%
9	392	Med Trucks	22.22%
10	392	Heavy Trucks	23.21%
11	392	Med Trucks/ Power Equip	25.55%
12	392	Heavy Trucks/ Power Equip	23.52%
13	392	Tractors (Gas)	40.72%
14	392	Tractors (Diesel)	15.38%
15	392	Trailers	7.11%
16	396	Trenchers and Cable Plows	15.22%
17	396	Rubber Tired Tractors	42.07%
18	396	Heavy Const. Equip	21.11%
19	396	Mobile Cranes	7.59%
20	396	Forklifts	37.96%
21	396	Trailers	14.32%
22	396	Misc Non-Hwy Equip	11.37%
23	396	Miscellaneous Equipment	8.74%

					-													
		annual depr	expense	year ending	12/21/2009		*		\$0	\$	\$0	0\$		0\$	0\$	\$0	\$0	\$
		deprec	r at	effective	1/1/2009	1000			2.35%	2.35%	2.35%			2.03%	2.03%	2.03%		
			accum	deprec	12/31/2008	and the same	R+(C*P)		#	유	\$	\$		₽	\$	\$0	0\$	#
		annual depr	exbeuse	year ending	8/00/18/6		¥.		0\$	0\$	0\$	0\$		9	0\$	\$0	0\$	8
		•	accum	deprec y	1 2002/15/0	(and and	N+(C*O*P)		0\$	0\$	\$0	0\$		0\$	9	\$0	0\$	0#
	number of	years from	12/31/2004	ending	734/3007	1 1007 700 7	z		3.000	3.000	3.000			3.000	3.000	3.000		
	_	deprec y	rate 12	effective	71 /2005 12	200000			1.97%	1.97%	1.97%			2.81%	2.81%	2.81%		
			accum	deprec	731/2004	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	K+(L*M)		0\$	Q.	\$0	\$0		Q	Q	\$0	9	9
	number of	years from	12/31/1991	ending	0000/18/01 8000/14/ 8000/18/01 8000/18/01 0000/18/01 0000/18/01 9000/14/ \$000/18/01 0084/18/01		-		13,000	13.000	13,000			13,000	13,000	13.000		
	-	annual depr y	expense 13	beginning	21/1/1992	-	<u>+</u>		0\$	Q	\$0	\$10		₽	0\$	\$0	0\$	8
		ă	accum	deprec b	/31/1991		£		0\$	양	0\$	0\$		₽	Q	\$0	0\$	9
		annual depr	expense	year ending	31/1991		ரு # வ		0\$	Ç.	0\$	0\$		Q	0\$	\$0	ο\$	8
		an and	accum ea	deprec yea	12/21/1880	0.000	(B)*(E)*(H)		0\$	0#	\$0	0\$		0\$	0\$	\$0	\$0	Q
	Je.	٤					*(g)		9.083	6.833	4.300			9.083	6.833	4.300		
	number of	years from	00 date	ending	0.001/16/61													
31-Dec-09	weighted	deprec	rate	year ending	12/31/1991	1000000			3.50%	3,50%	3,50%			2.90%	2.90%	2.90%		
		deprec	rate	effective	1961/12/21 1961/21/11				3.09%	3.09%	3.09%			2.57%	2.57%	2.57%		
31-Dec-08	deprec	rate from	co date	фис	11/12/1991				3.57%	3.57%	3.57%			3.00%	3.00%	3.00%		
			first yr.	partia	à	į			0.083	0.833	0.300			0.083	0.833	0.300		
					Commercial Operation Date				01-Dec-81	01-Mar-84	13-Sep-86			01-Dec-81	01-Mar-84	13-Sep-86		
					Contra AFUDC Amount				0\$	Q	\$0	0\$		Q	Q		0\$	0\$
								ñ					Fude					
					Decription	1		Production contra afudo	McGuire 1	McGuire 2	Radwaste	Total	Transmission contra afudo	McGuire 1	McGuire 2	Rady acte	Total	Total contra afudo

Attachment P

Duke Energy Carolinas, LLC Transmission Rate Base Conta AFUDC Amounts Recorded Pursuantto CFR 15.25(f)(2) 2222

accum

* * * * *

Duke Energy Carolinas, LLC Transmission Rate Base 561.1- 561.4 Break Down	Atta	chment Q
	12/	Balance 31/2009 Dr(Cr)
Total Accounts 561.1-561.4 (321.85.b:321.88.b)	\$	-
	\$	-
561.1 Load Dispatch Reliability	\$	-
561.2 Load Dispatch Monitor and Operate Trans System	\$	-
561.3 Load Dispatch Trans Service & Scheduling	\$	-
561.4 Scheduling System Control and Dispatch Services	\$	-
561.5 Reliability Planning	\$	-
561.6 Transmission Service	\$	-
561.7 Generation Interconnect Studies	\$	-
	\$	-
Form 1 (561.1-561.7)	\$	-
Less amounts:		
Control center assets included in Transmission Service Revenue Requirement	\$	-
Reliability Council fees related to retail service	\$	-
Scheduling fees paid for off-system sales	\$	-
Load Dispatch and Scheduling Expense included in Schedule 1	\$	-

Duke Energy Carolinas, LLC CATT Transmission Rate Formula Template Using Form 1-Data Using Actual Cost Data for 20xx with Average Ratebase Balances True Up from Billing Period to be Included in Projected ATRR for 20xx

Attachment R

Amount

Line	Reference		Am	ount
Revenue Requirement True-Up - Network Service				
1 Actual Amount Billed to Customers	Company Records		\$	8
2 Actual Amount Owed by Customers	Amounts Owed Worksheet		\$	0
3 Actual ATRR True Up Amount (Over Recovery = negative; Under Recovery = positive)	Line 2 - Line 1		\$	-
4 InterestTrue Up Amount	Interest Worksheet		\$	9
5 Network Service Load Ratio Share Percentage				0.0000%
6 Total ATRR True Up Amount (Network)	(Line 3 + Line 4) / Line 5		\$	
Revenue Requirement True-Up - Point to Point Service (Long Term Firm)				
7 Actual PTP Reservation Quantities	Amounts Owed Worksheet			=
8 Actual Point to Point Rate	Amounts Owed Worksheet		\$	0
9 Projected Point to Point Rate	DEC-Projected Rate, Page 1 Line 16			
10 Point to Point Price Variance	Line 8 - Line 9		\$	
11 ATRR True Up Amount (PTP)	Line 10 * Line 7		\$	=
12 Interest True Up Amount	Interest Worksheet		\$	-
13 PTP Load Ratio Share Percentage	Amounts Owed Worksheet			0.0000%
14 Total ATRR True Up Amount (PTP)	(Line 11 + Line 12) / Line 13		\$	=
		FERC Quarterly	Monthly	Interest
Interest Calculation		Interest Rate*	Ra	ite
15 January _ 20xx		(A)		0.00%
16 February		6 5 6		0.00%
17 March		(1-m-1) (1-m-1)		0.00%
18 April		40 - 13 10 - 10		0.00%
19 May		121		0.00%
20 June		8 8		0.00%
21 July		 		0.00%
22 August		540		0.00%
23 September		55.7		0.00%
24 October		924		0.00%
25 November		10 = 10 10,75,10		0.00%
26 December		323		0.00%
27 January _ 20xx		12:		0.00%
28 February		1.5		0.00%
29 March		121		0.00%
30 Average Monthly Interest Rate				

The interest is calcualted using the interest rate posted on the FERC website http://www.ferc.gov/legal/acct-matts/interest-rates.asp#skipnavsub

Attachment S1

Duke Energy Carolinas, LLC OATT Transmission Rate Formula Template Using Form 1-Data

Schedule 1 Duke Energy Carolinas Revenue Requirements

	neral														,
	maining Ge	Plant													
	System Re	ā	₩.	٠.	٠.	S.	S.	S.	ς,	σ,	S	€.	€.	5	S.
	Amounts Related to System Remaining General	Operating Center													
	Amounts	Ope		Ş	Ş						Ş				S.
GL Balance 12/31/2009		Pr(cr)								1	1	1	1	•	
요 12/	Ē	_,	s	s	s	s	s	s	s	s,	s,	s,	s,	s,	v
	Amounts Related to System	Operating Center													ı
	Amo														s
GL Balance 12/31/2008		Pr(c.)													
			s	s	s	s	s	s	s	s	s	s	s	ant \$	ω
				ts	ent			pment						· General Plant	
			ghts	nprovemen	and Equipm	quipment	_	sarage Equi	ment	Equipment	quipment	uipment	operty.	nt Costs for	
			nd Land Ri	rres and In	Furniture a	ortation E	Equipmen	Shop and (tory Equip	Operated	unication E	laneous Eq	Tangible Pr	t Reitreme	al Plant
		Account	(389) Land and Land Rights	(390) Structures and Improvements	(391) Office Furniture and Equipment	(392) Transportation Equipment	(393) Stores Equipment	(394) Tools, Shop and Garage Equipment	(395) Laboratory Equipment	(396) Power Operated Equipment	(397) Communication Equipment	(398) Miscellaneous Equipment	(399) Other Tangible Property	(399.1) Asset Reitrement Costs for	Total General Plant
		Form 1	207.86.g	207.87.g	207.88.g	207.89.g	207.90.g	207.91.g	207.92.g	207.93.g	207.94.g	207.95.g	207.97.g	207.98.g	207.99.g
		Ē	20.	20.	20.	20.	20.	20.	20.	20.	20.	20.	20.	20.	20.

Attachment 52

Revenue Requirement True-Up - Network Service 2 Actual Amount Billed to Customers 3 Actual Amount Owed by Customers	Amounts Owed Worksheet Sch 1	s s	y y
4 Actual Schedule 1 ARR Adjustment (Over Recovery = Gredit; Under Recovery = Debit)		S	
5 Interest True Up Amount	Interest Worksheet	w	£
6 Network Service Load Ratio Share Percentage	Amounts Owed Worksheet Sch 1		0.00%
7 Total Schedule 1 ARR True Up (Network)	(Line 4 + Line 5) / Line 6	v	36
Revenue Requirement True-Up - Point to Point Service (Long Term Firm) 8 Actual PTP Reservation Quantities	Amounts Owed Worksheet Sch 1	S	2
9 Actual Point to Point Rate 10 Projected Point to Point Rate	Schedule 1, Line 21	S S	3 3
11 Point to Point Price Variance	Line 9 - Line 10	v	
12 Schedule 1 ARR True Up (PTP)	Line 11 * Line 8	S	ū
13 Interest True Up Amount	Interest Worksheet	S	ū
14 PTP Load Ratio Share Percentage	Amounts Owed Worksheet Sch 1		0.00%
15 Total Schedule 1 ARR True Up (PTP)	(Line 12 + Line 13) / Line 14	v	a
			Monthly Interest
Interest Calculation		Interest Rate*	Rate
16 January_20xx		×	0.00%
17 February		æ	0.00%
18 March		×	0.00%
19 April		Tr.	0.00%
20 May		T	0.00%
21 June		x	0.00%
22 July		Tr.	0.00%
23 August		200	0.00%
24 September		x	0.00%
25 October		Tr.	0.00%
26 November		in.	0.00%
27 December		201	0.00%
28 January_20xx		ж	0.00%
29 February		Tr.	0.00%
30 March		al at	0.00%
31 Average Monthly Interest Kate			%nn.n

^{*} The interest is calcualted using the interest rate posted on the FERC website http://www.ferc.gov/legal/acct-matts/interest-rates.asp#skipnavsub

Worksheet A (Interest calcualtion for True- Up of ATRR)

Interest Amoritization Balance Rate Total Interest (Annuity due/owed	\$ 0\$ - \$ 9	- \$ 0\$ - \$ %00.0	- \$ 0\$ - \$ %00.0	- \$ 0\$ - \$ %00.0	- \$ 0\$ - \$ %00.0	- \$ 0\$ - \$ %00.0	- \$ 0\$ - \$ %00.0	- \$ 0\$ - \$ %00.0	- \$ 0\$ - \$ %00.0	- \$ 0\$ - \$ %00.0	- \$ 0\$ - \$ %00.0	- \$ 0\$ - \$ %00.0	\$		Interest Amoritization Balance	Total Interest (Annuity	- \$ 0\$ - \$ %00.0	- \$ 0\$ - \$ %00.0	- \$ 0\$ - \$ %00.0	- \$ 0\$ - \$ %00.0	- \$ 0\$ - \$ %00.0	- 5	- \$ 0\$ - \$ %00.0	- \$ 0\$ - \$ %00.0	- \$	- 5
True Up plus Interest	τς.	τς.	- \$	٠,	٠.	- •s	· •	· \$	· \$	٠.	٠.	· •\$			True Up plus	Interest	5	- \$	٠,	· ·	103	· •	· \$	- 5	100	105
NETWORK	June (20xx)	, Anr	August	September	October	November	December	January	February	March	April	May				d±d	June (20xx)	ylnr	August	Sept emb er	October	November	December	January	February	March
Balance due/owed													· vs.	105	Balance	due/owed										
Interest		•	i	1			1	ı	ı				ı	ı		Interest		i	1			1	ı		,	
Number of Months	12 \$	11 \$	10 \$	5	00	7 \$	\$ 9	5	4 \$	φ	2 \$	1 \$	\$	·\$.	Number of	Months	12 \$	11 \$	10 \$	5 5	σs. ∞	\$ 7	\$ 9	ς.	4	en
				%	%0	%00.0	%00.0	0.00%	0.00%	%00.0	%00.0	%00.0		0.00%	Interest	Rate	%00'0	%00.0	0.00%	%00.0	0.00%	%00.0	%00.0	%00.0	%00.0	0.00%
Interest Rate	0.00%	%00.0	0.00%	0.00%	0.00%	ō																				
ATRR True up Line Interest 4/12 Rate		%00.0	%00:0 - °	0.00	0.0			-							ATRR True up Line	12/12	,		1					,	,	

%00.0

January - May (20xx)

(Interest Calculation for True-Up of Schedule 1)

	Scehdule 1 True up	np Interest	Number of		Balance		True Up plus	Interest		Amoritization	Balanc
NETWORK -Schedule 1	Line 4/12	Rate	Months	Interest	due/owed	NETWORK -S chedule 1	Interest	Rate	Total Interest	(Annuity	due/owed
January (20xx)	\$	%00.0	12 \$			June (20xx)	45	%00.0	ş	95	vs.
	\$	%00.0	11 \$			ylut	\$	%00.0	\$	95	vs.
	· \$	%00.0	10 \$	i		August	ş	0.00%	- \$	₽	v,
	٠.	%00.0	5 5			September	· ·	%00.0	· \$	Ş	v).
	· •	%00.0	00			October	· •	%00.0	· \$	φ	vs.
	\$	%00.0	2 7			November	•	%00.0	· S	Q\$	vs.
	\$	%00.0	\$ 9			December	· \$\$	%00.0	· \$	95	vs.
	\$	%00.0	\$			January	\$	%00.0	\$	95	vs.
September	\$	%00'0	4 \$			February	5	%00.0	÷	\$0	vs.
	\$	%00'0	en			March	15.	%00.0	\$	95	vs.
November	•	%00'0	2 \$			April	15.	%00.0	· •\$	95	w
December	\$	%00.0	1 \$			May	5.	%00.0	· \$	S.	v,
	v,		\$	ı	· •				\$		
January - May (20xx)	5	%00.0	so.	1	ν. '						
	Schedule 1 True	e Interest	Number of		Balance		True Up plus	Interest		Amoritization	Balance
PTP - Schedule 1	up Line 12/12	Rate	Months	Interest	due/owed	PTP - Schedule 1	Interest	Rate	Total Interest	: (Annuity	due/owed
January (20xx)	\$	%00'0	12 \$			June (20xx)	5	%00.0	÷	95	vs.
	\$	%00.0	11 \$			ylnt	5	%00.0	· \$	0\$	vs.
	\$	%00.0	10 \$			August	٠,	%00.0	· \$	0\$	vs.
	\$	%00.0	σ			September	•	%00.0	· S	\$0	vs.
	\$	%00.0	55			October	· \$\$	%00.0	· \$	95	vs.
	\$	%00.0	7 \$			November	\$	%00.0	\$	95	vs.
	· \$	%00.0	\$ 9	ı		December	5	%00.0	· \$	₩	vs.
	٠.	%00.0	υ LO			January	· ·	%00.0	· \$	Ş	v).
September	· •	%00.0	4 \$			February	· •	%00.0	· \$	\$0	vs.
	\$	%00.0	σ			March	45	%00.0	· \$	Q\$	vs.
November	\$	%00.0	2 \$			April	· s	%00.0	ş	95	vs.
December	- \$	%00.0	1 \$			May	\$	%00.0	÷	95	vs.
			-		•				,		

%00.0

January - May (20xx)

Worksheet B (Calcula	ition of Amounts Owed	under Actual Transm	Worksheet B (Calculation of Amounts Owed under Actual Transmission Revenue Requirement)	ent)										
		Monthly demands:	emands			Billing Demands	spi			Network			Point to Point	
	Monthly system demand excl. network and firm PTP	Monthly network service demand	Morthly long term firm PTP reservations	Total	Monthly system demand exd. network and firm PTP	Monthly network service demand	Monthly long term firm PTP reservations	Total	Actual Monthly Revenue Requirement	LRS percentage	Amount due based on actual ATRR	Actual Monthly Point to-Point Rate	PTP Reservation Quantities	Amount due based on actual ATRR
Jan (Historical year)				,										
Feb				•										
Mar	•	•		•										
Apr	•	•		•										
May	1	•	•	•										
Jun														
Jul														
Aug	•	•												
Sept	1	•		1										
Oct	1	•	•	•										
Nov				•										
Dec				•										
Jan (Projected Year)	•	•		,	•	•	,	,	τς.	%00000	\$	· ·	•	
Feb	•	•	•	,	•	ţ	•	1	•	%000000	\$	\$	1	- 5
Mar	•	•		•	•	1	1	1	· \$	%0000%	•	\$	1	1
Apr									· •	%0000%	\$		•	1
May									· •	0.0000%	\$	•		1
Jun	1	•	1	1		1	1	ı	· •	0.0000%	\$	\$	1	· ·
Jul	1	•		1	•	1	1	ı	•	0.0000%	•	•	1	-
Aug	•	•	•	,		,	,	1	ا د	0.0000%	\$	٠.	•	1
Sept									103	0.0000%	\$	•		1
Oct				•		٠	•	•	5	%00000	\$	\$	•	155
Nov	1	•	•	•	•	•	•	1	· \$	0.0000%	•	\$	1	-
Dec	1	1	1	1	1	1	1	1	- \$	0.0000%	- \$	· \$	1	- \$
Sum of Billing and Sy:	Sum of Billing and System Demand for Projected Year	ted Year	1	,				•			5		•	103.
Load Ratio Share Percentages (Ratio of Customer Billing Dem	Load Ratio Share Percentages (Ratio of Oustomer Billing Demands to System Demands)	n Demands)		%00000				0.0000%						

	Worksheet C (Calculat	ion of Amounts Owed under A	Worksheet C (Calculation of Amounts Owed under Actual Schedule 1 Revenue Requirement)	Revenue Require	ment)	spacemod scilling	<u> </u>			Motorchy			Point to Doint	
	:	Amount							:	NO.				
	Monthly system demand excl. network and firm PTP	Monthly network service demand	Monthly long term firm PTP reservations	Total	Montony system demand excl. network and firm PTP	Monthly network service demand	Montiny long term firm PTP reservations	Total	Actual Monthly Revenue Requirement	LRS percentage	Amount due based on actual Schedule 1 RR	Actual Monthly Point-to-Point Rate	PTP Reservation Quantities	Amount due based on actual Schedule 1 RR
Jan (Historical year)														
Feb		•												
Mar		•												
Apr	1	1												
May	1	•	•	,										
Jun		•												
Jul		•												
Aug		•												
Sept	•	•	1											
Oct	1	1		•										
Nov		•		,										
Dec		•		,										
Jan (Projected Year)		•			•		٠		155	%000000	\$	•	•	\$
Feb		1	i						٠	%000000	\$	•		5
Mar		1		,		•		1	150	%00000	- \$	- 5	•	•
Apr		•							153	%00000	- \$	15.	•	•
May		•						٠	· •	0.0000%	- 5	· •\$•	•	5
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Dec	1	i	ii.	ı	i	1	1	ı	•	0.0000%	. \$	· ·	ı	٠ -
Sum of Billing and Sy	Sum of Billing and System Demand for Projected Year	ted Year	ı	•		•		•			•		,	υ,
Ratio of Customer Bo	Ratio of Customer Billing Demands to System Demands	Demands		0.00%				0.00%						

Schedule 10-B

Duke Energy Carolinas Formula Rate Principles

The following notes apply to calculations in the Formula Rate and are an integral part of the Formula Rate.

1.0 Transmission-related Revenue Credits.

- (i) The transmission-related revenue credits in the Formula Rate shall be determined in the following manner:
 - (1) All revenues associated with facilities allocated to the transmission function, including both direct and indirect allocations (e.g., general and intangible plant and administrative and general expense) shall be treated as revenue credits in the Formula Rate. Such revenue credits shall include, but shall not be limited to, transmission facilities lease/rental payments, direct assignment facilities charges, and general plant-related income.
 - (2) Transmission revenues from Short-Term Firm and Non-Firm Transmission Services under the OATT and transmission service similar to Short-Term Firm or Non-Firm Transmission Services under the OATT shall be treated as revenue credits in the Formula Rate.
 - (3) Transmission services revenues and Schedule 1 Scheduling, System Control and Dispatch Service ancillary service revenues from Federal Energy Regulatory Commission (FERC) Account 456.1 shall be treated as revenue credits in the Formula Rate, but all other ancillary services revenues from FERC Account 456.1 shall not be revenue credits in the Formula Rate.
 - (4) Revenues associated with indirect allocations of costs to the transmission function (e.g., general and intangible plant) shall be allocated to the transmission function in the Formula Rate based on the same underlying indirect allocations of costs and treated as a revenue credit.
- **2.0** <u>Cash Working Capital</u>. The Formula Rate shall include cash working capital based on a formulary approach as follows: 1/8 multiplied by the total of operation and maintenance expense.
- **3.0** Prepayments for Network Upgrades by Generators. The Formula Rate shall include as an offset to rate base in the Formula Rate the amount of refundable prepayments made by generators for network upgrades that Duke Energy Carolinas has not refunded to the OATT transmission customer as credits to its transmission charges; this will ensure Duke Energy Carolinas does not earn a return on those funds. Correspondingly, the amount of interest paid to OATT transmission customers as their balances are credited against their transmission service shall be included as an expense in the Formula Rate. Duke Energy Carolinas shall not capitalize and add any AFUDC to the completed cost of such network upgrades, but instead will include only the balance of any unrefunded interest accrued at the FERC refund interest rate as an addition to rate base.

- **4.0** Credits for Customer-owned Facilities under FERC Order No. 890. The Formula Rate shall include a placeholder for any future credits for customer-owned facilities to prevent any under-recovery of revenues by Duke Energy Carolinas due to any credits provided to OATT transmission customers for their own facilities.
- **5.0** Transmission Provider's Compliance with Order No. 2003. In accordance with FERC Order No. 2003, the Formula Rate shall exclude any transmission plant that meets the definition of "Interconnection Facilities" and was placed in service for Duke Energy Carolinas' own generation facilities after March 15, 2000. The Formula Rate shall also exclude generator step-up transformers and transmission lines less than 44ky.
- **6.0** Accumulated Deferred Income Taxes (ADIT). Accumulated deferred income taxes (ADIT) reflected in the Formula Rate shall be only such amounts as are properly allocated or assigned to the transmission function. In each Annual Update (as defined in the Formula Rate Implementation Protocols), Duke Energy Carolinas shall provide a spreadsheet that shows the functionalization of the FERC Form No. 1 reported amounts for ADIT and supports the amount of ADIT to be reflected in the Formula Rate. The functionalization shall be based on the most recent federal income tax return information available at the time the calculation of actual annual revenue requirements is performed. Because the unamortized balance of GridSouth costs is excluded from rate base, there will be no ADIT offset in the formula rate calculation related to GridSouth unamortized balance.
- 7.0 <u>Intangible Plant</u>. Intangible plant reflected in the Formula Rate shall only be such amounts as are properly allocated or assigned to the transmission function. In each Annual Update (as defined in the Formula Rate Implementation Protocols), Duke Energy Carolinas shall provide a spreadsheet that shows the functionalization of the FERC Form No. 1 reported amounts for Intangible plant and the associated accumulated amortization and supports the amounts to be reflected in the Formula Rate.
- **8.0** FERC Account 561. Consistent with FERC Order No. 668, the Formula Rate reflects the appropriate treatment of Account 561 subaccounts such that the Formula Rate includes only those items associated with Transmission Service and Schedule 1 Scheduling, System Control and Dispatch Service.
- **9.0** <u>Billing Demands.</u> For firm point to point and network transmission service, billing demands will be at the meter level (net of losses).
- **10.0** <u>Directly Assigned or Assignable Costs</u>. The Formula Rate shall exclude all costs that are properly directly assigned or assignable to one or more particular customers, including costs directly assigned or assignable to Duke.
- **11.0** <u>Radial Facilities</u>: The Formula Rate shall exclude the cost of New Radial Facilities as defined in the Formula Rate. At the time that a New Radial Facility owned by a Customer experiences a change in characteristics such that it meets the Commission's standards to be treated as an integrated facility, including the standards and policies set forth in Order No. 890-

B,¹ the Customer shall then be entitled at its election to Order 890 Credits for the undepreciated portion of the cost of such facility. At the time that a New Radial Facility owned by Duke experiences a change in characteristics such that it meets the Commission's standards to be treated as an integrated facility, the undepreciated portion of the cost of such facility may then be included in the Formula Rate. The Formula Rate shall include the cost of radial lines and facilities, and upgrades thereto, which were placed in service prior to the effective date of the Formula Rate.

12.0 <u>Load Ratio Share</u>. The calculation of load ratio share for network transmission service shall be based upon a numerator for each customer that uses coincident peak network loads measured at the meter level (net of losses) and a denominator (the Duke Energy Carolinas system peak transmission demand) based on the 12 month rolling average of system peak demands at the generation level (including losses).

Where long-term firm transmission obligations undertaken by Duke Energy Carolinas, either for off-system sales or transmission services, are based upon reservations of capacity, the denominator (system peak transmission demand) for the load ratio share calculation for network transmission service shall include the contract demands for such obligations in lieu of the actual coincidental peak demands at the time of the Duke Energy Carolinas monthly system transmission demand peak. The denominator shall exclude Short Term Transmission Service and Non-Firm Transmission Service demands at the time of the Duke Energy Carolinas monthly system transmission demand peak.

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Preventing Undue Discrimination and Preference in Transmission Service, Order No. 890, FERC Stats. & Regs. ¶31,241 (2007), order on reh'g, Order No. 890-A, FERC Stats. & Regs. ¶31,261, order on reh'g, Order No. 890-B, 123 FERC ¶61,299 (2008), order on reh'g and clarification, Order No. 890-C, 126 FERC ¶61,228, order on clarification, Order No. 890-D, 129 FERC ¶61,126 (2009).

SCHEDULE 10-C

NETWORK INTEGRATION TRANSMISSION SERVICE

[CP&L Zone]

In the CP&L Zone, the Transmission Customers shall compensate the Transmission Provider each month for Network Load for the applicable month as provided in Attachment H.

SCHEDULE 11

DISTRIBUTION SUBSTATION SERVICE

[FPC Zone]

The Transmission Customer shall compensate the Transmission Provider each month for Reserved Capacity or Network Load, as applicable, delivered to the Transmission Provider's Distribution Substations in the FPC Zone at the applicable charges set forth below:

- 11.1 Monthly Period: \$722/MW month.
- **11.2 Weekly Period:** \$166.61/MW week.
- 11.3 Daily Period: The charge for Daily Period delivery on on-peak days shall be \$33.32/MW day and the charge for Daily Period delivery on off-peak days shall be \$23.74/MW day. The total demand charge in any Weekly Period, pursuant to a reservation for Daily Period delivery, shall not exceed the Weekly Period rate times the highest amount in kilowatts of Reserved Capacity in any Daily Period during such Weekly Period.
- 11.4 Hourly Period: The maximum charge for Hourly Period service during on-peak hours shall be \$2.08/MW hour and the maximum charge for Hourly Period service during off-peak hours shall be \$0.99/MW hour. The total demand charge in any Daily Period, pursuant to a reservation for Hourly Period delivery, shall not exceed the Daily Period rate times the highest amount in kilowatts of Reserved Capacity in any Hourly Period during such Daily Period. In addition, the total demand charge in any Weekly Period, pursuant to a reservation for Hourly Period or Daily Period delivery, shall not exceed the Weekly Period rate times the highest amount in kilowatts of Reserved Capacity in any Hourly Period during such Weekly Period.

Billing determinants are the Transmission Customer's Reserved Capacity or Network

Load for service taken at distribution Points of Delivery.

NOTE: All quantities used in calculating the Transmission Customer's Reserved Capacity or Network Load, as applicable, shall be established at the transmission system input level, i.e., shall include the transmission capacity amount associated with any losses.

SCHEDULE 12

LONG-TERM AND SHORT-TERM NETWORK CONTRACT DEMAND TRANSMISSION SERVICE

The Transmission Customer shall compensate the Transmission Provider for Reserved Capacity in the FPC Zone at the sum of the applicable charges set forth below.

Charges:

- A.12.1 Monthly, Weekly and Daily Periods: The rates for the Monthly Period, the Weekly Period, the Daily Period for on-peak days and the Daily Period for off-peak days are derived from the Formula Rate, which is set forth in OATT Schedules 10-A.2 and 10-A.3. The resulting rates are posted on the Transmission Provider's OASIS. The Formula Rate is implemented in accordance with the OATT Schedule 10-A.1 Formula Rate Implementation Protocols.
- **A.12.2 Daily Period:** The total demand charge in any Weekly Period, pursuant to a reservation for Daily Period delivery, shall not exceed the Weekly Period rate times the highest amount in kilowatts of Reserved Capacity in any Daily Period during such Weekly Period.
 - **NOTE:** All quantities used in calculating the Transmission Customer's Reserved Capacity shall be established at the transmission system input level, *i.e.*, shall include the transmission capacity amount associated with any losses.
- **A.12.3 Annual Update:** The charges for Network Contract Demand Service shall be updated annually on June 1st of each year in accordance with the OATT Schedule 10-A.1 Formula Rate Implementation Protocols.
- **A.12.4 Unauthorized Use:** A Transmission Customer that exceeds its Reserved Capacity shall pay a charge equal to the amount of the capacity delivered in excess of the Reserved

Capacity multiplied by 150% of the applicable charge for the lesser of the term of that transaction or one month.

A.12.5 Regulatory Assessment: The Transmission Customer shall pay a portion of the charge by FERC pursuant to 18 C.F.R. § 382.201 related to service under this Tariff. The Regulatory Assessment Expense shall be allocated to the Transmission Customer on an annual basis in the year following the year in which transmission service is rendered based on the megawatt-hours of service provided to the Transmission Customer or based upon such other method as these fees are assessed by FERC.

SCHEDULE 13

GENERATOR IMBALANCE SERVICE

Generator Imbalance Service is provided when a difference occurs between the output of a generator located in the Transmission Provider's Control Area and a delivery schedule from that generator to (1) another Control Area or (2) a load within the Transmission Provider's Control Area over a single hour. The Transmission Provider must offer this service, to the extent it is physically feasible to do so from its resources or from resources available to it, when Transmission Service is used to deliver energy from a generator located within its Control Area. The Transmission Customer must either purchase this service from the Transmission Provider or make alternative comparable arrangements, which may include use of non-generation resources capable of providing this service, to satisfy its Generator Imbalance Service obligation. To the extent the Control Area operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that Control Area Operator. The Transmission Provider may charge a Transmission Customer a penalty for either hourly generator imbalances under this Schedule or a penalty for hourly energy imbalances under Schedule 4 for imbalances occurring during the same hour, but not both unless the imbalances aggravate rather than offset each other.

The Transmission Provider shall establish charges for generator imbalance based on the deviation bands as follows: (i) deviations within +/- 1.5 percent (with a minimum of 2 MW) of the scheduled transaction to be applied hourly to any generator imbalance that occurs as a result of the Transmission Customer's scheduled transaction(s) will be netted on a monthly basis and settled financially, at the end of each month, at 100 percent of incremental or decremental cost, (ii) deviations greater than +/- 1.5 percent up to 7.5 percent (or greater than 2 MW up to 10 MW) of the scheduled transaction to be applied hourly to any generator imbalance that occurs as a

result of the Transmission Customer's scheduled transaction(s) will be settled financially, at the end of each month, at 110 percent of incremental cost or 90 percent of decremental cost, and (iii) deviations greater than +/- 7.5 percent (or 10 MW) of the scheduled transaction to be applied hourly to any generator imbalance that occurs as a result of the Transmission Customer's scheduled transaction(s) will be settled at 125 percent of incremental cost or 75 percent of decremental cost, except that an intermittent resource will be exempt from this deviation band and will pay the deviation band charges for all deviations greater than the larger of 1.5 percent or 2 MW. An intermittent resource, for the limited purpose of this Schedule is an electric generator that is not dispatchable and cannot store its fuel source and therefore cannot respond to changes in system demand or respond to transmission security constraints.

Notwithstanding the foregoing, deviations from scheduled transactions in order to respond to directives by the Transmission Provider, a balancing authority, or a reliability coordinator shall not be subject to the deviation bands identified above and, instead, shall be settled financially, at the end of the month, at 100 percent of incremental and decremental cost. Such directives may include instructions to correct frequency decay, respond to a reserve sharing event, or change output to relieve congestion.

For purposes of this Schedule, incremental cost and decremental cost represent the Transmission Provider's actual average hourly cost of the last 10 MW dispatched for any purpose, e.g., to supply the Transmission Provider's Native Load Customers, correct imbalances, or make off-system sales, based on the replacement cost of fuel, unit heat rates, start-up costs (including any commitment and redispatch costs), incremental operation and maintenance costs, and purchased and interchange power costs and taxes, as applicable. Start-up cost will also include

the cost to cycle a unit back on-line that was removed from service to accommodate an excess Generator Imbalance purchase.

13.1 CP&L Zone and FPC Zone:

shall be calculated and allocated as set out below.

CP&L and FPC utilize the PCI GenTrader generation resource optimization model to determine the incremental and decremental cost. CP&L and FPC use actual generation and load parameters and spot value of relevant commodities as data for this optimization model.

13.1.1 Credits for Generator Imbalance Revenues in the CPL Zone and the FPC Zone

The Transmission Provider will credit revenues that it receives in excess of the incremental costs it incurs to accommodate generator imbalances ("penalty revenues") to all non-offending Transmission Customers (including Affiliated Transmission Customers) and to the Transmission Provider on behalf of its own customers (Native Load Customers). The credits

The penalty revenues for which the Transmission Provider provides credits consist of the following: for each undersupply generator imbalance in excess of the deviation band in an hour, the amount by which the Transmission Provider's revenues for such imbalance pursuant to this Schedule 13 exceed the incremental cost incurred to supply that imbalance.

The imbalance penalty revenues calculated for each hour shall be credited based on the ratio of the transmission revenues from each Network Transmission Customer or Point-to-Point Transmission Customer that did not experience an energy imbalance in excess of the deviation band in an hour to the sum of the transmission revenues from all Transmission Customers that did not experience energy imbalances in the hour. A Transmission Customer that experiences an energy imbalance in excess of the first tier deviation band in an hour shall not receive a credit for that hour.

The Transmission Provider shall disburse accumulated penalty revenues, plus interest calculated in accord with 18 C.F.R. § 35.19a, when the accumulated amount of penalty revenues collected under this Schedule 13 and Section 4.1 of Schedule 4 reaches \$100,000. However, effective as of April 1, 2009 and every April 1st thereafter, if a distribution has not been made within the previous twelve-month period, a distribution will be made no later than April 1 of that calendar year.

13.2 DEC Zone

13.2.1 Credits for Generator Imbalance Revenues in the DEC Zone

The Transmission Provider will credit revenues that it receives in excess of the costs it incurs to accommodate generator imbalances pursuant to Schedule 4.

ATTACHMENT A

FORM OF SERVICE AGREEMENT FOR FIRM POINT-TO-POINT TRANSMISSION SERVICE

1.0	This Service Agreement, dated as of, is entered into, by and between Carolina Power & Light Company/Florida Power Corporation/Duke Energy Carolinas, LLC (the Transmission Provider), and (Transmission Customer).
2.0	The Transmission Customer has been determined by the Transmission Provider to have a Completed Application for Firm Point-To-Point Transmission Service under the Tariff.
3.0	The Transmission Customer has provided to the Transmission Provider an Application deposit in accordance with the provisions of Section 17.3 of the Tariff.
4.0	Service under this agreement shall commence on the later of (1) the requested service commencement date, or (2) the date on which construction of any Direct Assignment Facilities and/or Network Upgrades are completed, or (3) such other date as it is permitted to become effective by the Commission. Service under this agreement shall terminate on such date as mutually agreed upon by the parties.
5.0	The Transmission Provider agrees to provide and the Transmission Customer agrees to take and pay for Firm Point-To-Point Transmission Service in accordance with the provisions of Part II of the Tariff and this Service Agreement.
	The Transmission Customer is responsible for replacing Real Power Losses associated with all transmission service in accordance with Section 15.7 of the Tariff. The Transmission Customer must identify the party responsible for supplying Real Power Losses before the transaction.
6.0	Any notice or request made to or by either Party regarding this Service Agreement shall be made to the representative of the other Party as indicated below.
	<u>Transmission Provider</u> :

	<u>Transmission Customer:</u>		
7.0	FPC Zone: The Transmiss set forth in OATT Attach		comply with the power factor requirements
8.0	The Transmission Custom Assignment Facilities cost		e for Redispatch cost and/or Direct
9.0 their	The Tariff is incorporated IN WITNESS WHEREOI respective authorized officia	F, the Parties have ca	art hereof. used this Service Agreement to be executed by
	<u>Transmission Provider</u> :		
By:	Name	Title	Date
	Transmission Customer:		
By:	Name	Title	 Date

Specifications For Long-Term Firm Point-To-Point Transmission Service

1.0	Term	of Transaction:
	Start	Date:
	Term	ination Date:
2.0		ription of capacity and energy to be transmitted by Transmission Provider including lectric Control Area in which the transaction originates.
3.0	Point	e(s) of Receipt:
	Deliv	vering Party:
4.0	Point	s(s) of Delivery:
	Rece	iving Party:
5.0		mum amount of capacity and energy to be transmitted (Reserved city):
6.0	`	gnation of party(ies) subject to reciprocal service obligation:
7.0	Name	e(s) of any Intervening Systems providing transmission service:
8.0	detai	ce under this Agreement may be subject to some combination of the charges led below. (The appropriate charges for individual transactions will be determined cordance with the terms and conditions of the Tariff.)
	8.1	Transmission Charge:
	8.2	System Impact and/or Facilities Study Charge(s):

Ancil	lary Services Charges:
т ,	Responsible for Providing Real Power Losses:

ATTACHMENT A-1

FORM OF SERVICE AGREEMENT FOR THE RESALE, REASSIGNMENT OR TRANSFER OF POINT-TO-POINT TRANSMISSION SERVICE

1.0	This Service Agreement, dated as of, is entered into, by and between (the Transmission Provider), and (the Assignee).
2.0	The Assignee has been determined by the Transmission Provider to be an Eligible Customer under the Tariff pursuant to which the transmission service rights to be transferred were originally obtained.
3.0	The terms and conditions for the transaction entered into under this Service Agreement shall be subject to the terms and conditions of Part II of the Transmission Provider's Tariff, except for those terms and conditions negotiated by the Reseller of the reassigned transmission capacity (pursuant to Section 23.1 of this Tariff) and the Assignee, to include: contract effective and termination dates, the amount of reassigned capacity or energy, point(s) of receipt and delivery. Changes by the Assignee to the Reseller's Points of Receipt and Points of Delivery will be subject to the provisions of Section 23.2 of this Tariff.
4.0	The Transmission Provider shall credit the Reseller for the price reflected in the Assignee's Service Agreement or the associated OASIS schedule.
5.0	Any notice or request made to or by either Party regarding this Service Agreement shall be made to the representative of the other Party as indicated below.
	Transmission Provider:
	Assignee:
6.0	The Tariff is incorporated herein and made a part hereof.

IN WITNESS WHEREOF, the Parties have caused this Service Agreement to be executed by their respective authorized officials.

Transmission Provide	<u>er</u> :	
Name	Title	Date
Assignee:		
 Name	 Title	

Specifications For The Resale, Reassignment Or Transfer of Long-Term Firm Point-To-Point Transmission Service

1.0	Term of Transaction:	
	Start Date:	
	Termination Date:	
2.0 the el	Description of capacity and energy to be transmitted by Transmiss lectric Control Area in which the transaction originates.	ion Provider including
3.0	Point(s) of Receipt:	
	Delivering Party:	
4.0	Point(s) of Delivery:	
	Receiving Party:	
5.0	Maximum amount of reassigned capacity:	
6.0	Designation of party(ies) subject to reciprocal service obligation:	
7.0	Name(s) of any Intervening Systems providing transmission service	ce:

.1	Transmission Charge:
.2	System Impact and/or Facilities Study Charge(s):
.3	Direct Assignment Facilities Charge:
.4	Ancillary Services Charges:

Service under this Agreement may be subject to some combination of the charges

8.0

ATTACHMENT B

FORM OF SERVICE AGREEMENT FOR NON-FIRM POINT-TO-POINT TRANSMISSION SERVICE

1.0	This Service Agreement, dated as of, is entered into, by and between Carolina Power & Light Company/Florida Power Corporation/Duke Energy Carolinas LLC (the Transmission Provider), and (Transmission Customer).	n,
2.0	The Transmission Customer has been determined by the Transmission Provider to be a Transmission Customer under Part II of the Tariff and has filed a Completed Application for Non-Firm Point-To-Point Transmission Service in accordance with Section 18.2 of the Tariff.	o
3.0	Service under this Agreement shall be provided by the Transmission Provider upon request by an authorized representative of the Transmission Customer.	
4.0	The Transmission Customer agrees to supply information the Transmission Provider deems reasonably necessary in accordance with Good Utility Practice in order for it to provide the requested service.	
5.0	The Transmission Provider agrees to provide and the Transmission Customer agrees to take and pay for Non-Firm Point-To-Point Transmission Service in accordance with the provisions of Part II of the Tariff and this Service Agreement.	
	5.1 The Transmission Customer is responsible for replacing Real Power Losses associated with all Transmission Service in accordance with Section 15.7 of the Tariff. The Transmission Customer must identify the party responsible for supplying Real Power Losses before the transaction.	е
6.0	Any notice or request made to or by either Party regarding this Service Agreement shabe made to the representative of the other Party as indicated below.	11
	<u>Transmission Provider</u> :	

	<u>Transmission Customer:</u>		
			_
			_
.0	FPC Zone: The Transmissi set forth in OATT Attachm		l comply with the power factor requirement
.0			ible for Redispatch cost and/or Direct
0.0	The Tariff is incorporated l	herein and made a	part hereof.
xecu	IN WITNESS WHEREOF authorited by their respective author		caused this Service Agreement to be
	<u>Transmission Provider</u> :		
By:	Name	Title	Date
	Transmission Customer:		
Зу:	Name	Title	

ATTACHMENT C-1

METHODOLOGY TO ASSESS AVAILABLE TRANSFER CAPABILITY (CP&L ZONE)

I. AVAILABLE TRANSFER CAPABILITY (ATC)

A. Types of ATC and Transmission Service Requests (TSR) evaluations that are done at CP&L:

CP&L recognizes time-variant power flow conditions on the interconnected transmission network. CP&L uses the same methodology and base assumptions, as documented below, to determine ATC in the Operating Horizon and similar principles and base assumptions for evaluating TSRs in the Planning Horizon (beyond 13 months):

Operating Scheduling Horizon ATC

Scheduling horizon definition:

CP&L uses a process which builds neighboring *NERC tags*, significant SDX outages, and load forecasts into the *hourly* powerflow snapshots used to determine the initial flows on the flowgates used in the AFC/ATC calculation process. For external coordinated flowgates where coordination agreements have been signed, the CP&L calculated Available Flowgate Capabilities (AFCs) will be replaced with owner's AFCs for the time horizon being studied. With recent developments in using real-time flows, the transmission provider utilizing those flows can over-ride the external coordinated flowgate AFCs during the next few hours if agreed to by the external coordinated flowgate owner. This process also develops distribution factors for each snapshot which are used to quickly schedule and evaluate the impact of new TSRs on top of the calculated flowgate values. Available headroom on each path's most constraining flowgate can be sold if not limited by contract constraints.

Operating - Reservation Horizon ATC (Beyond the scheduling horizon up to 13 months):

CP&L uses a process which builds neighboring *OASIS reservations* and SDX outages and load forecasts into the *hourly*, *daily*, *and monthly* powerflow snapshots used to determine the initial flows on the flowgates used in the ATC calculation process. For external flowgates where coordination agreements have been signed, the CP&L calculated AFCs will be replaced with owner's AFCs for the time horizon being studied. This process also develops distribution factors for each snapshot which are used to quickly schedule and evaluate the impact of new TSRs on top of the calculated flowgate values. Available headroom on each path's most constraining flowgate can be sold if not limited by contract constraints.

<u>Planning - System Impact Studies for Transmission Service Requests (Extending 13 months in the future and beyond):</u>

System impact studies are performed by the Transmission Planning Unit for Original Transmission Service Reservation Requests, Re-direct Requests, or Requests with rollover rights in the Planning Horizon, meaning the time window extending 13 months or further in the future.

B. General Summary of the Components of Available Transfer Capability (ATC)

CP&L uses several components to determine Available Transfer Capability (ATC) values for the interfaces with its neighboring companies. The basic components considered are as follows:

1) Sources, Sinks, and Path: CP&L considers, when the information is explicitly known, the ultimate source, ultimate sink, point of receipt, and the point of delivery when evaluating a transmission service request. This information is passed to the CP&L ATC engine when a request is submitted for transmission service on the CP&L OASIS.

2) Flowgates

Flowgate Identification

- 2.1 Flowgates are identified by one of several methods:
 - Flowgates identified as part of a coordination agreement
 - Flowgates requested for inclusion by another Transmission Service Provider (TSP), subject to screening tests
 - Flowgates subject to an interconnection-wide congestion management procedure within the last twelve months
 - Flowgates identified by screening tests
- 2.2 Flowgates Identified as Part of Coordination Agreements

CP&L includes Flowgates to support coordination agreements.

2.3 Flowgates Requested for Inclusion by Another TSP

If another TSP asks CP&L to include an external Flowgate in our AFC process, the Flowgate must be included in the requesting TSP's methodology, and the Flowgate must ass screening tests:

- Any generator within CP&Ls' TSP area which has at least a 5% Power Transfer Distribution Factor (PTDF) or Outage Transfer Distribution Factor (OTDF) impact on the Flowgate when delivered to the aggregate load of CP&Ls' TSP area, or
- A transfer from CP&Ls' TSP area to an adjacent BA Area which has at least a 5% PTDF or OTDF impact on the Flowgate.

- To help manage the NC to PJM interface, lower cutoff PTDFs and OTDFs may be employed. The NC/PJM interface consists of the interfaces between the PJM BA Area and the three BA Areas on the North Carolina border: Duke Energy Carolinas, Carolina Power & Light East, and Carolina Power & Light West.
- 2.4 Flowgates Subject to Interconnection-Wide Congestion Management Procedure Within the Last Twelve Months
 - CP&L will include any Flowgate within its Reliability Coordinator's area that has been subjected to an interconnection-wide congestion management procedure within the last 12 months, unless the Flowgate was created to address temporary operating conditions.
- 2.5 Flowgates Identified By Screening Tests

The screening tests identify Flowgates that are not addressed by the aforementioned methods. These screening tests identify Flowgates that fall inside CP&Ls' TSP area (internal Flowgates) as well as Flowgates that fall outside CP&Ls' TSP area (external Flowgates).

Flowgates are determined from the results of first contingency transfer analyses from adjacent BA source and sink combinations up to the path capability such that at a minimum the first three limiting Elements and their worst associated contingency combinations with an OTDF of at least 5% are included.

3) Margins: Applicable reliability margin is placed on each flowgate used in the model.

The two types of margins which are considered are:

- CBM Capacity Benefit Margin (refer to section II. below). **Note: CP&L does not reserve CBM.**
- TRM Transmission Reliability Margin (refer to section III. below)

These margins are discussed in depth in later sections of this Attachment.

- 4) Considered Limits: Contract and Flowgate type limits are considered. Once the impacts from existing reservations/schedules are considered, the new TSR being studied is evaluated against the Contract Path and Flowgate limits. The smaller of the two types of constraints is used to update the path ATCs.
 - a) Contract Limit Is based on the sum total of the maximum agreed upon ratings of the interconnecting facilities between CP&L and neighboring Transmission Owners. The individual interconnecting facility ratings are coordinated with the respective neighboring areas by a representative of the Transmission Planning Unit. The "most limiting facility" methodology is used to arrive at the contract limit for each facility.
 - **b)** Flowgate Limit Is based on sum of the ratings of the monitored elements if this is a thermal flowgate, or just the flowgate rating if used to model a stability limit. Transfer

Distribution Factors (TDF) are used when evaluating the new service request to estimate in the power flow model the impact of a schedule or the reservation to system flowgates.

5) Load Forecast / Customer Demand Forecast Data:

The NERC SDX load forecast data is used when available for modeling CP&L load and our immediate neighbors. Load in the starting cases is used for the other areas.

6) Transmission Topology and Transmission & Generation Equipment Outages:

a) Outages and System Topology:

The NERC SDX outage data for CP&L and our immediate neighbors are used to model topology information. For CP&L, all generation and transmission SDX outages are included. For our immediate neighbors, only 230 KV and above transmission outages are included and units with MW ratings above 50.

b) Generation Unit Dispatch:

Priority or block dispatch files for CP&L and our neighbors are used to dispatch the generation to meet the area load and scheduled interchange requirements.

7) Partial Path Reservations:

CP&L considers all confirmed reservations on the CP&L system in the calculation of ATC. No special designation is given to a reservation at any time.

8) Reservations and Schedules:

CP&L uses schedules in the scheduling horizon and reservations in the reservation horizon (firm and non-firm) when evaluating a request for transmission service and determining/posting ATC. During the scheduling horizon, non-tagged firm reservations are effectively released as available non-firm ATC. This is a natural result of using tags in the scheduling horizon. In the reservation horizon, CP&L uses the approved reservations of its neighbors when evaluating new TSRs.

C. ATC Algorithm: How is ATC Calculated?

1. Overview

CP&L utilizes commercially available software to build powerflow snapshots for the next 192 hours, 35 days, and 13 months. This software calculates the initial flowgate flows (initial AFCs) and also calculates the Transfer Distribution Factors (TDFs) for each POR/POD combination on the flowgate. These AFCs and TDFs are then passed over to the ATC calculation engine on the scheduled frequency below for evaluating new TSRs and determining the ATC postings. Contract path limits, flowgate limits, and flowgate overrides for neighbors where coordination agreements exist are honored when determining the path ATCs.

Powerflow snapshot schedule:

- 1. 48 hourly snapshots created every hour (includes NERC tags for CP&L and neighbors in scheduling horizon)
- 2. 192 hourly snapshots created once a day
- 3. 35 daily snapshots created once a day
- 4. 13 monthly snapshots created once a day

2. Definitions

Available Transfer Capability (ATC): A measure of the transfer capability remaining in the physical transmission network for further commercial activity over and above the already committed uses. Such committed uses include existing transmission commitments, including retail customer service, and applicable reliability margins such as capacity benefit margin and transmission reliability margin.

Flowgate: Consists of a monitored facility or facilities (such as a transformer or transmission line) under a contingency (some flowgates do not have contingencies). Flowgates are directional. Other properties include

- TFC the limit or Total Flowgate Capability (TFC)
- TRM in MWs or % of TFC
- CBM in MWs or % of TFC
- Firm Netting % (0 to 100% where 100% means all the firm is netted on this flowgate)
- Non-Firm Netting % (0 to 100% where 100% means all the non-firm is netted on this flowgate)

Available Flowgate Capability (AFC): The amount of headroom on a flowgate that remains available for additional transmission service.

AFC = TFC - base case flow impacts - TRM - CBM - Existing Transmission Commitment (ETC) impacts - New TSR impact

For Non-Firm AFC (Scheduling Horizon), CBM and ETC are zero and tags are part of the base case flow impacts.

Note that when using real-time flows in the scheduling horizon, an adjustment is applied to the next several hours of AFCs based on the difference between the calculated base case flows for the current hour and the actual base case flows determined from the Energy Management System. This applied adjustment will improve the accuracy of the flowgate AFCs, reducing over and under selling transmission.

For Non-Firm AFC (Reservation Horizon), CBM is zero, and the base case flows do not include the ETC impacts (i.e., no double counting is done).

For Firm AFC (Reservation Horizon only), non-firm reservations impacts are not considered, and the base case flows do not include the ETC impacts (i.e., no double counting is done).

For each transmission path defined by a source and a sink, the flow based approach identifies a set of constrained facilities referred to as flowgates that impact this path. The incremental impact of a path on a flowgate is quantified by a response factor expressed in a percentage value. For a transmission service request to be granted on this path, the incremental affect of the MW amount of the request must be smaller than the available flowgate capacity on all of the flowgates impacted by this path.

PTDF - Power Transfer Distribution Factor

PTDF = change in MW flow of an element (monitored or contingent) divided by the amount of the path transfer

LODF - Line Outage Distribution Factor

LODF = change in MW flow of a monitored element after a contingency divided by the initial flow on the contingency

Path TDF - Transfer Distribution Factor

Path TDF = (PTDF of Monitored Element) + (LODF)*(PTDF of Contingent Element): if limited by monitored/contingency pair. Used for FCITC (First Contingency Incremental Transfer Capability) type of calculation.

<u>Path TDF</u> = PTDF of Monitored Element: if not limited by a contingency. Used for NITC (Normal Incremental Transfer Capability) type of calculation.

Flowgate – A monitored element or a monitored element/contingency pair.

<u>Pushing the Path</u> – finding the smallest flowgate ATC in the same direction as the path being evaluated.

3. Thermal ATC Algorithm

Flowgate ATC = (Flowgate AFC)/(Path TDF)

Path ATC = Minimum of flowgate ATCs in the same direction as the path being pushed.

4. Thermal ATC Calculation Details

Netting

- In the scheduling horizon, Non-firm reservations are 100% netted. In the reservation horizon, Non-firm reservations are netted based on the non-firm netting percentage of the flowgates.
- In the scheduling horizon, non-tagged firm reservations are released as available non-firm ATC. In the reservation horizon, firm reservations are netted based on the firm netting percentage of the flowgates.

General TDF Cutoffs – 3% on internal flowgates and 5% on external flowgates

5. Reservation Options

Scheduling against TRM during emergency response conditions – Reservations can be made against the spinning reserve portion of a path's TRM if the ATC for that path does not exceed the calculated margin for that path. That margin equals the limiting flowgate TRM divided by the path TDF.

6. Contract ATC Calculation Algorithm

- Each import and export path has a contract limit.
- The POR/POD of the reservation is used to determine which import or export contract path to decrement.
- Pass through reservations decrement an import path and an export path. The contract limit for a pass-through path is the smallest of the remaining contract amount on the corresponding import and export path used.
- Reservations, whether firm or non-firm, do not net against the contract path limits.
- Contract ATC = remaining contract amount available for scheduling.

7. Databases for AFC Assessment

For assessments from the present time until month 13, AFCs are assessed using the database of an in-house application called Transmission Services Pricing and Tracking (TSPT) which retains all reservation and schedule information for the scheduling and reservation horizon. Any tags and reservations created on OATI OASIS are detected by TSPT, and the applicable information is stored for assessment on demand. Also archived are the seasonal cases and NERC tags, as well as CP&L's neighbor's OASIS reservations, SDX outages, SDX load forecasts, current hour real-time flow adjustments, and AFC overrides used in performing the AFC assessments.

For assessments from the next peak season until 13 months from the present time, an OASIS MMWG database is utilized.

D. <u>System Impact Studies for Transmission Service Requests in the Planning Horizon</u> (Extending 13 months in the future and beyond)

System impact studies are performed by the Transmission Planning Unit for Original Transmission Service Reservation Requests, Re-direct Requests, or Requests with rollover rights in the Planning Horizon, meaning the time window extending 13 months or further in the future. These studies are performed using a regional base case, applying reliability margins, and using similar concepts when evaluating the impact of the Transmission Service Request on the CP&L system. The Request is accepted or denied based on the evaluation of results versus Voltage/Stability limits, contract path limits, and thermal facility limits.

E. Frequency of ATC Calculation:

ATC is determined and posted as follows:

Hourly:

- The scheduling horizon hourly ATCs are determined and posted hourly.
- The next 168 hourly ATC values are determined and posted once a day.

Daily:

Values determined and posted once a day for 30 days.

Weekly:

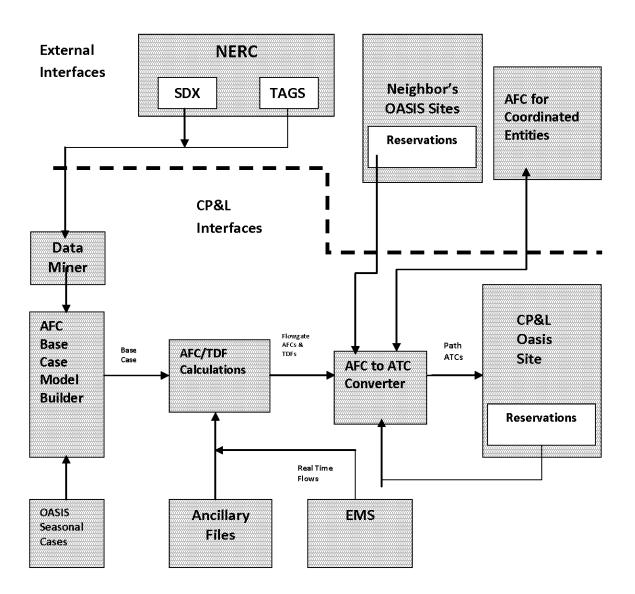
• Updated anytime a daily value changes.

Monthly:

- Monthly values for months 2 through 13 at least once per month.
- Values past 13 months based on request.

F. ATC Process Flow Diagram:

ATC Mathematical Algorithm



ATC Calculation Process Flow Diagram - Operating Horizon

Using Available Flowgate Capability (AFC) to determine ATC Algorithm

Determining ATC using AFC methodology is a multi-step integrated process. CP&L uses the following mathematical algorithms to calculate AFC and ATC.

 $AFC = flowgate\ rating - (solved\ base\ case\ flow) - (impacts\ of\ ETC) - TRM - CBM.$

(Note: CP&L currently uses a **CBM value of 0** for all calculations)

The AFC calculation is the amount of unused transfer capability on a flowgate after accounting for base case conditions represented by solved base case flows and applying the impacts of non-base case commitments and flowgate specific margins.

Impacts of ETC (all time horizons):

Firm AFC – all firm reservation impacts (no netting) are included

NonFirm AFC – all firm reservation impacts (no netting) and all non-firm reservation impacts (100% netting) are included

 $ATC_{flowgate\ based} = Minimum \{AFC_1 / Transfer\ Response\ Factor,\ ...,\ AFC_n / Transfer\ Response\ Factor \}$

The AFC to ATC converter translates the flowgate AFC values into path ATC values for posting to the OASIS. The ATC calculation is the minimum AFC of a set of limiting flowgates divided by the transfer response factor on the respective flowgate for a specific Point of Receipt/Point of Delivery pair.

ATC_{Path} = Minimum{ATC_{flowgate based}, Remaining Contract Path Capability)

The posted path ATC is the minimum of the flowgate based ATC value and the remaining contract scheduling capability on the path.

The OASIS link to this CP&L ATC mathematical algorithm is given below: http://www.oatioasis.com/CPL/CPLdocs/ATC Calculation Algorithm.pdf

II. CAPACITY BENEFIT MARGIN (CBM):

CBM is an amount of firm transmission preserved for Load Serving Entities (LSEs) on the host transmission system where their load is located. This emergency transfer capability is needed to enable access to generation from interconnected systems to meet generation reliability requirements. Preservation of CBM for a LSE allows that entity to reduce its installed generating capacity below what may otherwise have been necessary without interconnections to meet its generation reliability requirements.

Measurement Criteria:

CP&L utilizes a multi-area probabilistic analysis to assess generation system reliability. A multi-area analysis takes into consideration the capacity assistance available through interconnections with neighboring electric utilities. Generating reliability depends on the strength of the interconnections, the generation reserves available from the neighboring systems, and also the diversity in loads throughout the interconnected area. Thus, the interconnected system analysis shows the overall level of generation reliability and reflects the expected risk of capacity deficient conditions for supplying load.

Reliability Criteria:

A Loss-of-Load Expectation (LOLE) of a maximum of 1 day in 10 years is a widely accepted criterion for establishing system reliability. CP&L utilizes a target reliability of a maximum of 1 day in 10 years LOLE for generation reliability assessment. LOLE can be viewed as the expected number of days that the load will exceed available capacity. Thus, LOLE gives a physical sense of reliability and indicates the number of days that a capacity deficient condition could occur, resulting in the inability to supply customer demand.

CBM Requirement:

Based on probabilistic multi-area analysis, CP&L determines the emergency transfer capability needed to achieve the target reliability of a maximum of 1 day in 10 years LOLE. CP&L performs this analysis for the CP&L native load and for all network loads. The emergency transfer capability needed to meet the needs of the total network load is then compared to the total TRM value reserved. If the TRM value is less than the CBM required, then the difference is reserved as CBM; if not, then a CBM reservation is not required.

Who Performs the CBM Assessment?

The Resource Planning Unit of the Transmission Operations & Planning Department is charged with the responsibility of conducting generation reliability analyses and determining the emergency transfer capability needed to achieve the target reliability of a maximum of 1 day in 10 years LOLE. This is performed annually for use in the ATC process for the next year. The Power System Operations staff of the Transmission Operations & Planning Department is responsible for comparing the required emergency transfer capability to the TRM value and reserving CBM as necessary to meet the LOLE reliability target.

CP&L's current values posted on OASIS for CBM are zero.

CBM Use Procedure: Currently, there is not a need for a CBM use procedure since the current CBM reserved for Network Customer use is zero (0). The TRM requirement and associated TRM use procedure provides Network Customers with the capability and a process as described in Section III of Attachment C-1 for accessing TRM in order to maintain the LOLE of a maximum of 1 day in ten (10) years.

III. TRANSMISSION RELIABILITY MARGIN (TRM):

TRM is defined as the amount of transmission transfer capability necessary to provide a reasonable level of assurance that the interconnected transmission network will be secure. TRM accounts for the inherent uncertainty in system conditions and the need for operating flexibility

to ensure reliable system operation as system conditions change. The amount of generating reserve needed to maintain a reliable power supply is a function of the unique characteristics of a utility system including load shape, unit sizes, capacity mix, fuel supply, maintenance scheduling, unit availability, and the strength of the transmission interconnections with other utilities. There is no one standard measure of reliability that is appropriate for all systems since these characteristics are particular to each individual utility. Specifically, CP&L considers variation in generator dispatch, parallel path "loop flow" impacts, inrush power flow due to loss of generation and short-term Operator Response/Operating Reserves in developing TRM quantities. Following a contingency, system operators take immediate actions, either individually or in concert with other operators, to maintain the reliability of the transmission system. Transmission capacity must remain available to allow for operator flexibility immediately following such a contingency and allow sufficient margin for interregional power flows on the CP&L transmission system. At CP&L, TRM is separated into three quantities, TRM-Reserve Sharing [TRM (RS)], TRM-inrush [TRM (Inrush)] and TRM- Parallel Path Flow Impact [TRM (PPFI)].

Who Performs the TRM Assessment

Staff from the Power System Operations Unit and the Transmission Planning Unit of the Transmission Operations and Planning Department determines the allocation of TRM to the interfaces.

Methodology Used to Determine and Allocate TRM-Reserve Sharing

CP&L participates in a reserve sharing agreement with other companies within the Virginia-Carolinas (VACAR) subregion of Southeastern Electric Reliability Council (SERC). This agreement requires that each participating VACAR company will provide a Contingency Reserve Commitment to the subregion. The Total Contingency Reserve (TCR) is equal to the largest single resource in the combined areas multiplied by a factor of 1.5. Each participating company is required to maintain their share of the TCR based on a formula that takes into account each company's annual peak demand and largest resource. CP&L, in its eastern control area, allocates at each import interface enough TRM (RS) to accommodate each VACAR company's TCR. Additionally, in its eastern control area, CP&L maintains an export TRM (RS) with each of its VACAR company interfaces equal to the amount of TRM reserved by the VACAR neighbor to import the CP&L requirement under the reserve sharing agreement.

Methodology Used to Determine and Allocate TRM- Parallel Path Flow Impact

An analysis of recorded power flow vs. expected flow is performed to assess the impact to the CP&L transmission system of interregional power flow patterns. Parallel path flows occur within the interconnected electric transmission system as power moves within, around and through systems based on impedance characteristics influenced by system configuration, system topology, generation patterns and scheduled transactions.

Using power flow software, a seasonal model of the transmission system is created for days of high transmission usage as identified through historical records. Generator outages, equipment outages, system configuration and confirmed transactions are input to the model. The confirmed transactions modeled are taken from the CP&L scheduling systems of CP&L and surrounding areas. This model produces expected energy flow patterns across the CP&L interfaces. Information taken from the SCADA historical database provides real-time actual flows patterns for comparison. The difference between the expected flows and those actually recorded during

peak transmission usage constitute the basis for Parallel Path Flow Impacts necessary to be reserved in TRM.

Methodology Used to Determine and Allocate TRM - Inrush Flow Impact

An analysis of the power flow into the CPLE and CPLW control areas is conducted yearly or as required due to system changes. The analysis is conducted to determine the impact of the inrush power flow on each flowgate due to a sudden loss of any single CP&L generator. The largest flowgate impact for any generator loss is then compared to the TRM-Reserve Sharing flowgate number. The larger of the numbers is used for each flowgate TRM value. The numbers are not combined.

Operating Practices

- CP&L applies TRM (RS) and TRM (PPFI or Inrush) to specific flowgates resulting in a reduction in available transfer capability.
- CP&L does not allow TRM to be sold on a firm or non-firm basis, as doing so would endanger system reliability.

TRM calculation and allocation at CP&L is reviewed yearly or more frequently if system conditions change drastically, e.g., a new line or generator being put in service.

Use of TRM

TRM can be utilized by any LSE inside the CP&L Control Areas of CPLE and CPLW under the following conditions:

- 1. Presence of a disturbance (loss of firm resource) invoking an Emergency Reserve Sharing Agreement;
- 2. Declaration of an Energy Emergency Alert (EEA) due to insufficient resources (the LOAD SERVING ENTITY has exhausted all other options and can no longer provide its customers' expected energy requirements). Any load serving entity within the CPLE or CPLW control areas requesting use of TRM must request CP&L to request the VACAR-South Security Coordinator to post an EEA prior to CP&L granting use of TRM.
- 3. Once a customer is allowed access to TRM, the capacity is made available as firm network service.

The following load serving entities have access to TRM under one of the above conditions:

- (a) North Carolina Electric Membership Corporation NCEMC
- (b) North Carolina Eastern Municipal Power Agency NCEMPA
- (c) Fayetteville Public Works Commission FPWC
- (d) Sharpsburg
- (e) Black Creek
- (f) Lucama
- (g) Stantonsburg
- (h) Piedmont Electric Membership Corporation PEMC
- (i) French Broad Electric Membership Corporation FBEMC

- (j) Waynesville
- (k) Winterville
- (1) Camden
- (m) Carolina Power & Light d/b/a PEC for Native Wholesale and Retail Load
- (n) Haywood Electric Membership Corporation

The Following Procedures Shall be Utilized for Accessing TRM:

- a) The load serving entity shall call the CP&L Transmission Services Desk (919) 546-2144, and state which condition is occurring causing the request for the use of TRM.
- b) The load serving entity shall state the amount of TRM that is required, the emergency source, and the start time for the emergency interchange. The load serving entity will be responsible for tagging the emergency interchange.

CP&L's current flowgate TRM values are posted on OASIS in a separate document.

IV. TOTAL TRANSFER CAPABILITY (TTC):

The Total Transfer Capability (TTC) is the amount of transfer that can be reliably delivered across the interconnected transmission system for the forecasted conditions. CP&L uses the network AFC methodology to calculate ATC, which does not use TTC as an input. The flowgate rating is an equivalent starting point in the AFC calculation. However, a TTC value is derived as an output and is posted.

ATTACHMENT C-2

METHODOLOGY TO ASSESS AVAILABLE TRANSFER CAPABILITY (FPC ZONE)

This Attachment C-2 describes the FPC methodology used to assess Total Transfer Capability ("TTC") and Available Transfer Capability ("ATC"). The methodology as described in this document applies to TTC and ATC calculations and is based upon the "Florida Reliability Coordinating Council ("FRCC") ATC Document". Please see https://www.frcc.com/ATCWG/Shared%20Documents/FRCC%20ATC%20Coordination%20 Procedures.pdf.

MATHEMATICAL ALGORITHM:

The table below describes the mathematical algorithms used to calculate firm and non-firm ATC for the scheduling, operating and planning horizons.

A more detailed description of FPC's ATC algorithms may be accessed on FPC's OASIS at https://www.oatioasis.com/FPC/FPCdocs/ATC Mathematical Algorithm.doc

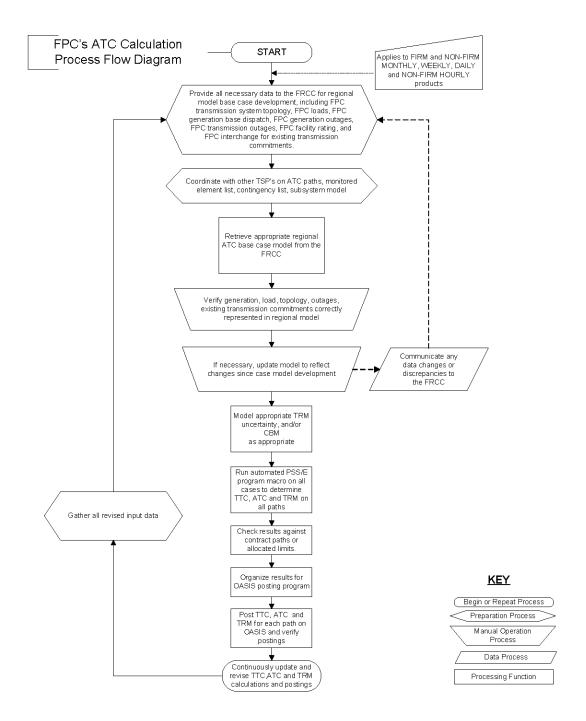
	CALCULATION HORIZON		
	SCHEDULING	OPERATING	PLANNING
FIRM	N/A	ATC = TTC - ETC - TRM - CBM	ATC = TTC - ETC - TRM - CBM
NON-FIRM	ATC = TTC - ETC	ATC = TTC - ETC - CBM	ATC = TTC - ETC - CBM

N/A - FIRM PRODUCTS DO NOT EXIST IN SCHEDULING HORIZON.

FPC uses a flow based (network response) calculation method to determine ATC on its paths within the FRCC. In the Operating horizon, calculations are performed using Power Technologies Incorporated's ("PTI") PSS/E load flow program. PSS/E efficiently calculates the impact of transactions on network elements and identifies the most limiting contingencies and limiting facilities. In the Planning horizon, ATC is determined by explicitly modeling requested transactions using PTI's PSS/E load flow program. PSS/E relies upon load flow cases that incorporate the base assumptions. These "base cases" are derived from the peak load base cases that FRCC Transmission Working Group ("TWG") annually updates and represent seasonal load profiles, in-service generating units, in-service transmission facilities and firm interchange contracts according to NERC guidelines. The FRCC ATCWG uses cases developed above to create loadflow cases of planned operations, modeling the expected load levels, facility outages, and confirmed firm and non-firm transactions for use in calculating hourly and daily ATC and TTC. — In addition, the ATCWG provides monthly cases for the next 12 months that model the combination of projected highest load and most significant maintenance outage scenario. FPC currently includes the total load; therefore, interruptible demands are not utilized in determining ATC values. Interruptible demands are loads within

FPC that may be curtailed via conditions of a power contract. Since this rarely happens, FPC assumes in its ATC calculations that these particular demands are not curtailed.

PROCESS FLOW DIAGRAM:



The Available Transfer Capability of FPC paths are determined using a network response method for ATC/TTC determination, and using the most current Databank loadflow base cases as a starting point, updated using data available from the FRCC Operations Planning Coordinator ("OPC") and best assumptions. These cases should have each Florida control area's generation dispatched economically to meet that control area's existing firm requirements including Existing Transmission Commitments.

In the ATC Operating Horizon (36 hours beyond the scheduling horizon) FPC uses cases developed by the ATCWG in the manner described above, that are stored in a common area available to transmission providers. These cases include loadflows representing the week ahead, and monthly cases representing the next 12 months. The ATCWG daily cases are updated twice weekly, and the monthly cases are updated on a seasonal schedule. The criteria FPC uses for ATC calculations shall be consistent with the FRCC and individual utility criteria. Established operating procedures shall be incorporated into ATC calculations. Revisions to operating procedure changes shall be noted and shared on the FRCC ftp site.

In the ATC Planning Horizon (beyond operating horizon) FPC uses FRCC Planning cases jointly developed by the FRCC member utilities for the ten-year horizon. This databank includes an interchange database for a variety of system load conditions and economic dispatch tables to facilitate preparation of loadflow cases for off-peak conditions. These loadflow databank cases contain all long term firm transactions, individual utility generation dispatch, projected load for the time period under evaluation, planned generation or transmission facility additions in the future, and designation of generation resources to serve all network load. These cases provide the starting point for all ATC determination.

FPC utilizes a discrete contingency and monitor list for ATC calculation. The monitored facilities are those facilities that are monitored for overloads and low voltage conditions (limits) under normal or first contingency analysis when calculating ATC. Monitored facilities for use in ATC calculations will generally include facilities operated at 69 kV and above and all tie lines between Transmission Providers. Other facilities operated at lower voltage levels may be added to the monitored facilities list. The FRCC ATCWG is responsible for compilation of the monitored facilities list for the FRCC, and uses the current monitored facilities list for the FRCC Reliability Coordinator and FRCC Operations Planning Coordinator functions as a starting point.

For ATC purposes, critical contingencies are those facilities that, when outaged, are deemed to have an adverse impact on the reliability of the transmission network. These facilities may be transmission facilities, including multi-terminal lines, or generating units. All tie-lines regardless of voltage and the largest unit of each control area will be considered critical contingencies. The FRCC ATCWG is responsible for compilation of the critical contingencies list for ATC calculations.

TTC

Total Transfer Capability (TTC) - The amount of electric power that can be moved or transferred reliably from one area to another area of the interconnected transmission systems by way of all transmission lines (or paths) between those areas under specified system conditions.

For all of FPC's intra-regional paths, ATC will be calculated by the generally accepted Network Response Method for ATC determination described in detail in the June 1996 NERC document, "Available Transfer Capability Definitions and Determination", using PTI's PSS/E software and any post processing programs that may be necessary to facilitate required postings.

PSS/E is used to determine the First Contingency Incremental Transfer Capability (FCITC), which is the Available Transfer Capability, or ATC, after Capacity Benefit Margin (CBM), Transmission Reliability Margin (TRM) and Existing Transmission Commitments (ETC) have been accounted for in the load flow case by explicit modeling. Total Transfer Capability (TTC) is the sum of each of these components.

TTC=ETC+ATC+CBM+TRM

The components of TTC are "back-calculated" by elimination and algebraic summation of known and calculated values. Using the appropriate base cases, transfer limits are determined for all commercially viable paths. These transfer limits are based on first contingency conditions. The results are combined with the appropriate TRM, ETC, and CBM to obtain the Total Transfer Capability (TTC). Finally, the calculated TTC is compared to any applicable contractual limitation, the lesser of which is the posted TTC.

Existing Transmission Commitments (ETC)

Definition- FPC defines ETC as the committed uses of the FPC transmission system considered when determining Available Transfer Capability.

ETC Calculation Methods – To set aside transfer capability for native load and non-OATT customers for the operating and planning horizons, FPC explicitly models the transactions and load using load forecasting when appropriate. The generation assumed to participate for native load and non-OATT customer impact is determined by using an FRCC approved and developed economic merit order. Point to Point (PTP) OATT transactions are modeled explicitly, and the generation assumed to participate for Point to Point (PTP) OATT is determined by using an FRCC approved and developed economic merit order. For models at various load levels the loads are scaled down, and generation is adjusted using the economic merit order.

Rollover – FPC assumes in ATC determinations that existing transactions eligible for rollover by a customer will rollover. If a customer has elected to not exercise rollover rights, FPC would exclude that transaction from ATC determinations.

Release of unscheduled Firm ATC reservations - FPC releases unscheduled firm as nonfirm ATC in the scheduling horizon (next 4 hours). The release is accomplished automatically on OASIS by comparing the reserved ATC and the pending or committed schedules (tags). The tags have an OASIS reservation number on them, and when the tag does not exist at all or in cases when the tag scheduled ATC is less than the OASIS reservation amount, the unscheduled portion is not subtracted from TTC in the nonfirm ATC algorithm for the scheduling horizon, and thus the capacity is released.

TRM

Transmission Reliability Margin (TRM) - The amount of transmission transfer capability necessary to provide reasonable assurance that the interconnected transmission network will be secure. TRM accounts for the inherent uncertainty in system conditions and the need for operating flexibility to ensure reliable system operation as system conditions change.

FPC posts the calculated TRM on a per path basis at the following link:

https://www.oatioasis.com/FPC/FPCdocs/PEF CBM TRM Methodology v2.htm

Transmission Reliability Margin (TRM) Calculation Methodology - FPC determines the appropriate amount of TRM at each of its interfaces based upon the operating reserve obligations contained in the FRCC Operating Reserve Policy. On most paths the TRM is based upon a maximum delivered or received reserve obligation.

Export Path TRM - FPC has an obligation to deliver up to 182 MW for a reserve call, thus the TRM is 182 MW on most FPC export paths. Due to the small size of some reserve share participants, a reserve call that would require FPC to deliver 182 MW of operating reserves is not possible. For those situations, the TRM is reduced to FPC's share (20%) of the MW output of the reserve sharing participant's largest generator. FPC has a maximum reserve obligation of 20% for each reserve call.

Import Path TRM - FPC must be able to receive up to the maximum amount of operating reserves allowed by the Reserve Sharing Agreement. On import paths the TRM is set to the maximum reserve sharing obligation to be delivered from each reserve sharing participant. The TRM for import paths varies between 0 MW and 376 MW depending upon the reserve obligations for the particular path.

Pass Through Path TRM - The TRM on pass through paths is the larger of the operating reserve requirement of the POD and POR for each path. The POR operating reserve requirement for pass through paths is adjusted by a loop flow factor where appropriate. For example, the reserve requirement to deliver to FPC may be 100 MW for a particular POR, however a pass through path from the same POR to a POD may only be impacted by 50 MW for the 100 MW reserve obligation, thus the loop flow factor is 0.5, and the resulting TRM is 100*0.5 = 50 MW.

Use of TRM – FPC subtracts TRM from TTC for all firm products in all of the time horizons. To the extent that system conditions allow without adversely impacting reliability, TRM will be made available for transmission service on a nonfirm basis.

CBM

Capacity Benefit Margin (CBM) - The amount of firm transmission transfer capability preserved by the transmission provider for Load-Serving Entities (LSEs), whose loads are located on that Transmission Service Provider's system, to enable access by the LSEs to generation from interconnected systems to meet generation reliability requirements. Preservation of CBM for an LSE allows that entity to reduce its installed generating capacity below that which may otherwise have been necessary without interconnections to meet its generation reliability requirements. The transmission transfer capability preserved as CBM is intended to be used by the LSE only in times of emergency generation deficiencies.

FPC's Resource Assessment & Planning group performs its resource adequacy analysis and incorporates both deterministic and probabilistic methods in its assessment of generation reliability. This assessment is accomplished by system reliability analyses which are typically based on a dual planning criteria of a minimum peak period reserve margin of 20% (FPC applies this to both Summer and Winter peaks) and a maximum loss-of-load probability (LOLP) of 0.1 day per year. Both of these criteria are commonly used throughout the utility industry. Historically, two types of methodologies, deterministic and probabilistic, have been employed in system reliability analysis. The calculation of excess firm capacity at the annual system peaks (reserve margin) is the most common method, and this relatively simple deterministic calculation can be performed on a spreadsheet. It provides an indication of the adequacy of a generating system's capacity resources compared to its native load during peak periods. However, deterministic methods do not take into account probabilistic-related elements such as the impact of individual unit failures. For example: two 50 MW units which can be counted on to run 90% of the time are more valuable in regard to utility system reliability than is one 100 MW unit which can also be counted on to run 90% of the time. Probabilistic methods also recognize the value of being part of an interconnected system with access to multiple capacity sources. For this reason, probabilistic methodologies have been used to provide an additional perspective on the generation resource adequacy of a generating system. There are a number of probabilistic methods that are being used to perform system reliability analyses. Of these, the most widely used is loss-of-load probability or LOLP. Simply stated, LOLP is an index of how well a generating system may be able to meet its demand (i.e., a measure of how often load may exceed available resources). In contrast to reserve margin, the calculation of LOLP looks at the daily peak demands for each year, while taking into consideration such probabilistic events as the unavailability of individual generators due to scheduled maintenance or forced outages. LOLP is expressed in units of the "number of times per year" that the system demand could not be served. The standard for LOLP accepted throughout the industry is a maximum of 0.1 day per year. This analysis requires a more complicated calculation methodology than does the reserve margin analysis. LOLP analyses are typically carried out using computer software models such as the Tie Line Assistance and Generation Reliability (TIGER) program used by FPC.

The result of this step of resource planning is a projection of how many MW of resources are needed to meet both reserve margin and LOLP criteria, and thus maintain system reliability.

Determination of CBM

FPC has adopted the following CBM Methodology:

FPC currently has zero CBM reserved on each of its interfaces (posted paths). FPC's CBM on each interface is currently established through the transmission provider functions within FPC.

Since FPC does not calculate a CBM component to meet any resource adequacy reliability requirement; CBM on each of FPC's path's where FPC is the POD will be 0 and will not be included in the calculations.

ATTACHMENT C-3

METHODOLOGY TO ASSESS AVAILABLE TRANSFER CAPABILITY (DEC ZONE)

1. Purpose and Scope

This Attachment C-3 sets forth the methodology to assess Available Transfer Capability (ATC). Any provisions herein shall be construed consistent with NERC MOD standards and any other applicable reliability standard.

2. Definitions

The terms defined below, to the extent defined differently than in Section 1 of Part I of the Tariff, apply only to this Attachment C-3.

2.1. Available Flowgate Capability (AFC)

A measure of the flow capability remaining on a Flowgate for further commercial activity over and above already committed uses.

2.2. Available Transfer Capability (ATC)

A measure of the transfer capability remaining in the physical transmission network for further commercial activity over and above already committed uses.

2.3. ATC Path

Any combination of Point of Receipt and Point of Delivery for which ATC is calculated; and any path posted on OASIS.

2.4. Balancing Authority

The responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports interconnection frequency in real time.

2.5. Balancing Authority Area (BA Area)

The collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area.

2.6. Capacity Benefit Margin (CBM)

The amount of firm transmission transfer capability preserved by the Transmission Service Provider for Load-Serving Entities (LSEs), whose loads are located on that Transmission Service Provider's system, to enable access by the LSEs to generation from interconnected systems to meet generation reliability

requirements. Preservation of CBM for an LSE allows that entity to reduce its installed generating capacity below that which may otherwise have been necessary without interconnections to meet its generation reliability requirements. The transmission transfer capability preserved as CBM is intended to be used by the LSE only in times of emergency generation deficiencies.

2.7. Existing Transmission Commitments (ETC)

Committed uses of a Transmission Service Provider's transmission system considered when determining ATC or AFC.

2.8. Flowgate

A mathematical construct, comprised of one or more monitored transmission facilities and optionally one or more contingency facilities, used to analyze the impact of power flows upon the bulk electric system.

2.9. Flowgate Methodology

The Flowgate Methodology is characterized by identification of key facilities as Flowgates. Total Flowgate Capabilities (TFCs) are determined based on facility ratings and voltage and stability limits. The impacts of Existing Transmission Commitments (ETCs) are determined by simulation. The impacts of ETC, Capacity Benefit Margin (CBM) and Transmission Reliability Margin (TRM) are subtracted from the Total Flowgate Capability, and Postbacks and counterflows are added, to determine the Available Flowgate Capability (AFC) value for that Flowgate. AFCs can be used to determine Available Transfer Capability (ATC).

2.10. Generator Shift Factor (GSF)

A factor to be applied to a generator's expected change in output to determine the amount of flow contribution that change in output will impose on an identified transmission facility or Flowgate.

2.11. Interconnection Reliability Operating Limit (IROL)

A System Operating Limit that, if violated, could lead to instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the bulk electric system.

2.12. Load-Serving Entity (LSE)

Secures energy and Transmission Service (and related interconnected operations services) to serve the electrical demand and energy requirements of its end-use customers.

2.13. Tag Dump

A database that contains tagging data for the Eastern Interconnection.

2.14. System Data Exchange (SDX)

A database that serves as a repository for transmission outages, generation outages, and load forecast data for the Eastern Interconnection.

2.15. Outage Transfer Distribution Factor (OTDF)

In the post-contingency configuration of a system under study, the electric Power Transfer Distribution Factor (PTDF) with one or more system facilities removed from service (outaged).

2.16. Point of Delivery (POD)

A location that the Transmission Service Provider specifies on its transmission system where an interchange transaction leaves or a Load-Serving Entity receives its energy.

2.17. Point of Receipt (POR)

A location that the Transmission Service Provider specifies on its transmission system where an interchange transaction enters or a generator delivers its output.

2.18. Power Transfer Distribution Factor (PTDF)

In the pre-contingency configuration of a system under study, a measure of the responsiveness or change in electrical loadings on transmission system facilities due to a change in electric power transfer from one area to another, expressed in percent (up to 100%) of the change in power transfer.

2.19. System Operating Limit (SOL)

The value (such as MW, MVar, Amperes, Frequency or Volts) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria. System Operating Limits are based upon certain operating criteria. These include, but are not limited to:

- Facility ratings (applicable pre- and post-contingency equipment or facility ratings)
- Transient stability ratings (applicable pre- and post-contingency stability limits)

- Voltage stability ratings (applicable pre- and post-contingency voltage stability)
- System voltage limits (applicable pre- and post-contingency voltage limits)

2.20. Total Flowgate Capability (TFC)

The maximum flow capability on a Flowgate, is not to exceed its thermal rating, or in the case of a flowgate used to represent a specific operating constraint (such as a voltage or stability limit), is not to exceed the associated System Operating Limit.

2.21. Transfer Distribution Factor (TDF)

The portion of an interchange transaction, typically expressed in per unit that flows across a transmission facility (Flowgate).

2.22. Transmission Owner

The entity that owns and maintains transmission facilities.

2.23. Transmission Reliability Margin (TRM)

The amount of transmission transfer capability necessary to provide reasonable assurance that the interconnected transmission network will be secure. TRM accounts for the inherent uncertainty in system conditions and the need for operating flexibility to ensure reliable system operation as system conditions change.

2.24. Transmission Service

Services provided to the transmission customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery.

2.25. Transmission Service Provider (TSP)

The entity that administers the transmission tariff and provides Transmission Service to transmission customers under applicable Transmission Service agreements.

3. Overview

Duke Energy Carolinas has chosen to use the Flowgate Methodology for calculating AFCs and the resultant ATCs for each ATC Path.

The Flowgate Methodology is based on the assumption that certain elements on the transmission system will begin to reach their limits before the other elements on the

system. Therefore by monitoring these more sensitive areas on the transmission system, transfer capability calculations can be simplified in regard to the number of contingencies and monitored elements examined during each study. This allows for a greater number of studies to be conducted with simplified input assumptions. The resulting studies focus on how power would actually flow if the Transmission Service requests were to be approved.

The Flowgate Methodology involves the calculation of AFC on Flowgates modeled in the process. ATC on posted paths is then derived from the calculated AFCs.

4. Two-Part AFC Calculation Process

Duke Energy Carolinas' AFC calculation takes place as a two part process:

- 1. <u>Model Building Process</u> Duke Energy Carolinas utilizes commercially available model building software for its model building process. This tool utilizes a starting point case that is used to derive multiple powerflow snapshot models covering defined horizons. From these snapshot models, Flowgate baseflows and GSFs relative to a reference bus are calculated.
- 2. <u>AFC Calculation Process</u> The Flowgate baseflows and GSFs are then passed to an AFC engine. The transaction TDF values are computed from the GSF values by subtracting the load GSF from the source GSF. The AFC Engine is a suite of software applications that determines Transmission Service reservation impacts, calculates AFCs and ATCs, evaluates new Transmission Service requests, applies business rules, and posts ATCs on OASIS.

5. AFC Calculation Horizons and Frequency

Duke Energy Carolinas has identified three distinct horizons for the calculation of AFC and ATC: Operating, Planning, and Study. The AFC calculation horizons are defined as follows:

AFC Time	AFC Horizon Time Range	
Horizon		
Operating	Prior to 10:00 AM EPT, current hour - midnight of the current	
	day. After 10:00 AM EPT, current hour - midnight of the next	
	day	
Hourly Planning	End of Operating horizon - at least 6 days beyond the current day	
Daily Planning	End of Hourly Planning horizon - at least 31 days beyond the	
	current day	
Monthly Study	End of Daily Planning horizon - at least 13 calendar months from	
	current month	

Duke Energy Carolinas' two-part AFC calculation process is executed at regularly scheduled intervals via automated processes. These automated processes create hourly,

daily, and monthly models and derive TDFs and AFCs from those models at the following frequency:

Increment	Model Build & AFC Calculation Frequency*	
Hourly	Next 48 hours calculated hourly Next 168 hours (at least)	
	calculated daily	
Daily	Next 31 days (at least) calculated daily	
Monthly	Next 13 months (at least) calculated daily	

^{*}Timeframes indicate when the models are built and new AFC values are calculated from these models. AFCs and resulting ATCs, however, are continuously decremented as Duke Energy Carolinas' Transmission Service reservations are confirmed.

6. Flowgate Identification

Flowgates are identified by one of several methods:

- Flowgates identified as part of coordination agreements
- Flowgates requested for inclusion by another TSP
- Flowgates subject to interconnection-wide congestion management procedure within the last twelve months
- Flowgates identified by screening tests

6.1. Flowgates Identified As Part of Coordination Agreements

Duke Energy Carolinas includes Flowgates to support coordination agreements.

6.2. Flowgates Requested For Inclusion by Another TSP

If another TSP asks Duke Energy Carolinas to include in its AFC process Flowgates that fall outside Duke Energy Carolinas' TSP area, the Flowgate must be included in the requesting TSP's methodology, and the Flowgate must pass screening tests:

- Any generator within Duke Energy Carolinas' TSP area has at least a 5% PTDF or OTDF impact on the Flowgate when delivered to the aggregate load of Duke Energy Carolinas' TSP area, or
- A transfer from Duke Energy Carolinas' TSP area to an adjacent BA Area has at least a 5% PTDF or OTDF impact on the Flowgate.

To help manage the NC/PJM interface, lower cutoff PTDFs and OTDFs may be employed. The NC/PJM interface consists of the interfaces between the PJM BA Area and the three BA Areas on the North Carolina border with PJM: Duke

Energy Carolinas, Carolina Power & Light East, and Carolina Power & Light West.

6.3. Flowgates Subject to Interconnection-Wide Congestion Management Procedure Within the Last Twelve Months

Duke Energy Carolinas will include any Flowgate within its Reliability Coordinator area that has been subjected to an interconnection-wide congestion management procedure within the last twelve months, unless the Flowgate was created to address temporary operating conditions.

6.4. Flowgates Identified By Screening Tests

Screening tests identify Flowgates that are not addressed by the aforementioned methods. These screening tests identify Flowgates that fall inside Duke Energy Carolinas' TSP area (internal Flowgates) as well as Flowgates that fall outside Duke Energy Carolinas' TSP area (external Flowgates).

Flowgates identified by screening tests are based, at a minimum, on the results of first contingency transfer analyses from adjacent BA source and sink combinations up to the path capability such that at least the first three limiting Elements and their worst associated contingency combinations with an OTDF of at least 5% are included.

7. Databases for AFC Processes

A collection of data exists for both the model building process and the AFC calculation process.

The database for the model building process includes all input and output data such as load forecasts, generation outages, transmission outages, generation block dispatch files, Flowgate definitions, POR/POD definitions, tagging data from Tag Dump, starting point models, output models, GSFs, and Flowgate baseflows.

The database for the AFC calculation process (the AFC Engine) includes input and output data items such as Flowgate definitions, GSFs, Flowgate baseflows, Transmission Service requests, Transmission Service reservations, tags, TFCs, TRMs, CBMs, Contract Path Limits, counterflow percentages, calculated AFCs, external AFCs (AFC overrides), ATCs, and Remaining Contract Path Capabilities.

8. Assumptions in the AFC Process

8.1. Generation Dispatch

Priority or block dispatch files for the Duke Energy Carolinas TSP area and for adjacent TSP areas when available are used to dispatch the generation to meet the area load and scheduled interchange requirements. For other external areas, if a priority or block dispatch is not used, then the generation dispatch in the starting

point case is used and on-line generation is scaled to balance the load, interchange, and losses.

8.2. Load Forecasts

Load forecast data from the System Data Exchange (SDX) is used when available for modeling load in the Duke Energy Carolinas TSP area and adjacent TSP areas. Load in the starting point cases is used for the remaining areas.

8.3. Transmission and Generation Outages

Transmission and generation outages from the SDX are used to model topology information for AFC calculations. Duke Energy Carolinas' AFC process takes into consideration transmission and generation outages for Duke Energy Carolinas TSP area and adjacent TSP areas.

8.4. Coordinated AFCs

For external Flowgates identified through AFC coordination, the AFCs that Duke Energy Carolinas calculates will be overridden by the AFCs provided by the TSP that calculates AFC for that Flowgate.

9. AFC Calculation Equations

9.1. Firm AFC Calculations

In accordance with the MOD-030 reliability standard, the following equation is employed when calculating firm AFC for a Flowgate for a specified period:

$$AFC_F = TFC - ETC_{Fi} - CBM_i - TRM_i + Postbacks_{Fi} + Counterflows_{Fi}$$

Where:

AFC_F is the firm AFC for the Flowgate for that period

TFC is the Total Flowgate Capability of the Flowgate

ETC_{FI} is the sum of the impacts of existing firm Transmission Service commitments for the Flowgate during that period

CBM_i is the impact of the CBM on the Flowgate during that period

TRM_i is the impact of the TRM on the Flowgate during that period

Postbacks_{Fi} are changes to firm AFC due to a change in the use of Transmission Service for that period

Counterflows_{Fi} are adjustments to firm AFC due to power flows in the opposite direction of the Flowgate

9.2. Non-Firm AFC Calculations

In accordance with the MOD-030 reliability standard, the following equation is employed in calculating non-firm AFC:

$$AFC_{NF} = TFC - ETC_{Fi} - ETC_{NFi} - CBM_{Si} - TRM_{Ui} + Postbacks_{NFi} + Counterflows_{NFi}$$

Where:

AFC_{NF} is the non-firm AFC for the Flowgate for that period

TFC is the Total Flowgate Capability of the Flowgate

ETC_{FI} is the sum of the impacts of existing firm Transmission Service commitments for the Flowgate during that period.

ETC_{NFI} is the sum of the impacts of existing non-firm Transmission Service commitments for the Flowgate during that period

CBM_{Si} is the impact of any CBM schedules on the Flowgate during that period

TRM_{UI} is the impact of the unreleased TRM on the Flowgate during that period

Postbacks_{NFi} are changes to non-firm AFC due to a change in the use of Transmission Service for that period

Counterflows_{NFI} are adjustments to non-firm AFC due to power flows in the opposite direction of the Flowgate

9.3. Total Flowgate Capability

Duke Energy Carolinas utilizes summer and winter facility ratings. As such, TFCs used in the ATC calculation will reflect these seasonal ratings. In instances where there is a difference in derived limits, such as a tie line, the most limiting parameter is used when determining TFC.

TFCs will be established at least once per calendar year. If notified of a change in the facility rating by the Transmission Owner that would affect the TFC of a Flowgate used in the AFC process, the TFC will be updated within seven calendar days of the notification.

9.4. Existing Transmission Commitments

Flow impacts from committed uses of a TSP's transmission system are considered in the AFC calculation as ETC. For both firm and non-firm, ETC contains two major components: ETC_{model} and ETC_{AFC}. ETC_{model} is the impact of ETC accounted for in the model building process, and ETC_{AFC} is the impact of ETC accounted for in the AFC calculation process. Processes are in place to ensure that no double counting takes place between transmission commitment impacts

accounted for in $\text{ETC}_{\text{model}}$ and transmission commitment impacts accounted for in $\text{ETC}_{\text{AFC}}.$

$$ETC = ETC_{model} + ETC_{AFC}$$

9.4.1. ETC_{model} - All Horizons

For firm and non-firm AFC calculations in all horizons, the baseflows that are calculated from models created in the model building process are synonymous with ETC_{model}. ETC_{model} is calculated using the following:

- 1. The impacts of generation to load for the Duke Energy Carolinas TSP area. These values are calculated from:
 - a. Load forecast for the time period being calculated, and
 - b. Unit commitment and generation block dispatch, including all designated network resources needed to meet the forecast load.
- 2. The impact of generation to load for adjacent TSP areas. These values are calculated from:
 - a. Load forecast for the time period being calculated, and
 - b. Unit commitment and generation block dispatch.
- 3. The impact of generation to load for all other TSP areas. These values are calculated from the seasonal peak load forecast included in the Multiregional Modeling Working Group (MMWG) models, SERC Near-Term Study Group (NTSG) models, or IDC models.
- 4. The impact of firm Network Integration Transmission Service (NITS) modeled in the starting point case for all BA Areas in the transmission model.
- 5. The impact of confirmed firm Point-to-Point (PTP) Transmission Service that are modeled in the starting point case for all BA Areas in the transmission model.
- 6. The impact of any grandfathered firm obligations that are modeled in the starting point case for all BA Areas in the transmission model.
- 7. Non-firm hourly AFC calculations in the operating horizon include the additional component of tag impacts from Tag Dump. Tag impacts include confirmed tags from the Duke Energy Carolinas TSP area and adjacent TSP areas and are filtered to ensure that no

double counting takes place between the reservation impacts and tag impacts in the model.

9.4.2. Firm ETC_{AFC-Fi} - All Horizons

For firm AFC calculations in all defined horizons, the remaining ETC impacts are captured by ETC_{AFC-Fi} in the AFC calculation process. ETC_{AFC-Fi} is calculated using the following:

- 1. The impact of firm NITS for the Duke Energy Carolinas TSP area and adjacent TSP areas for which reservations are exchanged and which are not included in the model. The reservations from adjacent TSPs are filtered to ensure that no double counting takes place.
- 2. The impact of confirmed firm PTP Transmission Service expected to be scheduled for the Duke Energy Carolinas TSP area and adjacent TSP areas for which reservations are exchanged and which are not included in the model. The reservations from adjacent TSPs are filtered to ensure that no double counting takes place.
- 3. The impact of any grandfathered firm obligations expected to be scheduled or expected to flow for adjacent TSP areas for which reservations are exchanged and which are not included in the model. The reservations from adjacent TSPs are filtered to ensure that no double counting takes place. Duke Energy Carolinas no longer has any grandfathered firm obligations.

9.4.3 Non-Firm ETC_{AFC-NFi}

9.4.3.1. Non-Firm ETC_{AFC-NFi} - Operating Horizon

For non-firm AFC calculations in the operating horizon, ETC_{AFC} . $_{NFi}$ = zero, i.e., there are no additional ETC impacts beyond what is included in the model. This approach effectively releases unscheduled firm transmission to the non-firm market.

9.4.3.2. Non-Firm ETC_{AFC-NFi} - Planning and Study Horizons

ETC_{NFi-AFC} in the planning and study horizons is calculated using the following:

1. The impact of non-firm NITS (secondary service) for the Duke Energy Carolinas TSP area and adjacent TSP areas for which reservations are exchanged. The reservations from adjacent TSPs

are filtered to ensure that no double counting takes place.

- 2. The impact of confirmed non-firm PTP
 Transmission Service expected to be scheduled for
 the Duke Energy Carolinas TSP area and adjacent
 TSP areas for which reservations are exchanged.
 The reservations from adjacent TSPs are filtered to
 ensure that no double counting takes place.
- 3. The impact of any grandfathered non-firm obligations expected to be scheduled or expected to flow for adjacent TSP areas for which reservations are exchanged. The reservations from adjacent TSPs are filtered to ensure that no double counting takes place. Duke Energy Carolinas has no grandfathered non-firm obligations.

9.4.4. Transmission Service Request Rollover Rights Impact

Transmission Service reservations that have met the requirements for rollover service are considered as impact in the ETC_{AFC} calculation for the time periods when the rollover would occur.

9.5. Counterflows

When applying transmission reservation impacts in the opposite direction of flow on a Flowgate in the AFC calculations, counterflow assumptions are used. Counterflow impact percentages are defined for each Flowgate and address:

- Firm reservation counterflow impact on firm AFC calculations
- Firm reservation counterflow impact on non-firm AFC calculations
- Non-firm reservation counterflow impact on non-firm AFC calculations

Counterflow assumptions are based on operating experience of normal Flowgate flows. At times, a Flowgate may experience higher or lower than normal counterflows. If real-time or expected operating conditions change to the extent that higher or lower than normal counterflows are expected, the counterflow assumptions for the Flowgate can be changed to reflect the new conditions. Counterflow assumptions are reflected in the AFC process as a Flowgate attribute.

9.6. Postbacks

The postback component of the AFC equation is implicit in the ETC_{AFC} component. Changes in reservation status are captured in the AFC Engine and are incorporated into the AFC values.

9.7. Capacity Benefit Margin (CBM)

Duke Energy Carolinas has not defined a need for CBM on any of its interfaces in the Operating, Planning, or Study Horizons. As such, the importing and exporting CBM on all interfaces is set to zero.

Duke Energy Carolinas does not address generation reliability assessments through the utilization of CBM, so this document does not contain the methodology and assumptions that Duke Energy Carolinas uses for generation reliability requirements.

9.8. Transmission Reliability Margin

Duke Energy Carolinas participates in a reserve sharing agreement with Carolina Power & Light Company, South Carolina Electric & Gas Company, South Carolina Public Service Authority, and Virginia Electric and Power Company. This agreement requires that each participating company provide a contingency reserve commitment to the other participants. Each participating company is required to maintain their share of the total contingency reserve based on a formula that takes into account each company's annual peak demand and largest resource.

Duke Energy Carolinas allocates TRM across its ATC Paths based on contractual obligations to supply and receive operating reserves. Currently, the only contractual obligation Duke Energy Carolinas has is with the participants of the reserve sharing agreement as stated above. The contractual requirements for the reserve sharing participants are reviewed, established, and updated on an annual basis. Duke Energy Carolinas allocates these contractual obligations to its ATC Paths through the utilization of TRM, based on the following methodology:

- Imports TRM for ATC Paths sinking in the Duke Energy Carolinas BA
 Area from participating BA Areas is set to the opposing BA Area's share
 of the reserve requirement. TRM on ATC Paths sinking in the Duke
 Energy Carolinas BA Area from non-participating BA Areas is set to zero,
 until such time as contingency reserves are identified and contracts have
 been established for those interfaces.
- Exports TRM for ATC Paths sourcing from the Duke Energy Carolinas BA Area to participating BA Areas is set to Duke Energy Carolinas' share of the reserve requirement. TRM on ATC Paths sourcing from the Duke Energy Carolinas BA Area to non-participating BA Areas is set to zero, until such time as contingency reserves are identified and contracts have been established for those interfaces. It should be noted that the TRM for exports to Carolina Power & Light are split between CPLE and CPLW.

Note that imports/exports from/to Virginia Electric and Power Company are scheduled through the CPLE BA Area.

Duke Energy Carolinas' TRM is based on reserve sharing requirements. In order to account for the TRM in the AFC process, it is necessary to convert the reserve sharing requirements on the interfaces to Flowgate-based values. The conversion process simulates the import and export of the full amount of the reserves to and from each of the reserve sharing agreement participants. The worst impact on each Flowgate determines the TRM amount allocated to that Flowgate. These Flowgate-based TRM values will be re-established when the path-based reserve sharing TRM amounts are recalculated. Additionally, the Flowgate-based TRM values will be established for any Flowgate added to the transfer capability calculation process.

10. ATC Calculation

10.1. Converting AFC to ATC

When converting AFCs to ATCs, the following equations are used:

$$ATC_{AFC} = \min(P)$$

$$P = \{PATC_1, PATC_2, ..., PATC_n\}$$

$$PATC_n = \frac{AFC_n}{DF_{np}}$$

Where:

 ATC_{AFC} = the ATC derived from the AFC process

P = is the set of partial ATCs for all impacted Flowgates honored by Duke Energy Carolinas

PATC_n = the partial ATC for a path relative to a Flowgate n

 $\mathbf{AFC_n}$ = the AFC for Flowgate *n*

 $\mathbf{DF_{np}}$ = the distribution factor for Flowgate *n* relative to path *p*

10.2. Contract Path Limit

The interface between Duke Energy Carolinas' transmission system and that of adjacent BA Areas is considered to be an import/export path. Each import and export path is associated with a Contract Path Limit. This Contract Path Limit is the minimum of:

- The sum of the ratings of the ties
- The maximum transfer expected to occur on the import or export path. This value is based on traditional transfer test levels.

Duke Energy Carolinas' ATC calculation takes into consideration Contract Path Limits. This is accomplished by calculating Remaining Contract Path Capability (RCPC) for import and export paths in parallel with the AFC process. RCPC on import and export paths is calculated according to the following formula:

$$RCPC_p = Contract\ Path\ Limit_p - \sum Reservations\ or\ Schedules_p$$

Where:

 $RCPC_p$ = The Remaining Contract Path Capability on import or export path p

Contract Path Limit_p = The Contract Path Limit on import or export path p

Reservations or Schedules_p = Reservations or Schedules (depending on the horizon) reserved or scheduled on import or export path p

RCPC for an import or export path is decremented based on the POR/POD of the reservation or schedule, and these reservations/schedules, whether firm or non-firm, are not netted. In other words, a reservation or schedule on the export path "Duke-to-Neighbor A" does not impact the RCPC for the import path "Neighbor A-to-Duke", and vice versa.

Pass-through reservations/schedules decrement two separate import/export paths - the import path from the POR and the export path to the POD. The RCPC used in the evaluation of a pass-through Transmission Service request is the lesser of the RCPC on the corresponding import and export path.

10.3. ATC on Posted Paths

When determining ATC_{posted path}, the following equation is used:

$$ATC_{posted\ path} = min \big[ATC_{AFC}, RCPC_p \big]$$

Where:

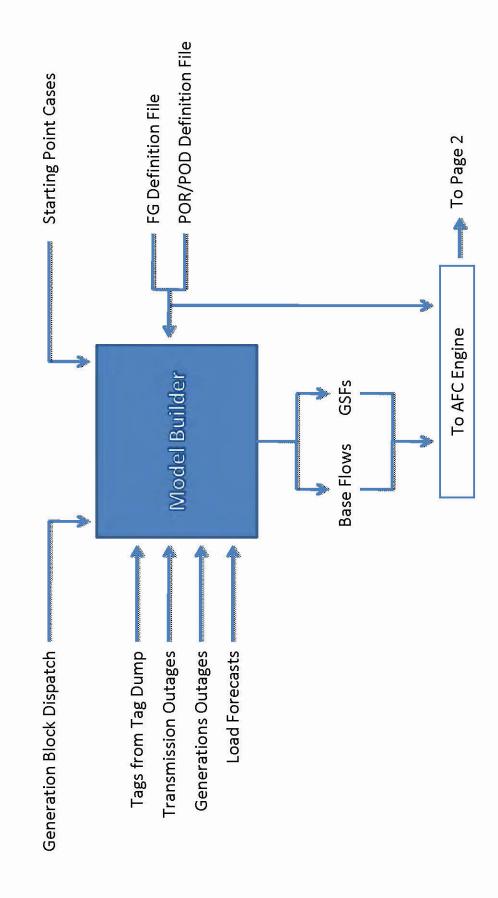
ATC_{posted path} = the Available Transfer Capability for that path that is posted on OASIS

 ATC_{AFC} = the ATC for that posted path derived from the AFC process

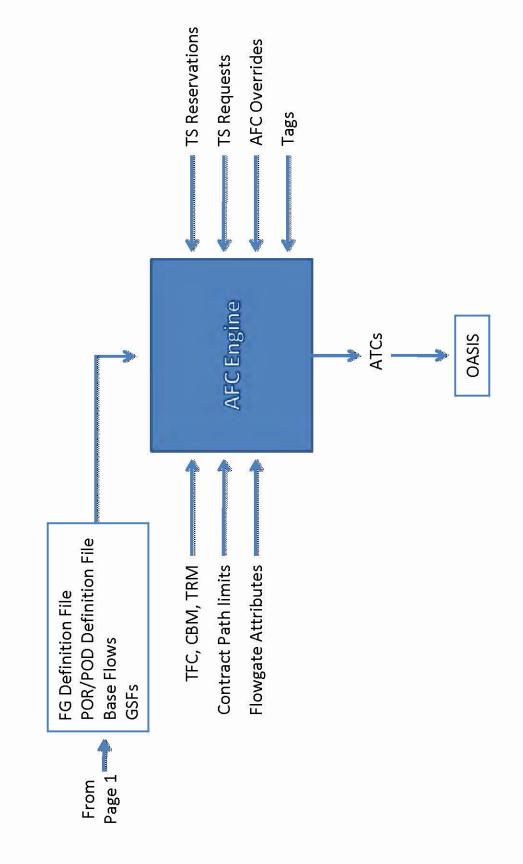
 $\mathbf{RCPC_p} = \mathbf{Remaining}$ Contract Path Capability for the applicable import/export path p

11. Process Flow Diagrams

ATC Process Flow



ATC Process Flow



ATTACHMENT D

METHODOLOGY FOR COMPLETING A SYSTEM IMPACT STUDY

A. CP&L Zone

Upon receipt of an executed System Impact Study Agreement, CP&L will perform studies using its power flow models to identify any system constraints resulting from the requested service. Using these models, CP&L evaluates its present and planned transmission system for conformance to its Transmission Planning Criteria and Assessment Practices. These Transmission Planning Criteria and Assessment Practices, which CP&L uses to evaluate System Impact Study requests, are filed annually in FERC Form No. 715, "Annual Transmission Planning and Evaluation Report." CP&L will use the same procedure, assumptions and criteria in performing a System Impact Study for an Eligible Customer as it uses when performing studies for its own uses of the Transmission System.

CP&L will notify the Eligible Customer upon completion of the System Impact Study if the Transmission System will be adequate to accommodate all or part of a request for service or that no costs are likely to be incurred for new transmission facilities or upgrades. Within fifteen (15) days of completion of the System Impact Study the Eligible Customer must execute a Service Agreement or the Application will be deemed terminated and withdrawn.

If the System Impact Study indicates that additions or upgrades to the Transmission System are needed to supply the Eligible Customer's service request, CP&L, within thirty (30) days of completion of the System Impact Study, will tender to the Eligible Customer a Facilities Study Agreement pursuant to which the Eligible Customer must agree to reimburse CP&L for performing the required Facilities Study. Upon receipt of an executed Facilities Study

Agreement, CP&L will use due diligence to complete the required Facilities Study within a sixty (60) day period.

CP&L will use due diligence to complete the required System Impact Study within a sixty (60) day period. In the event that CP&L is unable to complete the required System Impact Study within such time period, CP&L will so notify the Eligible Customer and provide an estimated completion date along with an explanation of the reasons why additional time is required to complete the required studies.

B. FPC Zone

The Transmission Provider will evaluate the impact of a prospective firm transmission transaction by modeling the transaction using an applicable transmission system electrical model. This evaluation will consider the following:

- The Transmission Provider's reliability criteria.
- Current and reasonably forecasted loads of the Transmission Provider's Native Load Customers and Network Integration Transmission service customers on the Transmission Provider's transmission system.
- Pending and existing firm transmission transactions that coincide with the time requested for the prospective transaction, modeled on a simultaneous basis.

Analysis will involve using the appropriate transmission system electrical model in a load flow and/or transient stability program to model normal and various first contingency situations that may occur, and determining whether system response meets acceptable criteria considering the prospective transaction. In general, this involves running simulations for the loss of any single line, generator, or transformer, with any one generator scheduled out for maintenance. The Transmission Provider will normally run this transmission system analysis from minimum to peak load conditions for possible contingencies. If appropriate, additional studies would be performed to determine transmission system response to less probable contingency criteria, to

assure the system meets Transmission Provider, FRCC and SERC planning guidelines for more severe outages. These studies would include the loss of multiple generators or lines and combinations of each. These less probable scenarios are also evaluated at various load levels, since some of the most severe situations occur at average or minimum load conditions. In particular, critical fault clearing times are typically the shortest (most severe) at minimum load conditions, with just a few large base load units supplying the system needs. For more detail on the Transmission Provider's planning criteria please refer to the most current FERC Form No. 715 "Annual Transmission Planning and Evaluation Report" on file with the FERC.

The Transmission Provider also will evaluate the impact of a prospective firm transaction on the critical Transmission Provider interfaces. Transfer analysis will be conducted in accordance with the NERC reference document for calculating and reporting the electric power transfer capability of interconnected electric systems titled *Transmission Transfer Capability*, dated May 1995, as amended or supplemented from time to time. This transfer analysis will consider the simultaneous effect of all existing and pending firm power transactions of the Transmission Provider's system with the prospective transaction simulated at the same time. The amount of electric power, incremental above normal base power transfers, that can be transferred over the Transmission Provider's Transmission System in a reliable manner will be based on all of the following criteria:

- For the existing or planned system configuration under normal conditions, all facility loadings will be within normal ratings and all voltages within normal limits.
- The Transmission Provider's Transmission System should be capable of absorbing the dynamic power swings and remaining stable following a disturbance that results in the loss of any single electric system element, such as a transmission line, transformer, or generating unit.

• After the dynamic power swings subside following a disturbance that results in the loss of any single electric system element as described above, all transmission facility loading should be within emergency ratings and all voltages should be within emergency limits.

The prospective transaction will also be evaluated in term of impact on other major interfaces in which the Transmission Provider has obligations to abide by defined procedures. As an example, transfer limit studies for the Florida-Georgia transmission Interface have very specific procedures that have been agreed to by FRCC utilities. These procedures and the currently accepted limits can be obtained from the FRCC and must be followed to assure reasonable results. Failure to follow the recommended methodology will result in overly optimistic reactive reserves, and thus optimistic transfer limits.

C. DEC Zone

Upon receipt of an executed System Impact Study Agreement, the Transmission Provider will perform studies using power flow, transfer, stability, fault and other analyses as necessary and appropriate to determine whether sufficient transmission capability is available and to identify any system constraints resulting from the requested transmission service. More detailed criteria and processes utilized by the Transmission Provider in performing a System Impact Study are set forth in the Transmission Provider's annual FERC Form No. 715 submittal. The Transmission Provider will use the same study approach in completing the studies for a Transmission Customer as it uses when completing such studies for itself.

The Transmission Provider subscribes to all applicable North American Electric Reliability Council (NERC) and Southeastern Electric Reliability Council (SERC) Transmission Reliability criteria for both its own transmission system studies and System Impact Studies.

Specifically, the Transmission Provider subscribes to NERC's Transmission Transfer Capability document and SERC's Planning Principles and Guides. In addition, the Transmission Provider

subscribes to its own Reliability Guidelines for its own transmission system studies and System Impact Studies.

The Transmission Provider's Reliability Guidelines are established to ensure that the Transmission Provider's transmission network is capable of moving power throughout its system while maintaining acceptable voltage and thermal loading levels, during both normal and contingency conditions. The Reliability Guidelines, which are filed with FERC as part of the FERC Form No. 715, include transmission planning objectives, planning assumptions, study practices, and planning guidelines.

ATTACHMENT E

INDEX OF POINT-TO-POINT TRANSMISSION SERVICE CUSTOMERS

See Transmission Provider's Electric Quarterly Report at the following Internet address:

http://www.ferc.gov/docs-filing/eqr/data/spreadsheet.asp

ATTACHMENT F- 1

FORM OF SERVICE AGREEMENT FOR NETWORK INTEGRATION TRANSMISSION SERVICE (CP&L ZONE AND FPC ZONE)

1.0	This Service Agreement, dated as of, is entered into, by and between Carolina Power & Light Company/Florida Power Corporation (the Transmission Provider), and ("Transmission Customer").					
2.0	The Transmission Customer has been determined by the Transmission Provider to have a Completed Application for Network Integration Transmission Service under the Tariff.					
3.0	The Transmission Customer has provided to the Transmission Provider an Application deposit in the amount of \$, in accordance with the provisions of Section 29.2 of the Tariff or has met the creditworthiness standards of Attachment O of the Tariff. In the event that the Customer does not take service for any reason, the Transmission Provider will return the deposit, with interest at the rate specified in 18 C.F.R. § 35.19a(a) (2)(iii), less any costs the Transmission Provider incurred in processing the Application (including, where necessary, the performance of a System Impact Study; the Transmission Provider will provide the Applicant with a statement identifying the costs incurred.					
4.0	Service under this agreement shall commence on the later of (1), or (2) the date on which construction of any Direct Assignment Facilities and/or Network Upgrades are completed, or (3) such other date as it is permitted to become effective by the Commission. Service under this Service Agreement shall terminate on					
5.0	The Transmission Provider agrees to provide and the Transmission Customer agrees to take and pay for Network Integration Transmission Service in accordance with the provisions of Part III of the Tariff and this Service Agreement.					
	5.1 The Transmission Customer is responsible for replacing Real Power Losses associated with all transmission service in accordance with Section 28.5 of the Tariff. The Transmission Customer must identify the party responsible for supplying Real Power Losses before the transaction.					
6.0	Any notice or request made to or by either Party regarding this Service Agreement shall be made to the representative of the other Party as indicated below.					

<u>Tran</u>	smission Provider:
Tran	smission Customer:
 The T	Fariff, Specifications for Network Integration Transmission Service and the N
Opera	ating Agreement, all may be amended from time to time, are incorporated he a part hereof.
	ce under this Service Agreement will be subject to some combination of the charges detailed below:
8.1	Transmission Charge:
8.2	System Impact and/or Facilities Study Charge(s):
8.3	Direct Assignment Facilities Charge:
8.4	Ancillary Services Charges:

9.0 Nothing contained herein shall be construed as affecting in any way the Transmission Provider's right to unilaterally make application to the Federal Energy Regulatory Commission, or other regulatory agency having jurisdiction, for any change in the Tariff or this Service Agreement under Section 205 of the Federal Power Act, or other applicable statute, and any rules and regulations promulgated thereunder; or the Transmission Customer's rights under the Federal Power Act and rules and regulations promulgated thereunder.

10.0	The Transmission Customer will be responsible for Distribution Substation Service charges, Redispatch cost, Network Upgrade, and/or Direct Assignment Facilities cost as follows:					
	IN WITNESS WHERE ted by their respective aumission Provider:		e caused this Service Agreement to be			
D- ::						
By:	ame	Title	Date			
<u>Trans</u>	mission Customer:					
By:	ame	 Title				

Specifications For Network Integration Transmission Service

inc c	lectric Control Area in which the transaction originates.
Netw	vork Resources
(1)	Transmission Customer Generation Owned or Leased: <u>Resource</u> <u>Capacity</u> Capacity Designated as Network Resource, including summer and winter ratings
(2)	Transmission Customer Generation Purchased: <u>Source Capacity</u>
	Total Network Resources: (1) + (2) =
Netw	vork Load
(1)	Transmission Customer Network Load: Network Load Transmission Voltage Level
	Total Network Load at time of most recent Zonal annual peak load:
Desig	gnation of party(ies) subject to reciprocal service obligation:

Party	Party Responsible for Providing Real Power Losses:					

ATTACHMENT F- 2

FORM OF SERVICE AGREEMENT FOR NETWORK INTEGRATION TRANSMISSION SERVICE (DEC ZONE)

OATT SERVICE AGREEMENT NO. XXX

SERVICE AGREEMENT

FOR

NETWORK INTEGRATION TRANSMISSION SERVICE

BETWEEN

DUKE ENERGY CAROLINAS, LLC

AND

CUSTOMER

Service Agreement For Network Integration Transmission Service

1.0 PARTIES

This Service Agreement, dated as of September 1, 2006, amended as of October 1, 2006, February 1, 2008 and January 1, 2011 is entered into, by and among Duke Energy Carolinas, LLC (the "Transmission Provider"), and Customer a state Corporation ("XXXX") ("Transmission Customer") sometimes hereinafter referred to individually as "Party" and collectively as "Parties."

2.0 COMPLETED APPLICATION

The Transmission Customer has been determined to have a Completed Application for Network Integration Transmission Service under the Transmission Provider's Open Access Transmission Tariff (the "Tariff").

If the corporate identity or name of XXXX is to change during the term of this Service Agreement, XXXX shall notify Transmission Provider as soon as possible after learning of said projected change. In such event Transmission Provider may in its reasonable discretion require a new Application for Network Integration Transmission Service and/or the execution of an appropriate amendment of this Service Agreement.

3.0 TERM

Unless the Federal Energy Regulatory Commission (the "Commission") orders a different date for commencement of service, service under this Service Agreement shall commence on the later of: (1) the date the conditions precedent to receiving service set forth in Section 29.1 of the Tariff are met, or (2) September 1, 2006. Service under this Service Agreement shall continue through [DATE]. If the Service Agreement is not terminated by the Transmission Provider or the Transmission Customer, the Service Agreement will automatically renew for successive five year terms. The Service Agreement may be terminated at the end of each successive five year term by the Transmission Provider or the Transmission Customer by giving notice of such termination in writing at least one year prior to the end of the renewal period.

4.0 EFFECT OF ISO/RTO PARTICIPATION

This Service Agreement and the Network Operating Agreement, and the attachments thereto (collectively, the "Subject Agreements"), have been developed by the Parties in the context of transmission service provided pursuant to the Tariff and the Commission's open access requirements under Order No. 888 during a period of regulatory transition. The Parties acknowledge that the Transmission Provider is likely to join a Regional Transmission Organization ("RTO"), and further acknowledge that at such time as the Transmission Provider does so join an RTO transmission service shall be provided to the Transmission Customer pursuant to the rates, terms and conditions of the open access transmission tariff of the RTO ("RTO OATT"), and other terms, conditions, rules and/or protocols of the RTO. The Parties further agree that in the event of a material inconsistency or conflict between the RTO OATT or such other terms, conditions, rules

and/or protocols of the RTO and the Subject Agreements, that the Subject Agreements may require amendment to account for such changed circumstance. In such event, at the request of either Party or the RTO, the Transmission Customer and the RTO (and the Transmission Provider, if appropriate) shall enter into good faith negotiations to amend the Subject Agreements in a manner such that the transmission service is provided in accordance with the RTO OATT and such other terms, conditions, rules and/or protocols. If the Transmission Customer and the RTO (and the Transmission Provider if appropriate) cannot agree on the necessary revisions the Transmission Customer may request that the RTO (and the Transmission Provider, if appropriate) file unexecuted amended Subject Agreements with the Commission pursuant to Section 205 of the Federal Power Act such that the transmission service thereunder comports with the RTO OATT and such other terms, conditions rules and/or protocols of the RTO and the Transmission Provider shall support the Transmission Customer's right to request such filing. By agreeing to the procedure set forth above, neither Party waives any rights it might otherwise have with respect to the Subject Agreements under the Federal Power Act.

5.0 NATURE OF SERVICE TO BE FURNISHED

The Transmission Provider agrees to provide and the Transmission Customer agrees to take and pay for Network Integration Transmission Service in accordance with the provisions of Part III of the Tariff and this Service Agreement, the Attachments hereto, and the Network Operating Agreement as they may be amended from time to time. Neither Party shall be deemed, by virtue of having entered into this Service Agreement, to have agreed to diminish or enhance the rights of either Party with regard to the Commission's comparability policies, provided that the foregoing clause shall be construed in a manner most consistent with each Party performing its obligations hereunder.

6.0 NOTICES

Any notice or request made to or by either Party regarding this Service Agreement shall be made to the representative of the other Party as indicated below.

Transmission Provider:

Duke Energy Carolinas, LLC 526 South Church Street

Mailcode: EC02A

Charlotte, NC 28201-1006 Attn: Charlotte Glassman

Transmission Contracts Manager

Phone: (704) 382-3621

Fax Number: (704) 382-0850

E-Mail Address: caglassm@duke-energy.com

Transmission Customer:

[Customer]

Address

Attn:

Title:

Phone:

Fax:

E-Mail Address:

Bills for Service hereunder shall be sent to:

With copy to:

7.0 INCORPORATION OF OTHER DOCUMENTS

The Tariff, Attachment A hereto (Specifications for Network Integration Transmission Service), Attachment B hereto (Delivery Points), Attachment C hereto (Distribution Rates), Attachment D hereto (Power Factor Penalty), Attachment E hereto (Network Operating Agreement), and Attachment F hereto (Other Charges) are incorporated herein and made a part hereof.

To the extent that any provisions in the Tariff, this Service Agreement (including Attachments) or the Network Operating Agreement are ambiguous or inconsistent, any such ambiguity or inconsistency will be resolved in the following priority: the Tariff, the Service Agreement (including Attachments).

8.0 BILLINGS AND BILLING ADJUSTMENTS

- 8.1 The Transmission Provider will have the right to adjust or revise any bill rendered under the Tariff no later than eighteen (18) months after the date the bill was rendered. Any billing adjustment will be in writing and will state the specific basis for the adjustment. An Adjusted Bill will constitute a new bill in regard to the adjusted components for all purposes of the Tariff and this Service Agreement.
- 8.2 The Transmission Customer may, in good faith, challenge the correctness of any bill and any adjusted or revised bills. The Transmission Customer's challenge of any bill rendered under the Tariff may include the appropriateness of all charges thereunder. Unless otherwise agreed in writing by the Parties, the Transmission Customer's challenge must be presented no later than eighteen (18) months following the date such bill is received. Any billing challenge will be in writing and will state the specific basis for the challenge. The Transmission Provider shall respond in writing to any such billing challenge within forty-five (45) days. After such response, billing challenges shall be treated as disputes pursuant to Section 7.3 of the Tariff.
- 8.3 Refunds or additional charges that are a result of an adjustment, revision or billing challenge will include interest calculated at the rate set forth in 18 C.F.R. § 35.19a (a)(2)(iii).

9.0 AUDITS

- 9.1 In addition to the bill challenge rights set forth in Section 8.2, the Transmission Customer shall also have audit rights as set forth in this Section 9.0. The Transmission Customer shall conduct any such audit within eighteen (18) months from the date of the rendering of any bill under the Tariff. The Transmission Provider and the Transmission Customer will each have the right, upon reasonable notice, to inspect or audit each other's accounts and records supporting the bills for service under the Tariff during such calendar year. Such audit will be performed to the extent necessary to verify the correctness of any bill and the appropriateness of all charges thereunder. The audited Party shall provide or cause to be provided all information that the auditing Party may reasonably request to substantiate all billings, adjustments or revisions to billings for service under the Tariff. Any such audit will be conducted, upon reasonable written notice, during normal business hours at the offices where such accounts and records are maintained or at a location mutually agreeable to the Parties. The audited Party shall provide to the auditing Party reasonable office accommodations to conduct the audit. Those qualified personnel identified upon reasonable written notice by the auditing Party will be permitted to conduct audits. The audited Party will be entitled to review the audit report and any supporting materials at the conclusion of the audit and prior to finalization. The accounts and records for any particular billing period shall not be subject to more than one (1) audit by each Party.
- 9.2 Notwithstanding the above, if the Transmission Provider renders a billing adjustment or revision and the audit for the affected calendar year has been conducted, then the Transmission Customer may conduct an audit of the billing adjustment or revision within ninety (90) days after the adjustment is rendered and challenge such adjustment no later than one-hundred and fifty (150) days after the adjustment is rendered.
- 9.3 With the exception of quantifiable changes in the amounts of the billings, the audit report, supporting materials, and all other audit results of all such audits shall be kept confidential by the Parties and shall not be released to any other party without the express written consent of the other Party except that in the event that a matter subject to audit becomes the subject of dispute resolution or litigation in any forum with jurisdiction, a Party may disclose to the decision maker the audit report, supporting materials, other audit results of all such audits, and any related information, provided that the other Party is afforded notice and an opportunity to request that such information be protected against disclosure to third parties.

10.0 DELIVERY POINTS

The Transmission Customer Delivery Points shall be the points of connection between the Transmission Provider's facilities and the facilities of the Transmission Customer or its member systems.

11.0 ADJUSTMENT FOR LOSSES

To the extent any Delivery Point is at a voltage level less than 44 kV or the metering point(s) is (are) remote from the Delivery Point, the load associated with such Delivery Point used for the calculation of the Network Integration Transmission Service charge shall be adjusted for the losses associated with: (i) the Transmission Provider's applicable distribution facilities losses; and/or (ii) the Transmission Customer's distribution and transmission facilities, as applicable. Such loss compensation factors shall be as mutually agreed upon by the Parties. To the extent the Parties cannot agree on any such factors, the Dispute Resolution Procedures in Section 12 of the Tariff may be invoked to resolve the disagreement.

12.0 NO WAIVERS

Failure of a Party to enforce any provision of this Service Agreement will not be construed as a waiver of such provision, and will not affect the validity of the Service Agreement or the right of either Party subsequently to enforce any provision of the Service Agreement. Any waiver at any time by either Party of its rights with respect to the other Party or with respect to any matter arising in connection with this Service Agreement will not be considered a waiver with respect to any subsequent matter. Failure of a Party to resort to any legal remedy or to exercise any one or more alternative remedies will not affect such Party's right subsequently to resort to any one or more of such rights or remedies on account of any such grounds then existing or which may subsequently occur.

13.0 RUS APPROVAL

This Service Agreement and any subsequent amendment(s) are subject to the approval of the Administrator of the Rural Utilities Service ("RUS"). The Transmission Customer will be responsible for obtaining approval of this Service Agreement from the RUS and will seek to obtain such approval promptly. If the RUS fails to approve either in whole or in part this Service Agreement or any subsequent amendments as submitted, the Parties will undertake to renegotiate this Service Agreement or said amendments, as appropriate, to restore this Service Agreement as near as possible to its original intent and effect, provided that by virtue of such renegotiation no party shall be obligated to agree to the insertion of, deletion of or modification of any specific provisions of this Service Agreement.

14.0 ACCEPTANCE BY FERC

The Parties recognize that this Service Agreement and its Attachments must be filed with the Federal Energy Regulatory Commission and is subject to the jurisdiction of that Commission. This Service Agreement is conditioned expressly on acceptance by the Commission of this Service Agreement and its Attachments without changes or conditions unacceptable to either Party. The Parties agree that in the event that any of the terms and conditions of this Service Agreement and its Attachments are finally held or determined to be invalid, illegal or void, or to be in contravention of any applicable laws, rules, regulations or public policy, all other terms and conditions of this Service Agreement and its Attachments shall remain in full force and effect unless the terms and conditions so found to be invalid, illegal or void are not reasonably separable from the

remaining terms and conditions of this Service Agreement and its Attachments. The Parties further agree that if, upon the initial filing of this Service Agreement and its Attachments with the Commission or at any time thereafter, the Commission or a court of competent jurisdiction issues an Order that (i) amends, modifies or conditions this Service Agreement and its Attachments in a way that materially changes the obligations or benefits to either Party, or (ii) finds on a final basis any provision of this Service Agreement and its Attachments to be invalid, illegal or void, the Parties shall review such Order to determine whether such amendments, modification, conditions or findings are acceptable. Within twenty-one (21) calendar days following such Order, the Parties shall notify each other in writing of their acceptance or rejection of the Service Agreement and its Attachments based upon any amendments, modifications, conditions or findings so ordered. A failure by a Party to provide notification within such twenty-one (21) day period shall be deemed acceptance. If either Party provides notification of its rejection or such Order requires adjustment of this Service Agreement and its Attachments, the Parties shall enter into re-negotiation of this Service Agreement and its Attachments within 60 calendar days either after the notification or the Order for the purposes of restoring as nearly as possible the obligations and benefits of each Party as originally bargained for and conforming this Service Agreement and its Attachments with the requirements of such Order. If no agreement is reached by the Parties on the terms and conditions of a reformulated Service Agreement and Attachments within sixty (60) calendar days after the initiation of such re-negotiation, the Parties agree that the Transmission Provider shall file a proposed unexecuted Service Agreement and Attachments with the Commission no later than ninety (90) calendar days after the initiation of such re-negotiation.

IN WITNESS WHEREOF, the Parties have caused this Service Agreement to be executed by their respective authorized officials.

Transmission Provider:

Duke Energy Carolinas, LCC (Transmission)

⊙ v /		
Signature:		
By: <u>Jim L Stanley</u> Name	Sr. Vice President, Power Delivery Title	——————————————————————————————————————
rvaine	Title	Date
<u>Transmission Customer</u>		
Customer		
Signature:		
By:		
Name	Title	Date

Attachment A Specifications For Network Integration Transmission Service

1.0 Term of Network Service:

As specified in Section 3.0 of the Service Agreement for Network Integration Transmission Service.

2.0 <u>Description of Capacity and/or Energy to be Transmitted by Transmission Provider</u> <u>Across the Transmission Provider's Transmission System (including electric control</u> area in which the transaction originates):

Firm capacity and energy delivered to the Transmission Provider's Transmission System in the amount of (i) the sum of hourly metered load(s) at the metering location, compensated, where applicable, for losses on (a) the Transmission Customer's facilities to the extent the metering is remote from the delivery point and (b) the Transmission Provider's distribution facilities to the extent such delivery point is served from such facilities, plus (ii) real power losses on the Transmission Provider's Transmission System as set forth in Section 28.5 of the Tariff. The listing of the Transmission Customer's Delivery Points, as may be amended from time to time, is set forth in Attachment B to the Service Agreement. Detailed information about each of the Transmission Customer's Delivery Points shall be set forth in Delivery Point Data Sheets, executed by the Parties, substantially in the form set forth in Attachment B to the Service Agreement.

3.0 Resources:

Note: Changes or additions to Network Resources to serve Transmission Customer load growth shall be treated as a "Designation of New Network Resources" pursuant to Section 30.2 of the Transmission Provider's Tariff.

3.1 Transmission Customer Contracted Generation:

3.2 Designated Network Resource

Control Area in Which Resource is Located: Designated Interface(s): N/A

4.0 Network Load:

The Network Load is the demand and energy requirements of Transmission Customer's x number of Delivery Points connected or anticipated to be connected to the Transmission Provider's transmission and distribution system.

5.0 <u>Designation of Party Subject to Reciprocal Service Obligation:</u>

The Transmission Customer

6.0 <u>Service Under This Agreement May be Subject to Some Combination of the Charges</u> Detailed Below:

The appropriate charges for individual transactions will be determined in accordance with the terms and conditions of the Tariff.

6.1 Transmission Charge:

As per the Tariff, Part III Section 34.

6.2 <u>Facilities Study Charge</u>:

Not Applicable

6.3 <u>Direct Assignment Facilities Charge:</u>

As per the Tariff and Commission's approval of directly assignable charges.

6.4 Ancillary Services Charge:

Schedule 1, Scheduling, System Control and Dispatch Service:

The charges for **Scheduling**, **System Control and Dispatch Service** are as provided per the Tariff, Schedule 1.

Schedule 2, Reactive Supply and Voltage Control from Generation Source Service: The charges for Reactive Supply and Voltage Control from Generation Sources Service are provided per the Tariff, Schedule 2.

Schedule 3, Regulation and Frequency Response Service: The charges for **Regulation and Frequency Response Service** are provided per the Tariff, Schedule 3.

Schedule 4, Energy Imbalance Service: The Transmission Customer must either purchase **Energy Imbalance Service** from the Transmission Provider or make alternative comparable arrangements to satisfy its Energy Imbalance Service obligations. The charges for this service are as provided per the Tariff, Schedule 4.

Schedule 5, Operating Reserve - Spinning Reserve Service: The Transmission Customer must either purchase **Operating Reserve** - **Spinning Reserve Service** from the Transmission Provider or make alternative comparable arrangements to satisfy its Operating Reserve - Spinning Reserve Service obligations. The charges for this service are as provided per the Tariff, Schedule 5.

Schedule 6, Operating Reserve - Supplemental Reserve Service: The Transmission Customer must either purchase **Operating Reserve** - **Supplemental Reserve Service** from the Transmission Provider or make alternative comparable arrangements to satisfy its Operating Reserve - Supplemental Reserve Service obligations. The charges for this service are as provided per the Tariff, Schedule 6.

6.5 Loss Compensation Service:

The Transmission Customer may elect to (1) supply the capacity and/or energy necessary to compensate the Transmission Provider for losses which occur across transmission facilities, (2) receive an amount of electricity at delivery points that is reduced by the amount of losses incurred by the Transmission Provider, or (3) with the concurrence of the Transmission Provider, have the Transmission Provider supply the capacity and/or energy necessary to compensate for such losses. To the extent the service is provided by the Transmission Provider, the charges for this service are as provided per the Tariff, Schedule 9.

6.6 Gross Receipts Tax:

The Transmission Customer has satisfied the Transmission Provider's requirement, if any, to provide documentation that the Transmission Customer's customers pay gross receipts taxes. The Transmission Provider will provide credits as appropriate.

6.7 Redispatch Charges:

As per the Tariff, Part III Section 34.4.

6.8 Distribution Rates:

As provided per the Tariff, Part III Section 34.6 and Attachment C-3.

6.9 <u>Penalties for Non-Compliance with the Transmission Provider's Power Factor Standards:</u>

As stated in Attachment D.

Attachment B

Delivery Points

Delivery Locations:

XXXX DELIVERY POINTS

DELIVERY PT NAME

Duke Energy Carolinas, LLC Delivery Point Data Sheet

Transmission Custome	er Name: 		
Member Name:			
Delivery Point Name N	Number:		
Delivery Identifier:	Duke Energy Carolinas	, LLC Transmission	Customer
Joint Use Substation:			
Delivery Point Location	n Description:		
Planned Demand:	kW (Summer)		kW (Winter)
Transmission Voltage:	kV	Delivery Voltage:	<u>kV</u>
Metered Voltage:	kV		
Meter Location:			
Meter Location Descri	ption:		
Meter Ownership:			
Metering Compensatio	on Description:		
Power Factor Groupin	g Number:		
Delivery Station Facili	ties:		
Cost Basis:	Cla	essification:	_
Interruptible Load:	kW		
Special Facilities: / Ar	rangements:		
Effective Date:			
By:			
Transmi	ission Customer		Date
By:			
Duke Ei	nergy Carolinas, LLC		Date

Attachment C Distribution Rates

$$\begin{array}{l} \textit{Distribution Rates for} \\ \textit{TX Customer Delivery Points} \end{array} = \begin{pmatrix} \textit{Original Cost} \\ \textit{of Delivery Station} \end{pmatrix} \times \begin{pmatrix} \textit{\% Assigned To} \\ \textit{TX Customer} \end{pmatrix} \times \begin{pmatrix} 1.22\% \ \textit{per mo} \end{pmatrix}$$

Original Cost of Delivery Station

For all assets in service as of September 30, 2000, the Original Cost of the Delivery Station shall be the values specified in this attachment. The Original Cost of all additional assets shall be the asset cost as assigned to FERC accounts 360 through 369 (or their successors). Retired assets will reduce the 'Original Cost of Delivery Station' by the values of the retired assets which were included in the 'Original Cost of Delivery Station'.

Percentage Assigned to Transmission Customer

This factor will apply to delivery stations only where the Transmission Customer is not the sole user. (For stations having the Transmission Customer as the sole user the value assigned to the factor will be one (1).)

For delivery stations in service on September 30, 2000, to which no new assets have been added, the factor is determined by the Percentage Use of Station Capability ("Percentage of Capability Method"). The Percentage Use of Station Capability formula is as follows:

The higher of

$$PercentageUseOf \\ StationCapability = \frac{TX\ Customer}{Contract\ kVA} \\ \hline Delivery\ Station\ kVA}$$

where

$$TX \ Customer Contract \ kVA = \frac{Contract \ kW_1}{\% Power Factor (Maximum Non-coincident 12 MoPeak_2)}$$

or

$$PercentageUseOf \\ StationCapability = \frac{TX \ Customer \ kW \ Peak}{60 \ Minute \ Integrated \ Clock \ Hour \ Demand} \\ Delivery \ Station \ kW$$

where

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Delivery Station kW = (Delivery Station kVA) \times (%Power Factor(Maximum Non – coincident 12 Mo.Peak 1))
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For new Delivery Stations placed in service after September 30, 2000, and for Delivery Stations where new assets have been added,² the factor is determined by Percentage of Station Use ("Percentage of Station Use Method") as follows:

 $Percentage \ of \ Station \ Use = \frac{kW \ Demand \ at \ Hour \ of \ Delivery \ Station \ Peak}{Delivery \ Station \ Integrated \ 60 \ Minute}$ $kW \ Demand \ at \ Hour \ of \ Delivery \ Station \ Peak$

The hour of the Delivery Station Peak is the hour of maximum delivery station integrated 60 minute demand for the current month and previous 11 months. Temporary load shifts and other unusual circumstances will be excluded from the Delivery Station Peak calculation. If metering is not in place to determine the hour of the delivery station peak, the Percentage of Capability Method shall be used.

A Delivery Station may be terminated by either the Transmission Provider or the Transmission Customer upon reasonable notice. The initiator of the termination shall be responsible for paying any loss due to early retirement incurred by the other Party involving assets covered by these distribution rates.

These distribution rates do **NOT** include the costs for metering and metering equipment.

Transmission Provider will provide advance notice to Transmission Customer about changes to customer-specific facilities that will increase Transmission Customer's costs through a direct assignment charge.

¹ Contract kW is equivalent to the term Planned Demand located on the 'Delivery Point Data Sheet'.

² The definition of a new asset will be limited to

a. the addition or replacement of transformers, capacitors, isolating devices and instrument transformers (non-meter application), or

b. a cumulative increase in the original cost of a delivery point to 125% of its initial value.

- 1. LOSS DUE TO EARLY RETIREMENT: Loss due to early retirement shall consist of replacement costs less accumulated depreciation, less salvage plus cost of removal, and in the case of Transmission Customer, when the loss due to early retirement is occasioned by Transmission Provider initiating the termination, reintegration costs shall be added.
- 2. REPLACEMENT COST: Replacement Cost shall be the cost of the identical item at the time of the sale, the time of replacement, or retirement, as the case may be, or where such identical item is no longer available, the closest comparable item shall be used to determine the cost.
- 3. DEPRECIATION: Depreciation shall be calculated at the annual rate of and in the manner of Transmission Provider's then current rate and method as set forth in Transmission Provider's FERC Form 1, page 430, entitled "Depreciation and Amortization of Electric Plant" and shall be applied to Replacement Cost. Accumulated Depreciation is the Annual Depreciation so calculated times the number of years from the date of installation to the date on which the calculation is made. Depreciation shall be limited to a maximum of 75% of Replacement Cost.
- 4. SALVAGE: Salvage shall consist of reusable and non-reusable items of equipment. Where an item of equipment is reusable, the value of such item shall be determined by Replacement Cost less Accumulated Depreciation. Where an item is non-reusable its value shall be equal to the proceeds received by Transmission Provider from its sale as scrap. The total of the value of reusable and nonreusable items shall be credited in calculating the loss due to early retirement.
- 5. COST OF REMOVAL: Cost of removal shall include direct labor plus a percentage for regular employee fringe benefits and a percentage for engineering and supervision, cost of use of equipment and miscellaneous expenses. The charges for cost of removal will be calculated consistent with regular charges made to others for similar work at that time.
- 6. REINTEGRATION COSTS: Reintegration costs shall include direct labor plus a reasonable percentage for regular employee fringe benefits and a reasonable percentage for engineering and supervision, cost of use of equipment, cost of materials, and miscellaneous expenses and are limited to those costs required to allow Transmission Customer to connect the new Delivery Point with its lines, by the most practical and direct route, which were previously connected with the terminated Delivery Point. The charges for the costs of reintegration will be calculated consistent with the standard methodology being used by the Participant at that time.

Delivery Locations Original Cost (\$)

Attachment D Power Factor Penalty

1.0 Power Factor Compliance Requirements per Delivery Point

Beginning with the billing period which follows the later of: i) September 1, 2006, or ii) the month in which Duke complies with the requirements set forth in the Transmission Provider's Facility Connection Requirements ("FCR"), the Transmission Customer must meet the power factor requirements set forth in the FCR or pay penalties specified in Section 2.0 herein.

The Transmission Provider will provide power factor information for each Duke Electric Distribution substations to demonstrate compliance with the power factor standards set forth in Attachment F of the NITSA. If the Transmission Provider's Electric Distribution substations are not in compliance with the power factor standards set forth in Attachment F of the NITSA, the Transmission Customer will not be subject to these power factor penalties until such time as the Transmission Provider has demonstrated that the Transmission Provider's Electric Distribution substations are in compliance with the power factor standards.

Power Factor Groups are defined in Attachment F of the NITSA.

2.0 Penalty Formula

The penalties for failure to meet the power factor requirements are provided:

Power Factor Groups consisting of 1 Delivery Point:

Peak Period Penalty = {Delivery Point kVar Demand at Peak – (Delivery Point kW Demand at Peak X 0.2718)} X 0.75/kVar

Valley Period Penalty = Delivery Point Leading kVar Demand at Valley X \$0.75/kVar

Power Factor Groups consisting of 2 or more Delivery Points:

Peak Period Penalty:

Scenario 1: The aggregate power factor of the group is less than 96.5% lagging at the hour of monthly transmission system peak. The following penalty will be assessed.

Peak Period Group Penalty = {Delivery Group kVar Demand at Peak – (Delivery Group kW Demand at Peak X 0.2718)} X 0.75/kVar

Scenario 2: The aggregate power factor of the group meets the power factor requirement at the hour of monthly transmission system peak but one or more

delivery points in the group are operated at a power factor outside the 92 % lagging to 92 % leading range. Each delivery point with a power factor outside the desired power factor range will be assessed the following penalty.

Peak Period Penalty Per Delivery = {Delivery Point kVar Demand at Peak-(Delivery Point kW Demand at Peak X 0.2718)} X 0.75/kVar

Scenario 3: The aggregate power factor of the group is less than 96.5% lagging at the hour of monthly transmission system peak and one or more delivery points in the group are operated at a power factor outside the 92 % lagging to 92 % leading range. The following penalty for the group and for each delivery will be assessed.

Peak Period Group Penalty = {Delivery Group kVar Demand at Peak – (Delivery Group kW Demand at Peak X 0.2718)} X 0.75/kVar

Peak Period Penalty Per Delivery = {Delivery Point kVar Demand at Peak-(Delivery Point kW Demand at Peak X 0.2718)} X 0.75/kVar

Total Peak Period Penalty = Peak Period Group Penalty + $\sum_{i=1}^{n}$ Peak Period Penalty Per Delivery

Where n is the total number of delivery points in the group in violation of the power factor requirements.

Valley Period Penalty:

Scenario 1: The aggregate power factor of the group is leading at the hour of monthly transmission system valley. The following penalty will be assessed.

Valley Period Group Penalty = Delivery Group Leading kVar Demand at Valley X \$0.75/kVar

Scenario 2: The aggregate power factor of the group meets the power factor requirement at the hour of monthly transmission system valley but one or more delivery points in the group are operated at a power factor outside the 92 % lagging to 92 % leading range. Each delivery point with a power factor outside the desired power factor range will be assessed the following penalty.

Valley Period Penalty Per Delivery = Delivery Point Leading kVar Demand at Valley X \$0.75/kVar

Scenario 3: The aggregate power factor of the group is leading at the hour of monthly transmission system valley and one or more delivery points in the group are operated at a power factor outside the 92 % lagging to 92 % leading range. The following penalty for the group and for each delivery will be assessed.

Valley Period Group Penalty = Delivery Group Leading kVar Demand at Valley X \$0.75/kVar

Valley Period Penalty Per Delivery = Delivery Point Leading kVar Demand at Valley X \$0.75/kVar

Total Valley Period Penalty = Valley Period Group Penalty + $\sum_{i=1}^{n}$ Valley Period Penalty Per Delivery_i

Where n is the total number of delivery points in the group in violation of the power factor requirements.

3.0 Terms

Delivery Point kW Demand at Peak - The kW demand at the Delivery Point registered at the hour of the Transmission Provider's Monthly Transmission System Peak

Delivery Group kW Demand at Peak - The sum of kW demand registered at the hour of the Transmission Provider's Monthly Transmission System Peak at each Delivery Point in the Delivery Point Group

Delivery Point kVar Demand at Peak1- The kVar demand at the Delivery Point registered at the hour of the Transmission Provider's Monthly Transmission System Peak

Delivery Group kVar Demand at Peak¹ - The sum of kVar demand registered at the hour of the Transmission Provider's Monthly Transmission System Peak at each Delivery Point in the Delivery Point Group.

Delivery Point Leading kVar Demand at Valley¹ - The leading kVar demand at the Delivery Point registered at the hour of the Transmission Provider's Monthly Transmission System valley

Delivery Group Leading kVar Demand at Valley¹ - The sum of kVar demand registered at the hour of the Transmission Provider's Monthly Transmission System valley at each Delivery Point in the Delivery Point Group.

4.0 Duke Capacitors in Delivery Stations

The Delivery Point kVar Demand at Peak, Delivery Group kVar Demand at Peak, the Delivery Point Leading kVar Demand at Valley, and the Delivery Group Leading kVar Demand at Valley will account for the presence of capacitors (if any) owned by Duke at the distribution delivery station. To prevent penalizing the Transmission Customer for the Duke's operation of its capacitors, the Duke capacitors will be considered operational during the day and hour of the monthly transmission system peak regardless of the actual

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As adjusted in accordance with Section 4.0.

operating status of the Duke capacitors. Likewise, the Duke capacitors will be considered not operational during the day and hour of the monthly transmission system valley regardless of the actual operating status of the Duke capacitors.

5.0 Temporary Waiver of Power Factor Requirements for New Delivery Points

The Transmission Customer may request a 24-month partial waiver of the Peak Period Power Factor requirements for new delivery points. This waiver would be to allow the transmission customer adequate time to develop a new distribution voltage profile for the new delivery point and to perform the associated feeder work. The form of the partial waiver would be as follows:

1. For the first 12-month period following the in-service date of the new delivery, the Peak Period Power Factor requirements for that delivery will be:

Peak Periods - The Transmission Customer must operate its electrical system in a manner resulting in a power factor not less than 90% lagging as measured at the delivery point at the hour of transmission system peak on a monthly basis for the months of June, July, August, and September. A lagging power factor of less than 90% lagging as measured at the delivery point at the hour of transmission system peak for the specified months will result in a penalty. The penalty will be calculated using the following formula:

Peak Period Penalty = {Delivery Point kVar Demand at Peak – (Delivery Point kW Demand at Peak X 0.4843)} X 0.75/kVar

2. For the second 12-month period following the in-service date of the new delivery, the Peak Period Power Factor requirements for that delivery will be:

Peak Periods - The Transmission Customer must operate its electrical system in a manner resulting in a power factor not less than 94% lagging as measured at the delivery point at the hour of transmission system peak on a monthly basis for the months of June, July, August, and September. A lagging power factor of less than 94% lagging as measured at the delivery point at the hour of transmission system peak for the specified months will result in a penalty. The penalty will be calculated using the following formula:

Peak Period Penalty = {Delivery Point kVar Demand at Peak – (Delivery Point kW Demand at Peak X 0.3629)} X 0.75/kVar

3. The new delivery point can not be included in a power factor group for the duration of a temporary waiver.

6.0 Waiver of Valley Power Factor Requirements for Delivery Points serving Underground Distribution Systems

The Transmission Customer may request a waiver from the Valley Period Power Factor requirement for any delivery point dedicated to serving an underground distribution system. Duke recognizes that such systems may be capacitive in nature at minimum loads and may present a leading power factor at the delivery point. In requesting this

waiver, the Transmission Customer must demonstrate that the delivery point is capacitive in nature at minimum loads and that no capacitors are in-service at such times. If the delivery point receives a waiver it cannot be included in a power factor group.

Attachment E Network Operating Agreement

1.0 Control Area Requirements

The Transmission Customer shall: (i) operate as a Control Area under applicable guidelines of the North American Electric Reliability Council ("NERC"), Southeastern Electric Reliability Council ("SERC"), and Virginia-Carolinas Reliability Group ("VACAR") or any of their successors; (ii) satisfy its Control Area requirements, including all necessary Ancillary Services, by contracting with the Transmission Provider; or (iii) satisfy its Control Area requirements, including all necessary Ancillary Services, by contracting with other entities, consistent with Good Utility Practice, which satisfies NERC, SERC and VACAR requirements. The Transmission Customer shall plan, construct, operate and maintain its facilities and system in accordance with Good Utility Practice, which shall include, but not be limited to, all applicable guidelines of NERC, SERC and VACAR, as they may be modified from time to time, and any generally accepted practices in the region.

2.0 Network Operating Committee

- (a) The Transmission Provider and the Transmission Customer shall each appoint a member and an alternate to a Network Operating Committee, and so notify the other Party of such appointment in writing. Such appointments may be changed at any time by similar notice. Each member and alternate shall be a responsible person working with the day to day operations of their respective systems. The Network Operating Committee shall meet as necessary to carry out the duties set forth herein. The Network Operating Committee shall also represent the Parties in all other operational matters not identified below that may be delegated to it by mutual agreement of the Parties. The Network Operating Committee shall hold meetings at the request of either Party, at a time and place agreed upon by the members of the Network Operating Committee.
- (b) The Network Operating Committee shall coordinate operating criteria for the Parties' respective responsibilities under the Tariff, NITSA, and NOA including: (i) operate and maintain equipment necessary for integrating the Transmission Customer system within the Transmission Provider's Transmission System (including, but not limited to, remote terminal units, metering, communications equipment and relaying equipment); (ii) transferring data, as necessary and as applicable, between the Transmission Provider and the Transmission Customer (including, but not limited to, heat rates and operational characteristics of Network Resources, generation schedules for units outside the Transmission Provider's Transmission System, interchange schedules, unit outputs for redispatch required under Section 33 of the Tariff, voltage schedules, loss factors, and other real time data); (iii) using software programs required for data links and constraint dispatching; (iv) exchanging data on forecasted loads and resources necessary for longterm planning; (v) addressing any other technical and operational considerations required for implementation of Part III of the Tariff, including scheduling protocols; and (vi) developing and implementing communications protocols and procedures for the exchange of scheduling information. The Network Operating Committee shall have no

power to amend or alter the provisions of this NOA or the NITSA. The Network Operating Committee shall use the standards set forth in the Transmission Provider's FCR document, as may be amended from time to time. The Network Operating Committee shall establish procedures: (i) to establish and verify initial and continuous compliance with the FCR, including the implementation of revised FCR provisions; and (ii) to correct failures to comply in a timely manner.

3.0 Network Operating Committee Agreements

- (a) Each Party shall cooperate in providing to the Network Operating Committee all information required in the performance of the Network Operating Committee's duties. All decisions and agreements, if any, made by the Network Operating Committee shall be evidenced in writing and approved by each member of the Operating Committee, and shall be in accordance with the Tariff, the NITSA, and the NOA.
- (b) Disputes within the Network Operating Committee shall be resolved in accordance with the Dispute Resolution Procedures in the Tariff.

4.0 Redispatch Procedures

- (a) The Transmission Provider may implement redispatch procedures in accordance with Section 33.2 of the Tariff. If the Transmission Provider has redispatch procedures that have been accepted for filing and permitted to go into effect by the Federal Energy Regulatory Commission ("FERC" or the "Commission"), those procedures will be adhered to by the Transmission Provider and the Transmission Customer in any instance in which redispatch is implemented. Until such time as the FERC has permitted the Transmission Provider's redispatch procedures to go into effect, redispatch will require mutual consent by both the Transmission Provider and the Transmission Customer. The Transmission Customer shall respond immediately to requests for redispatch from the Transmission Provider's system operator.
- (b) The Transmission Customer will submit to the Transmission Provider verifiable cost data for its Network Resources, which estimates the cost to the Transmission Customer of changing the generation output of each of its Network Resources. This cost data will be used, along with similar data for the Transmission Provider's resources, as the basis for least-cost redispatch. The Transmission Provider's operations personnel will keep this data confidential, and will disclose it only to those who require the information in order to carry out the redispatch function. Under no circumstances shall the Transmission Provider disclose this data to the Transmission Provider's Bulk Power Marketing function or any other marketer. If the Transmission Customer experiences changes to its costs, the Transmission Customer will submit those changes to the Transmission Provider's system operator.
- (c) The Transmission Customer may audit, at its own expense, redispatch events (such as the cause or necessity of the redispatch) during normal business hours following reasonable notice to the Transmission Provider. Either the Transmission Customer or the Transmission Provider may request an audit of the other Party's cost data. Any audit of

cost data will be performed by an independent agent at the requesting Party's cost. Such independent agent will be required to keep all cost data confidential.

(d) Once redispatch has been implemented, the Transmission Provider will book in a separate account the redispatch costs incurred by the Transmission Provider and the Transmission Customer based on the submitted cost data. The Transmission Provider and all Transmission Customers will each bear a proportional share of the total redispatch costs based on their then current Load Ratio Shares. The redispatch charge or credit, as appropriate, will be reflected on the Transmission Customer's monthly bill.

5.0 Metering

- (a) The Transmission Customer will be responsible for the purchase, installation, operation, maintenance, repair, and replacement of all metering equipment, with the exception of metering associated with NCEMC's ownership share of the Catawba Nuclear Station, including communication equipment and paths, necessary to provide Network Integration Transmission Service, except as otherwise set forth in this NOA. All metering equipment of the Transmission Customer shall conform to Good Utility Practice and the standards and practices of the Transmission Provider's Control Area where necessary for implementation of Network Integration Transmission Service. Prior to its installation, the Transmission Provider and the Transmission Customer shall review the metering equipment to ensure conformance with such standards or practices as applicable. The Transmission Customer may, by mutual agreement of the Parties, lease or purchase metering equipment of the Transmission Provider for all or part of this obligation.
- (b) Electric capacity and energy received by the Transmission Provider directly from the Transmission Customer's Network Resources will be measured by meters installed at the Transmission Customer's Network Resources. Electric capacity and energy which are wheeled for the Transmission Customer by a neighboring system will be received at designated Points of Receipt between such neighboring system and the Transmission Provider's Control Area. When measurement is made at any location other than a Point of Receipt, suitable adjustment for losses between the point of measurement and the Point of Receipt will be agreed upon in writing between the Parties hereto and will be applied to all measurements so made. Metered receipts used in billing and accounting hereunder will in all cases include adjustments for such losses.
- (c) Electric capacity and energy delivered to the Transmission Customer's Network Loads by the Transmission Provider will be measured by meters installed at the Delivery Points to such Network Loads. Meters may be placed at locations other than Delivery Points by mutual agreement of the Parties. When measurement is made at any location other than a Delivery Point, suitable adjustment for losses between the point of measurement and the Delivery Point will be agreed upon in writing between the Parties hereto and will be applied to all measurements so made. Metered receipts used in billing and accounting hereunder will in all cases include adjustments for such losses. In addition, the Transmission Customer will provide written confirmation of its commitment not to tap an owned transmission line before a new metered delivery is put in service without sixty (60) days' advance notification to the Transmission Provider. Further, the Transmission

Customer will allow the Transmission Provider access to its facilities for inspection of the transmission line upon the Transmission Provider's reasonable notice.

- (d) Meters at the Transmission Customer's Network Resources, where applicable, and Network Loads will be tested at least biennially. Representatives of the non-owning Party will be provided notification of and afforded an opportunity to witness such tests.
- (e) The owning Party will, upon request of the non-owning Party, test any meter at the Network Resources or Network Load used for determining the receipt or delivery of electric capacity and energy by the Transmission Provider. In the event the test shows the meter to be inaccurate, the owning Party will make any necessary adjustments, repairs, or replacements. In the event the test shows the meter to be accurate, all costs of the test will be paid by the non-owning Party.
- (f) In the event any meter used to measure capacity and energy fails to register or is found to be inaccurate, appropriate billing adjustments, based on the best information available, will be agreed upon by the Parties hereto. Meters shall be calibrated to 0.5% accuracy at unity power factor for both full load and light load. These meters shall be calibrated to 1.0% accuracy for 0.5 power factor at full load. Metering accuracy limits are stated in the following table.

METER ACCURACY LIMITS					
Watt-hour Function			Var-hour Function		
Full Load	Power Factor	Light Load	Power Factor		
+/- 0.5	+/- 1.0	+/- 0.5	+/- 1.0		

Notes:

- Watt-hour and var-hour functions should be tested in both directions of energy flow (In and Out).
- When compensating for transformer or line loss, utilize stated limits above or 5% of desired compensation, whichever is greater.
- The meter shall be tested with compensation applied to obtain a true test of the installation.

Test Points	Volts	Amps	Power Factor
Full Load	120	5	1.0
Power Factor	120	5	0.5
Light Load	120	0.5	1.0

These values will be considered to be correct and accurate insofar as correction of billing is concerned. If, as a result of any test, a meter is found to be out of compliance with these values, then the record of readings of such meter previously taken will be corrected according to the percentage of any inaccuracy so found, but no correction will extend beyond ninety (90) days prior to the day on which inaccuracy is discovered by such test.

- (g) The Transmission Provider will have the right to install, at its own expense, suitable metering equipment at any Point(s) of Receipt or Delivery, as herein provided for the purpose of checking any meters installed by the Transmission Customer.
- (h) The Transmission Customer will provide the metering as described in Section 7.0(a). The Transmission Customer and the Transmission Provider (collectively "Metering Parties") will have electronic access to the meters for the purpose of collecting and processing meter data for billing as defined in the Catawba Interconnection Agreement, FERC Electric Rate Schedule No. 273 ("IA") and the Tariff. The Metering Parties will also have electronic access to the meters for the purpose of verifying the accuracy of the metered data and meter configuration. If physical access to metering equipment located on premises owned or controlled by a Metering Party is needed, the owning Metering Party will furnish the non-owning Metering Party's representative with physical access to the meters upon reasonable prior request for the purpose of: (i) collecting and processing meter data for billing under the IA and Tariff; and /or (ii) verifying the accuracy of the metered data and meter configuration. The owning Metering Party shall have the right to have an observer present during such activities by the non-owning Metering Party's representatives.
- (i) The Metering Party that owns a meter will provide any equipment nameplate and configuration information requested by the non-owning Metering Party to allow the non-owning Metering Party to verify that the meter measurement and loss compensation calculation, if applicable, is accurate. The owning Metering Party shall notify the non-owning Metering Party at least thirty (30) days in advance of any changes to the metering, meter programming, or meter equipment. In the event that changes are made in response to equipment failure, notification will be made within two (2) business days after the failure is discovered.

6.0 Control Area and Data Equipment

- (a) The Transmission Customer will be responsible for the purchase, installation, operation, maintenance, repair, and replacement of all data acquisition equipment, metering equipment, protection equipment, and any other associated equipment and software, which may be required for the Transmission Customer to operate in accordance with Section 3.0 of this NOA. Such equipment shall conform to Good Utility Practice and conform to the reasonable standards and practices of the Transmission Provider's Control Area. Prior to its installation, the Transmission Provider and the Transmission Customer shall review the equipment and software required by this Section to ensure conformance with such standards or practices.
- (b) The real time telemetry and data to be received by the Transmission Provider's system operator and the Transmission Customer shall be determined initially by the Parties. Subsequent changes shall be determined by the Network Operating Committee. Such telemetry and data shall be necessary for monitoring of system operations for reliability, security, or economics. This telemetry includes, but is not limited to, loads, line flows, voltages, generator output, and breaker status at any of the Transmission Customer's transmission facilities. To the extent telemetry is required that is not available, the

Transmission Customer shall, at its own expense, install any metering equipment, data acquisition equipment, or other equipment and software necessary for the telemetry to be received by the Transmission Provider's system operator.

(c) Each Party shall be responsible for implementing any computer modifications or changes required to its own computer system(s) as necessary to implement this Section.

7.0 Operating Requirements

- (a) The Transmission Customer shall operate its generating resources in a manner consistent with that of the Transmission Provider, following voltage schedules, utilizing free governor response, meeting power factor requirements at the point of interconnection with the Transmission Provider's system, and other such criteria required by NERC, SERC, or VACAR, or any of their successors, and consistently adhered to by the Transmission Provider.
- (b) Insofar as practicable, the Transmission Provider and the Transmission Customer shall protect, operate, and maintain their respective systems so as to avoid or minimize the likelihood of disturbances which might cause impairment of service on the system(s) of the other. The Parties, consistent with Good Utility Practice, shall implement load shedding programs to maintain the reliability and integrity of the Transmission System, as provided in Section 33.6 of the Tariff. Load shedding shall include: (i) automatic load shedding by underfrequency device; and (ii) manual load shedding. The Transmission Provider will implement load shedding to maintain the relative sizes of load served, unless otherwise required by circumstances beyond the control of the Transmission Provider or the Transmission Customer. Automatic load shedding devices will operate without notice. When manual load shedding is relied upon, the Transmission Provider shall notify the Transmission Customer's dispatchers or schedulers of the required action and the Transmission Customer shall take immediate steps to comply.
- (c) The Transmission Customer shall, at its own expense, provide, operate, and maintain in service high-speed, underfrequency load shedding equipment. The Transmission Customer will install underfrequency devices consistent with NERC, SERC, and VACAR, or any of their successors requirements, to disconnect automatically approximately thirty percent (30%) of its Network Load in a manner consistent with that followed by the Transmission Provider, which is three (3) steps of approximately ten percent (10%) each at frequency set points of 59.3 Hertz, 59.0 Hertz and 58.5 Hertz. The installation of underfrequency relays to accomplish any additional load shedding above that already installed shall be completed on a schedule agreed to by the Network Operating Committee. The Network Operating Committee may review the amount of load that would be disconnected automatically and make such adjustments and changes as necessary.
- (d) In the event the Transmission Provider reasonably modifies the load shedding system in accordance with Good Utility Practice, the Transmission Customer shall, at its expense, make changes to its equipment and setting of such equipment, as required. The Transmission Customer shall test and inspect the load shedding equipment within ninety

(90) days of taking Network Integration Transmission Service under the Tariff and thereafter in accordance with Good Utility Practice, but no more often than the Transmission Provider, and provide a written report to the Transmission Provider. The Transmission Provider may request a test of the load shedding equipment with reasonable written notice at the expense of the Transmission Provider. If the Transmission Customer installs automatic load shedding equipment, the Transmission Provider shall provide to the Transmission Customer a written report upon each test of the Transmission Provider's automatic load shedding equipment. The Parties will provide each other with copies of NERC compliance reports, as they relate to the NERC Planning Standards on underfrequency load shedding.

8.0 Operational Information

- (a) The Transmission Customer shall provide by September 1 of each year the Transmission Customer's Network Resource Availability Forecast (e.g., all planned resource outages, including off-line and on-line dates) for the following year. Such forecast shall be made in accordance with Good Utility Practice. The Transmission Customer shall inform the Transmission Provider, in a timely manner, of any changes to the Transmission Customer's Network Resource Availability Forecast. In the event that the Transmission Provider determines, in compliance with its rights and responsibilities under Section 28.2 of the Tariff, that such forecast cannot be accommodated due to a transmission constraint on its Transmission System, then the Transmission Provider shall notify the Network Operating Committee which shall meet to resolve the matter. If the Network Operating Committee is unable to resolve the matter in a timely fashion, then the Dispute Resolution Procedures set forth in Section 12 of the Tariff shall apply.
- (b) The Transmission Customer shall provide, at least thirty-six (36) hours in advance of every calendar day, the Transmission Customer's best forecast of any planned transmission or Network Resource outage(s) and other operating information reasonably required by the Transmission Provider to provide Transmission Service under the NITSA and this NOA. In the event that such planned outages cannot be accommodated due to a transmission constraint on the Transmission Provider's Transmission System and the Network Operating Committee cannot agree on remedial measures, the provisions of Section 33 of the Tariff will be implemented.
- (c) The Transmission Provider and the Transmission Customer shall notify and coordinate with the other Party prior to the commencement of any work by either Party (or contractors or agents performing on their behalf) which may directly or indirectly have an adverse effect on the other Party. All information provided by either Party to the other under this Section shall be treated as confidential.

9.0 Network Planning

In order for the Transmission Provider to plan, on an ongoing basis, to meet the Transmission Customer's requirements for Network Integration Transmission Service, the Transmission Customer shall provide to the Transmission Provider, by September 1 of each year, updated information (current year and 10-year projection) for Network Loads

and Network Resources, as well as any other information reasonably necessary to plan for Network Integration Transmission Service. This type of information is consistent with the Transmission Provider's information requirements for planning to serve its Native Load Customers. The data will be provided in a format consistent with that used by the Transmission Provider.

10.0 Character of Service

Power and energy delivered under the NITSA and this NOA shall be delivered as three-phase alternating current at a frequency of approximately sixty (60) Hertz, and at the nominal voltages at the Points of Delivery and Points of Receipt.

11.0 Transfer of Power and Energy Through Other Systems

Since the Transmission Provider's Transmission System is, and will be, directly and indirectly connected with other electric systems, it is recognized that, because of the physical and electrical characteristics of the facilities involved, electric capacity and energy delivered under the NITSA and this NOA will flow through such other systems. The Parties agree to advise other electric systems as deemed appropriate of such scheduled transfers and to attempt to maintain good relationships with affected third parties. The Parties further agree that the Transmission Customer will be responsible for making arrangements, suitable to the Transmission Provider, with neighboring transmission providers as necessary for the scheduling and delivery of electric capacity and energy from any other designated or non-designated Network Resources of the Transmission Customer to the Transmission Provider's Control Area.

Attachment F Other Charges

1.0 Direct Assignment Charges (recurring):

ATTACHMENT G

NETWORK OPERATING AGREEMENT

(CP&L ZONE AND FPC ZONE)

The Transmission Provider and	(Transmission Customer)
agree that the provisions of this Network Operating Agreem	nent ("NOA") and the Service
Agreement govern the Transmission Provider's provision of	Network Integration
Service/Network Contract Demand Transmission Service to	the Transmission Customer in
accordance with the Transmission Provider's Open-Access	Transmission Tariff (Tariff), as it
may be amended from time to time. Unless specified herein	, capitalized terms shall refer to terms
defined in the Tariff ¹	

1.0 Control Area Requirements

The Transmission Customer shall: (i) operate as a Control Area under applicable guidelines of the North American Electric Reliability Council ("NERC") and either the Southeastern Electric Reliability Council ("SERC") or the Florida Regional Reliability Council ("FRCC"), as applicable; or (ii) satisfy its Control Area requirements, including all Ancillary Services, by contracting with the Transmission Provider; or (iii) satisfy its Control Area requirements, including all Ancillary Services, by contracting with another entity that can satisfy those requirements in a manner that is consistent with the Tariff and Good Utility Practice and satisfies NERC and SERC or FRCC standards. The Transmission Customer shall plan, construct, operate and maintain its facilities and system in accordance with Good Utility Practice, which shall include, but not be limited

This Attachment G applies only to the CP&L Zone and the FPC Zone. The NOA applicable to the DEC Zone is available at Attachment F-2, as Attachment E to the Service Agreement for Network Integration Transmission Service.

to, all applicable guidelines of NERC and SERC or FRCC, as they may be modified from time to time, and any generally accepted practices in the region that are consistently adhered to by the Transmission Provider.

2.0 Redispatch Procedures

- (a) If the Transmission Provider determines that redispatching resources (including reductions in off-system purchases and sales) to relieve an existing or potential transmission constraint is the most effective way to ensure the reliable operation of the Transmission System, the Transmission Provider will redispatch the Transmission Provider's resources, and request the Transmission Customer to redispatch its resources, on a least-cost basis, without regard to the ownership of such resources. The Transmission Provider will maintain a redispatch protocol and will apprise the Transmission Customer of its redispatch practices and procedures, as they may be modified from time to time.
- (b) The Transmission Customer will submit verifiable cost data for its resources, which estimate the cost to the Transmission Customer of changing the generation output of its Network Resources, to the Transmission Provider. This cost data will be used, along with similar data for the Transmission Provider's resources, as the basis for least-cost dispatch. The Transmission Provider's bulk power operations personnel will keep this data confidential, and will not disclose it to the Transmission Provider's marketing personnel. If the Transmission Customer experiences changes to its costs, the Transmission Customer will submit those changes to the Transmission Provider's Energy Control Center. The Transmission Provider will implement least-cost redispatch consistent with its existing

- contractual obligations and its current practices and procedures for its own resources per Sections 33.2 and 42.2 of the Tariff. The Transmission Customer shall respond within ten minutes to requests for redispatch from the Transmission Provider's Energy Control Center.
- c) The Transmission Customer may audit, at its own expense, particular redispatch events (such as the cause or necessity of the redispatch) during normal business hours following reasonable notice to the Transmission Provider. Either the Transmission Customer or the Transmission Provider may request an audit of the other Party's cost data. Any audit of cost data will be performed by an independent agent at the requesting Party's cost. Such independent agent will be a nationally recognized accounting firm and will be required to keep all cost data confidential.
- (d) Once redispatch has been implemented, the Transmission Provider will book in a separate account the redispatch costs incurred by the Transmission Provider and the Transmission Customer based on the submitted cost data. The Transmission Provider and the Transmission Customer will each bear a proportional share of the total redispatch costs pursuant to Sections 33 and 42 of the Tariff. The redispatch charge or credit, as appropriate, will be reflected on the Transmission Customer's monthly bill.

3.0 Metering

(a) Unless otherwise agreed and except as provided in Section 3(b), the Transmission Provider will be responsible for the installation, operation, maintenance, repair and replacement of all metering equipment necessary to provide Network

Integration Service or Network Contract Demand Service. The charge for such equipment and service shall be as set forth in the Network Service Agreement.

All metering equipment shall conform to Good Utility Practice and, if it is electrically located in the Transmission Provider's Control Area, the standards and practices of the Transmission Provider's Control Area. Prior to installation of any metering equipment by the Transmission Customer or its agents, the Transmission Provider and the Transmission Customer shall review the metering equipment to ensure conformance with such standards or practices.

- (b) Unless otherwise agreed, electric capacity and energy received by the

 Transmission Provider from the Transmission Customer will be measured by

 meters installed and maintained by the Transmission Customer at the

 Transmission Customer's Network Resources if such Network Resources are
 electrically located within the Transmission Provider's Control Area. When

 measurement is made at any location other than a point of receipt, suitable
 adjustment for losses between the point of measurement and the point of receipt
 will be agreed upon in writing between the Parties hereto and will be applied to
 all measurements so made. Metered receipts used in billing and accounting
 hereunder will in all cases include adjustment for such losses.
- (c) Electric capacity and energy delivered to the Transmission Customer's points of delivery by the Transmission Provider will be measured by meters installed at the points of delivery. When measurement is made at any location other than a point of delivery, suitable adjustment for losses between the point of measurement and the point of delivery will be agreed upon in writing between the Parties hereto and

- will be applied to all measurements so made. Metered receipts used in billings and accounting hereunder will in all cases include adjustments for such losses.
- (d) Meters at the Transmission Customer's Network Resources and Network Loads will be tested at least biennially. In addition, the Transmission Customer will, upon request of the Transmission Provider, test any of its meters at its Network Resources or Network Loads used for determining the receipt or delivery of capacity and energy by the Transmission Provider. Representatives of the Transmission Provider will be afforded an opportunity to witness such tests. In the event the test shows the meter to be inaccurate, the Transmission Customer will make any necessary adjustments, repairs or replacements thereon.
- (e) In the event any meter used to measure capacity and energy fails to register or is found to be inaccurate, appropriate billing adjustments, based on the best information available, will be agreed upon by the Parties hereto. Any meter tested and found to be not more than two percent above or below normal will be considered to be correct and accurate insofar as correction of billing is concerned. If, as a result of any test, a meter is found to register in excess of two percent either above or below normal, then the reading of such meter previously taken will be corrected according to the percentage of inaccuracy so found, but no correction will extend beyond ninety days prior to the day on which inaccuracy is discovered by such test.
- (f) The Transmission Provider will have the right to install suitable metering equipment at any Point(s) of Receipt or Delivery, as herein provided for the purpose of checking the meters installed by the Transmission Customer.

(g) The Transmission Customer will read the meters owned by it, except as may be mutually agreed, and will furnish to the Transmission Provider all meter readings and other information required for operations and for billing purposes. Such information will remain available to the Transmission Provider for 3 years.

4.0 Control Area and Data Equipment

- (a) Unless otherwise agreed the Transmission Provider will be responsible for the installation, modification, operation, maintenance, repair and replacement of all data acquisition equipment, protection equipment, and any other associated equipment and software, which may be required by either Party for the Transmission Customer to operate in accordance with its choice under Section 1.0 of this NOA. The charge for such equipment and service shall be set forth in the Network Service Agreement. Such equipment shall conform to Good Utility Practice and, if the Transmission Customer is electrically located within the Transmission Provider's Control Area, the standards and practices of the Transmission Provider's Control Area. Prior to installation of any such equipment by Transmission Customer or its agents, the Transmission Provider and the Transmission Customer shall review the equipment and software required by this Section to ensure conformance with such standards or practices.
- (b) The selection of real time telemetry and data to be received by the Transmission Provider's Energy Control Center and the Transmission Customer shall be at the reasonable discretion of the Transmission Provider's Control Area, as deemed necessary for reliability, security, economics, and/or monitoring of system operations. This telemetry includes, but is not limited to, loads, line flows,

voltages, generator output, and breaker status at any of the Transmission

Customer's transmission facilities. To the extent telemetry is required that is not
available, the Transmission Customer shall, at its own expense, install any
metering equipment data acquisition equipment, or other equipment and software
necessary for the telemetry to be received by the Transmission Provider's Energy
Control Center.

(c) Each Party shall be responsible for implementing any computer modifications or changes required to its own computer system(s) as necessary to implement this Section.

5.0 Operating Requirements

- Transmission Customer shall operate its generating resources inside the

 Transmission Provider's Control Area in a manner consistent with that of the

 Transmission Provider, including following voltage schedules, free governor
 response, meeting power factor requirements at the point of interconnection with
 the Transmission Provider's system, and other such criteria required by NERC
 and SERC or FRCC, and consistently adhered to by the Transmission Provider.
- (b) [CP&L Zone: When load is being served by the Transmission Customer in the CP&L Zone, the Transmission Customer shall maintain a power factor of 100% to 90% lagging at each point of delivery determined on the basis of the 60-minute metered or computed reactive demand (kVar) for each hour of the month and the corresponding 60-minute metered or computed kilowatt demand for that hour. In addition, the Transmission Customer shall maintain a power factor of 100% to 95% lagging at each point of delivery, determined on the basis of the 60-minute

metered or computed kilowatt demand at the time of CP&L's monthly transmission system peak and the corresponding 60-minute reactive demand (kVar) for that hour. To the extent the Transmission Customer owns or operates reactive devices which could cause reactive power to flow onto the CP&L system, CP&L and the Transmission Customer will develop procedures governing the Transmission Customer's delivery of reactive power to the CP&L system. In the event that the Transmission Customer does not satisfy the power factor requirements outlined above or the Parties cannot agree on the procedures governing the customer's delivery of reactive power, CP&L reserves the right to make a unilateral filing with FERC under Section 205 of the Federal Power Act seeking authorization to either (i) assess appropriate charges to the Transmission Customer for reactive power supplied to the Transmission Customer by CP&L up to the level of minimum power factor requirement, or (ii) install power factor correction equipment sufficient to bring the Transmission Customer's power factor into compliance with the power factor requirements, and to assess the Transmission Customer the reasonable cost of such equipment.] FPC Zone: The Transmission Customer shall comply with the power factor requirements set forth in OATT Attachment V.

(c) Insofar as practicable, the Transmission Provider and the Transmission Customer shall protect, operate, and maintain their respective systems so as to avoid or minimize the likelihood of disturbances which might cause impairment of service on the system(s) of the other. The Parties shall implement load shedding programs to maintain the reliability and integrity of the Transmission System,

consistent with the standards of NERC and SERC or FRCC, as provided in Sections 33.6 and 42.6 of the Tariff. Load shedding shall include: (1) automatic load shedding by under frequency relay or (2) manual load shedding. The Transmission Provider will implement load shedding to maintain the relative sizes of load served, unless otherwise required by circumstances beyond the control of the Transmission Provider or the Transmission Customer. Automatic load shedding devices will operate without notice. When manual load shedding is necessary, the Transmission Provider shall notify the Transmission Customer's dispatchers or schedulers of the required action and the Transmission Customer shall comply within ten minutes.

(d) The Transmission Customer shall, at its own expense, provide, operate, and maintain in service high-speed, digital under frequency load shedding equipment. For load served in or from the CP&L Zone, the Transmission Customer will install under frequency relays to disconnect automatically its Network Load in a manner consistent with that followed by the Transmission Provider. For load served in or from the FPC Zone, the under frequency load shedding equipment shall enable the automatic disconnection of a minimum of fifty six percent (56%) of its Network Load in a manner consistent with that followed by the Transmission Provider and the FRCC, which is set forth below:

Set	Frequency	Time	Percent	Cumulative
Point	Set point	Delay*	Load	Percent
	(Hz)	(Sec)	Shed	Load Shed
A	59.7	0.28	9	9
В	59.4	0.28	7	16
C	59.1	0.28	7	23
D	58.8	0.28	6	29
Е	58.5	0.28	5	34
F	58.2	0.28	7	41
L	59.4	10.00	5	46
M	59.7	12.00	5	51
N	59.1	8.00	5	56

^{*} Time Delay = Intentional delay + relay delay + breaker delay.

The installation of under frequency relays to accomplish any load shedding in addition to that already installed shall be completed on a schedule agreed to by the Network Operating Committee. The Network Operating Committee may review the amount of load that would be disconnected automatically, and make such adjustments and changes as necessary.

(e) In the event the Transmission Provider modifies the load shedding system, the

Transmission Customer shall, at its expense, make changes to its equipment and
the settings of such equipment, as required. The Transmission Customer shall test
and inspect the load shedding equipment within ninety (90) days of taking

Network Integration Transmission Service or Network Contract Demand

Transmission Service under the Tariff and thereafter in accordance with Good

Utility Practice, and provide a written report to the Transmission Provider. The

Transmission Provider may request a test of the load shedding equipment with
reasonable notice.

(f) The Transmission Customer shall ensure that all Network Resources meet the Transmission Provider's requirements for parallel operation of non-utility generation.

6.0 Operational Information

The Transmission Customer shall provide data needed for the safe and reliable operation of the Transmission Customer's and the Transmission Provider's Control Area and to implement the provisions of the Tariff. The Transmission Provider will treat this information as confidential and will not divulge it to its marketing personnel.

- (a) The Transmission Customer [served from the CP&L Zone shall provide by September 1st] [served from the FPC Zone shall provide by November 30th] of each year the Customer's Network Resource availability forecast (e.g., all planned resource outages, including off-line and on-line dates) for the following year. Such forecast shall be made in accordance with Good Utility Practice. The Transmission Customer shall inform the Transmission Provider, in a timely manner, of any changes to the Transmission Customer's Network Resource availability forecast. In the event that the Transmission Provider determines that such forecast cannot be accommodated due to a transmission constraint on its Transmission System, and such constraint may jeopardize the security of its Transmission System or adversely affect the economic operation of either the Transmission Provider or the Transmission Customer, the provisions of Sections 33.2 and 42.2 of the Tariff will be implemented.
- (b) The Transmission Customer [served from the CP&L Zone shall provide at least 14 calendar days] [served from the FPC Zone shall provide at least 36 hours]

advance notice of the Transmission Customer's best forecast of any planned transmission or Network Resource outage(s) and other operating information that the Transmission Provider deems appropriate. In the event that such planned outages cannot be accommodated due to a transmission constraint on the Transmission Provider's Transmission System, the provisions of Sections 33.2 and 42.2 of the Tariff will be implemented.

- (c) The Transmission Provider and the Transmission Customer shall notify and coordinate with as much advance notice as reasonably possible with the other Party prior to the beginning of any work by the other Party (or contractors or agents performing on their behalf), which may directly or indirectly have adverse effects on the reliability and security of the other Party's system.
- (d) The Transmission Customer is responsible for replacing Real Power Losses associated with all transmission service in accordance with Sections 28.5 and 36.11 of the Tariff. The Transmission Customer must identify the party responsible for supplying Real Power Losses before the transaction takes place.

7.0 Network Planning

In order for the Transmission Provider to plan, on an ongoing basis, to meet the Transmission Customer's requirements for Network Integration Service, the Transmission Customer [served from the CP&L Zone shall provide, by January 1st of each year, updated information (current year and 15-year projections)] [served from the FPC Zone shall provide, by November 30th of each year, updated information (current year and 10-year projections)] for Network Loads and Network Resources, as well as any other information reasonably necessary to plan for Network Integration Service. This type of

information is consistent with the Transmission Provider's information requirements for planning to serve its Native Load Customers. The data will be provided in a format consistent with that used by the Transmission Provider.

8.0 Character of Service

Power and energy delivered under the Service Agreement and this NOA shall be delivered as three-phase alternating current at a nominal frequency of sixty (60) Hertz, and at the nominal voltages at the delivery and receipt points.

9.0 Transfer of Power and Energy Through Other Systems

Since the Transmission Provider's Transmission System is, and will be, directly and indirectly connected with other electric systems, it is recognized that, because of the physical and electrical characteristics of the facilities involved, power delivered under the Service Agreement and this NOA may flow through such other systems. The Parties agree to advise other electric systems as deemed appropriate of such scheduled transfers and to attempt to maintain good relationships with affected third parties. If the Transmission Provider is charged by another electrical system for loop flow charges, then the Transmission Provider may seek recovery of these charges from the Transmission Customer based on his cost responsibility pursuant to § 205 of the Federal Power Act.

10.0 Notice

If any Notice or request made to or by either Party regarding this NOA shall be made to the representative of the other Party as indicated in the Network Service Agreement.

11.0 Incorporation

The Tariff and the Service Agreement, as may be amended from time to time, are incorporated herein and made a part hereof.

12.0 Term

The term of this NOA shall be concurrent with the term of the Service Agreement between the Parties.

IN WITNESS WHEREOF, the Parties have caused this NOA to be executed by their respective authorized officials.

Transmission Provider:		
By:	Title	Date
Transmission Customer:		
By:	 Title	 Date

ATTACHMENT H

NETWORK INTEGRATION TRANSMISSION SERVICE

I. FPC Zone

The Annual Transmission Revenue Requirement for purposes of Network Integration Transmission Service shall be as determined by Schedule 10-A.2.

II. DEC Zone

The Annual Transmission Revenue Requirement for purposes of Network Integration Transmission Service shall be as determined by Schedule 10-B, Exhibit B.

III. CP&L Zone

The Transmission Customers shall compensate the Transmission Provider each month for Network Load for the applicable month as follows:

- 1. **Monthly Delivery:** The charge for network integration service is derived from the Formula Rate, which is set forth in OATT Attachment H.1. The resulting rate is posted on the Transmission Provider's OASIS. The Formula Rate is implemented in accordance with the OATT Attachment H.2 Formula Rate Implementation Protocols. The charge for Network Integration Transmission Service shall be updated annually on June 1st of each year in accordance with the OATT Attachment H.2 Formula Rate Implementation Protocols.
- **NOTE:** All quantities used in calculating the Network Integration Transmission Customer's Network Load shall be adjusted to the transmission system input level, i.e., shall include the transmission capacity amount associated with any applicable losses. As a result, the Customer's load, as metered at the Point(s) of Delivery (transmission exit level), will be increased using the Real Power Loss factor of 2.15% to bring the Customer's load to the generation level.
- 2. The Network Customer will designate and operate all Network Resources in accordance with the sub-parts of Section 30 of this Tariff. If the Network Customer desires to serve a portion of its load from an undesignated resource, it will be considered Secondary Service in accordance with Section 28.4.
- 3. The Transmission Customer will compensate the Transmission Provider for any redispatch costs in accordance with Section 34.4.

	Attachmer	nt H.1	
			Establish DEC 0
			9
			Year Ending 12/31/yy
Exhibit PEC - 2 Page 1 of 5 Year Ending 12/31/yyyy			
		and the state of t	n-1 Nata
	OAT Handingson not be verified hate For	maia rempiate sarigiron	II Data
	Summary of I	Rates	
	Section Distriction *1. Graphs		
Line		Peference	OATT
Line		Reference	Transmission
1	Gross PEC Revenue Requirement	Page 3, Line 33	0
_		E-Likit DEO 0 - 4	
4.70			10 - 01
0.000		EXHIBIT PEC - 3, p. 3	
5	Total Revenue Credits		0
~	late as it Bish and day (Nata and Bases on Before de	Entité DEO C	
ь	Interest Dispursed W/ Network Prepay Retunds	EXHIBIT PEC-5	U
7	Payanua Pag't - Customar Owned Eacilites		0
3.50	Revenue Req : - Sustainer Switch Facilities		
8	Net Revenue Requirements (Line 1 - Line 5 + Line 6 + Line	e 7)	0
121	Divisor - Sum of Monthly MW Transmission System		
9		p.5, line 5 Total	0
10	Trans. Rev Reg't Rate \$/MW-Mon.	Line 8 / Line 9	0
11		Page 5, Line 11	0
12	Total Firm Monthly Trans. \$/MW-Month		0
13	Appual Firm Trans \$/MW/year	Line 12 * 12	
13	Allitual Fillit Italis Willians year	Lille 12 12	J
14	Weekly Firm/Non-Firm P-t-P Rate \$/MW-Week	Line 13 / 52 weeks	0.00
45		U	
16	Оп-Реак Days	Line 147 / days	0.00
	Non-Firm Hourly P-t-P Rates (\$/MWh):		
	On-Peak Hours	Line 15 / 16 hrs	0.00
17	OTH CAN HOURS		
17 18	Off-Peak Hours	Line 16 / 24 hrs	0.00

Development of Rate Base

Line	RATE BASE:	Reference	Total	Alloca	tor	OATT Transmission
	Gross Plant in Service (Note A):					
1	Production Plant	205.46.g	0	N/A		
2	Transmission Plant	p. 4, line 1	0	TP	0.00000	0
3	Distribution Plant	207.75.g	0	N/A		
4	General Plant	207.99.g	0	OATT LABOR	0.00000	0
5	Intangible Plant	205.5.g	0	OATT LABOR	0.00000	0
6	Total Gross Plant	J	0	GP =	0.00000	0
	Accumulated Depreciation:					
7	Production Depr. Reserve	219.20-24.c	0	N/A		
8	Transmission Depr. Reserve	219.25.c	0	TP	0.00000	0
9	Distribution Depr. Reserve	219.26.c	0	N/A		
10	General Depr. Reserve	219.27.c	0	OATT LABOR	0.00000	0
11	Intangible Amort. Reserve	200.21.c	0	OATT LABOR	0.00000	0
12	Total Accumulated Depr.	20012110	0		0.0000	0
	Net Plant in Service					
13	Net Production Plant	Line 1 - Line 7	0			
14	Net Transmission Plant	Line 2 - Line 8	0			0
15	Net Distribution Plant	Line 3 - Line 9	0			U
16	Net General Plant	Line 4 - Line 10	0			0
17		Line 5 - Line 11	0			0
	Net Intangible Plant	tine 3 - tine 11		. ND	0.00000	
18	Total Net Plant		0	NP =	0.00000	0
	Adjustments to Rate Base - Deferred Tax					
19	ADIT - 190	234.8.c	0	Exhibit PEC		0
20	ADIT - 282 (Negative)	27 5.2.k	0	Exhibit PEC		0
21	ADIT - 283 Negative)	277.8.k	0	Exhibit PEC	C - 6, p 4	0
22	Total Deferred Tax Adjustments		0			0
	Adjustments to Rate Base - Labor Relate	d Net Deferred Cred	lits:			
23	Accum Provision for I&D 228.2 (Neg)	112.28.c	0	OATT LABOR	0.00000	0
24	Accum Provision for P&B 228.3 (Neg)	112.29.c	0	OATT LABOR		0
25	Accum. Misc Oper Prov. 228.4 (Neg)	112.30.c	0	Exhibit PEG		0
26	SFAS 158 Regulatory Asset	232.18.f	0	OATT LABOR		0
27	Net Rate Base Adj.	232.10.1	0	• 0,111 B18011	0.00000	0
21	Net rate base Auj.		U			U
28	Plant Held for Future Use	214.47.d	0	Note B		0
29	Transmission CWIP - Identified Projects	(PEC - 4)	0		0.50000	0
30	OATT CWIP Contra		0	p 5,line 15	0.00000	0
	Rate Base Adjustment - Network Upgrad	de Prepayment Bala	nces (PEC - 5):			
31	Balance - Network Prepayments		0	D/A	(1.00000)	0
32	Accrued Interest Balance		0	D/A	1.00000	0
33	Reversal of Anson/Richmond AFUDC		0	D/A	1.00000	0
34	Total Network Upgrade Prepayment Adj	ustments	0			0
_	Working Capital:					
35	Cash Working Capital (1/8 O&M)	Page 3, line 15				0
36	M&S - Transmission	227.8.c	0	TP	0.00000	0
37	M&S - Stores Expense	227.15.c	0	OATT LABOR	0.00000	0
38	Prepayments	111.57.c	0	GP	0.00000	0
39	Total Working Capital					0
40	Rate Base (Sum of Lines 18, 22, 27, 29, 30	, 34, and 39)				0

Development of Revenue Requirements

Line	EXPENSES:	Reference	Total	Allocat	or	OATT Transmission
	O&M Expense					
1	TOTAL Transmission Expenses	321.112.b	0			
2	Less Account 561.1-561.4	321.84-88.b	0			
3	Less Account 565	321.96.b	0			
4	Net Transmission O&M	Note C	0	TP	0.00000	0
5	Total Admin & General Expenses	323.197.b	0			
6	Less (924) Property Insurance	323.185.b	0			
7	Less (928) Regulatory Commission Expenses	323.189.b	0			
8	Less (930.1) General Advertising Expenses	323.191.b	0			
9	Less Industry Dues,R&D and Nuc Assoc Exp	335.1-3,15.b	0			
10	Net Labor Related A&G		0	OATT LABOR	0.00000	0
11	(924) Property Insurance	323.185.b	0	GP	0.00000	0
12	Trans. Related Regulatory Expense	350.12.b	0	D/A	1.00000	0
13	Trans. Related Advertising Exp.	Note D	0	D/A	1.00000	0
14	Conforming Adj 2007 PBOP Expense	Note E	0	OATT LABOR	0.00000	0
15	Total O&M (Sum of Lines 4, 10, and 11 thru 14)					0
	Depreciation Expense					
16	Transmission Depr. Expense	336.7.b	0	TP	0.00000	0
17	General Depr. Expense	336.9.b	0	OATT LABOR	0.00000	0
18	Intangible Amortization	336.1.f	0	OATT LABOR	0.00000	0
19	Total Depreciation		0			0
	Taxes Other Than Income (Note E)					
20	Labor Related	263.i	0	OATT LABOR	0.00000	0
21	Property Related	263.i	0	GP	0.00000	0
22	Total Other Taxes		0			0
	Return:					
23	Rate Base (Page 2, Line 40) * Rate of Return (Pa	ge 4, Line 31)				0
	Income Taxes:					
24	NC/SC Composite	Note F	0.00%			
25	Federal		0.00%			
26	Composite T = State + Federal * (1 - State)		0.00%			
27	Tax Rev.Req't Factor = T / (1-T) * (1 - Wtd.Debt.	Cost/R)	0.00%			
28	ITC Gross Up Factor = 1 / (1 -T)	•	0.000			
29	Amortized ITC (Negative)	266.8.f	0			
30	Income Taxes Calculated (Line 23 * Line 27)					0
31	ITC Adjustment (Line 28 * Line 29)		0	NP	0.00000	0
32	Total Income Taxes					0
33	TOTAL REVENUE REQUIREMENT (Sum of Lines	15, 19, 22, 23, and 32)				0

Supporting Allocation Factor and Return Calculations

Line			Reference	Total
	Transmission Plant Included in OATT Rate:			
1	Total Transmission Plant		Note K	0
2	Less Gen. Step-up Transformers in 353		Note D	0
3	Less Interconnection Facilities (Order 200	03)	PEC - 5, p 3	0
3A	Plus Contra EPIS - OATT (Neg.)		p. 5, line 14	0
4	Trans Plant for OATT Rate			0
5	TP Allocator (Line 4 / Line 1)		Note C	0.00000
	Labor Allocation Factor			
6	Total Direct Payroll - O&M Labor		354.28.b	0
7	A&G Labor		354.27.b	0
8	Adj RCO Labor in A&G Labor			0
9	Adjusted Labor w/o A&G (Line 6 - Line 7 +	- Line 8)		0
10	Transmission O&M Labor 354.21.b		354.21.b	0
11	Trans Labor Factor (Line 10 / Line 9)			0.00000
12	OATT LABOR Allocator (Line 5 * Line 11)		Note C	0.00000
	Return and Capitalization:			
13	Long Term Interest Expense (Note J)		117.62-66.c	0
14	Less Interest on Securitization Bonds		Note H	0
15	Net Long Term Interest Expense			0
16	Preferred Dividends (positive)		118. 2 9.c	0
17	Long Term Debt		112.24.c	0
18	Less Loss on Reacquired Debt		111.81.c	0
19 2 0	Plus Gain on Reacquired Debt Less Securitization Bonds		113.61.c Note H	0
21	Net Long Term Debt		Note n	0
22	Preferred Stock		112.3.c	0
36-45-5	Common Stock Development:		00.000 13.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1	
23	Proprietary Capital		112.16.c	0
24	Less Preferred Stock		112.3.c	0
25	Less Account 216.1		112.12.c	0
26	Common Stock			0
27	Total Capitalization (Sum Lines 21, 22, 26)	Í		0
	SUMMARY CAP STRUCTURE	Weight	<u>Cost</u>	Weighted Cost
28	Long term Debt	0.00%	0.00%	0.00%
29	Preferred Stock	0.00%	0.00%	0.00%
30	Common Equity	0.00%	10.80%	0.00%
31	Overall Return: R ₀ =			0.00%

Wholesale GridSouth Amortization and Explanatory Notes

Line		Reference	Total	Alloca	itor	OATT Transmission
	Denominator for Wholesale Transmission:					
1	Firm Network Service for Self	400.17.e	0		0.00000	0
2	Firm Network Service for Others	400.17.f	0		1.00000	0
3	Long-Term Firm P-t-P Reservations	400.17.g	0		1.00000	0
4	Other Long-Term Firm Service	400.17.h	0		1.00000	0
5	Total System Long Term Firm Transmission	on Load	0			0
6	Wholesale Trans Allocation Factor					0.00000
7	GridSouth - Deferred Debit as of 12/31/06	Note I	32,962,614	WT2006	0.30297	9,986,562
	Five-Year Amortization of G/S Wholesale An	nount				
8	Annual Funding Requirement	9,986,562 / 5		Fixed		0
9	Under(over) Collection Prior Year					0
10	Net GridSouth Wholesale Revenue Requi	irement				0
11	GridSouth Wholesale Amortization	Line 10 / Line 5				0
	Remaining Wholesale GridSouth Balance					
12	Cumulative Whlse Funding - Prior years					0
13	Remaining Wholesale Deferred Debit	Line 7 - Line 12				0
	Memo: OATT Contras from 50% in CWIP in F	Rate Base				
14	1010950 - CONTRA EPIS		0	1 / Line 6	0.00000	0
15	1071140 - CONTRA CWIP		0	1 / Line 6	0.00000	0

- Note A: Excludes Asset Retirement Obligations from plant balances
- Note B: FERC Form 1 page 214 excluding non-transmission related items
- Note C: The allocator "TP" is the percent of gross transmission plant that is OATT related, i.e., after removal of interconnections and generator step-up transformer investment. It also serves as the basis for deriving OATT-related transmission labor from the Form-1 reported value.
- Note D: Analysis of Company books.
- Note E: Difference between Test Year PBOP Expense and 2007 Amount in Initial Formula Rate of \$18,903,000
- Note F: Excludes all income and gross receipts taxes. Labor related other taxes include FICA and unemployment taxes. Property related taxes include county and local property, highway use, and intangible taxes.
- Note G: Determined by annual apportionment factors provided by Tax Department
- Note H: To the extent PEC is authorized by state utility commission(s) and issues bonds to securitize retail recovery of extraordinary property losses, associated principal and interest expense are excluded in capitalization and return basis.
- Note I: The WT2006 allocation factor, based on the wholesale/system load relationship in the Form-1 for year ending 12/31/2006, will be a constant in determining the wholesale GridSouth allocation to be recovered in the first five years of formula rate operation.
- Note J: Adjusted to exclude all charges to Account 427 not arising from liabilities included in Account 221 or Account 224.
- Note K: Form 1 value at 207.58.g adjusted by subtracting the per books wholesale credit for OATT Electric Plant in Service contra, i.e., value at page 5, line 14 above prior to gross-up for its subsequent use at page 4, line 3A.

Exhibit PEC - 3
Page 1 of 3
Year Ending 12/31/yyyy

PROGRESS ENERGY CAROLINAS, INC.

Transmission Formula Rate Support Account 454 Reconciliation - Rents

	Amount	Allocation Factor	OATT Amt
NORTH CAROLINA			
	-		
TOTAL NORTH CAROLINA			
	=		
SOUTH CAROLINA			
	-		
TOTAL SOUTH CAROLINA			
	=		
TOTAL	- 0		0
	_		•

Exhibit PEC -3 Page 2 of 3 Year Ending 12/31/2007

PROGRESS ENERGY CAROLINAS, INC.
Transmission Rate Formula Support - Account 456.1 Revenue Credits

Form 1 Reference	Payment by (Column (b))	Classification (Col (d))	Rate Schedule (Col (e))	Transmission Revenue (Col (k))	Ancillary/Other Revenue (Col (m))	Total Revenue (Col (n))	
p 328							
	Total Per Form-1			0	0	0	
	STF/NF Revenues			0	0	0	

Exhibit PEC - 3 Page 3 of 3 Year Ending 12/31/yyyy

PROGRESS ENERGY CAROLINAS, INC.

Transmission Formula Rate Support Account 456 Reconciliation - Other Revenue

Description	Amount	Allocation Factor	OATT Amt
Total Other Revenue	0		0
Total Other Revenue	0		0

Exhibit PEC - 4 Page 1 of 1 Year Ending 12/31/yyyy

PROGRESS ENERGY CAROLINAS, INC.
Transmission Rate Formula Support - Year End CWIP for Identified Projects

Project No.	Description	12/31/yyyy CWIP
	Total All Identified Projects	0

PROGRESS ENERGY CAROLINAS, INC.

Transmission Rate Formula Support - Customer Prepayments for Network Upgrades Detail

NCEMC Anson Co. Project - Closed to Plant in Service June 2007

Balances as of Beginning of Refund Period:

	Cash Payments	Accrued Interest	Total Liability	Memo: AFUDC Booked
Balance at Closing Adj Payment after Close	6,510, 88 5 <u>20,171</u>	466,912	6,977,797 <u>20,171</u>	
Adjusted Balance	6,531,056	466,912	6,997,968	411,779
Allocation of Balance Refunds:	93.33%	6.67%		

Test Year Refund History:

		Allocation of Amount Refunded			
Service Month	Amount Refunded	Current Interest	Cash Prepayment	Accrued Interest	Ending Liability Balance
Jan-yyyy	0	0	0	0	0
Feb-yyyy	0	0	0	0	0
Mar-yyyy	0	0	0	0	0
Apr-yyyy	0	0	0	0	0
Мау-уууу	0	0	0	0	0
Jun-yyyy	0	0	0	0	0
Jul-yyyy	0	0	0	0	0
Aug-yyyy	0	0	0	0	0
Sep-уууу	0	0	0	0	0
Oct-yyyy	0	0	0	0	0
Nov-yyyy	0	0	0	0	0
Dec-уууу	<u>0</u> 0	<u>0</u> 0	<u>0</u> 0	<u>0</u>	0
Total	0	0	0	0	
==> Interest Disbursed:	0	0		0	
Allocation of Ending Balance:			0	0	0

AFUDC Reserval Calculation:

Carculation.					
(1)	(2)	(3)	(4) = 12 / (3)	(5) = 0.0 / (4)	(6)=[1-(5)]* 411,779
FERC A/C	Pct. of Project	Depr. Rate	Avg. Depr. Life (Months)	% Depreciated 12/31/yyyy	Net AFUDC Reversal
352	8.69%	1.72%			
353	84.68%	1.71%			
354	0.29%	1.43%			
355	2.69%	5.13%			
356	3.64%	3.31%			
		1.86%	645.0	0.00%	0

PROGRESS ENERGY CAROLINAS, INC.

Transmission Rate Formula Support - Customer Prepayments for Network Upgrades Detail

NCEMC Richmond Co. Project - Closed to Plant in Service December 2007

Balances as of Beginning of Refund Period:

	Cash Payments	Accrued Interest	Total Liability	Memo: AFUDC Booked
Balance at Closing Adj Payment after Close** Adjusted Balance	11,685,996 <u>0</u> 11,685,996	1,124,652 1,124,652	12,810,648 <u>0</u> 12,810,648	1,081,205
Allocation of Balance Refunds:	91.22%	8.78%		

Test Year Refund History:

	L	Allocation of Amount Refunded			
Service Month	Amount Refunded	Current Interest	Cash Prepayment	Accrued Interest	Ending Liability Balance
Jan-yyyy	0	0	0	0	0
Feb-yyyy	0	0	0	0	0
Mar-yyyy	0	0	0	0	0
Apr-yyyy	0	0	0	0	0
Мау-уууу	0	0	0	0	0
Jun-yyyy	0	0	0	0	0
Jul-yyyy	0	0	0	0	0
Aug-yyyy	0	0	0	0	0
Sep-yyyy	0	0	0	0	0
Oct-yyyy	0	0	0	0	0
Nov-yyyy	0	0	0	0	0
Dec-уууу	<u>0</u>	<u>0</u> 0	<u>0</u> 0	<u>0</u>	0
Total	0	0	0	0	
==> Interest Disbursed:	0	0		0	
Allocation of Ending Balance:			0	0	0

AFUDC Reserval Calculation:

(1)	(2)	(3)	(4) = 12 / (3)	(5) = 0.0 / (4)	(6)=[1-(5)]* 1,081,205
FERC A/C	Pct. of Project	Depr. Rate	Avg. Depr. Life (Months)	% Depreciated 12/31/yyyy	Net AFUDC Reversal
352	5.22%	1.72%			
353	37.76%	1.71%			
355	18.56%	5.13%			
356	38.46%	<u>3.31%</u>			
		2.96%	405.3	0.00%	0

^{** -} Additional payment adjustments were made first quarter 2008.

Exhibit PEC - 5 Page 3 of 3 Year Ending 12/31/yyyy

PROGRESS ENERGY CAROLINAS, INC.

Transmission Rate Formula Support - Interconnection Facilities [1] Generation In-Service After March 15, 2000 per FERC Order 2003

Project Balance

Total Interconnection Facilities 0

 $^{^{[1]}\}text{-}$ Excludes Step-up Transformers accounted for on PEF-2, page 4, line 2

PROGRESS ENERGY CAROLINAS, INC.
Transmission Rate Formula Support - List of Inputs from FERC Form-1

Page	Row	Column	Description	Reference	Value
111	57	С	Prepayments	111.57.c	
111	81	С	Loss on Reacquired Debt	111.81.c	
112	3	С	Preferred Stock Issued	112.3.c	
112	12	С	Account 216.1	112.12.c	
112	16	С	Proprietary Capital	112.16.c	
112	24	С	Long Term Debt	112.24.c	
112	28	С	Accum. Provision for Injuries & Damages	112.28.c	
112	29	С	Accum. Provision for Pensions & Benefits	112.29.c	
112	30	С	Accum. Misc Operating Provisions	112.30.c	
113	61	С	Gain on Reacquired Debt	113.61.c	
117	62-67	C	Long Term Interest Expense	117.62-67.c	
118 200	29 21	c	Preferred Dividends (positive) Intangible Amort. Reserve	118.29.c 200.21.c	
205	∠ı 5	c	Intangible Amort. Reserve	200.21.c 205.5.q	
205	46	g	Production Plant	205.5.g 205.46.g	
207	58	g	Transmission Plant	207.58.g	
207	75	g g	Distribution Plant	207.75.g	
207	99	g	General Plant	207.70.g 207.99.g	
214	47	d	Plant Held for Future Use (Trans. Only)	214.47.d	
219	20-24	c	Production Depr. Reserve	219.20-24.c	
219	25	c	Transmission Depr. Reserve	219.25.c	
219	26	c	Distribution Depr. Reserve	219.26.c	
219	27	С	General Depr. Reserve	219.27.c	
227	8	С	M&S - Transmission	227.8.c	
227	15	С	M&S - Stores Expense	227.15.c	
232	18	f	SFAS 158 Regulatory Assets	232.18.f	
234	8	c	ADIT - 190	234.8.c	
263	3	i	Other Taxes - FICA	263.3.i	
263	4	i	Other Taxes - Federal Unemployment	263.4.i	
263	7	i	Other Taxes - Highway Use	263.7.i	
263	13&25	į	Other Taxes - Real & Personal Property	263.13&25.i	
263	15&27	į	Other Taxes - State Unemployment	263.15&27.i	
263	18	i	Other Taxes - Intangibles	263.18.i	
266	8	f	Amortized ITC (Negative)	266.8.f	
267	8 8	h	Accum Deferred ITC - 255 (Negative)	267.8.h 273.8.k	
273 275	2	k k	ADIT - 281 (Negative) ADIT - 282 (Negative)	275.8.k 275.2.k	
275	8	k k	ADIT - 282 (Negative) ADIT - 283 (Negative)	275.2.k 277.8.k	
321	84-88	b	(561.1-561.4) Transmission Expense	321.84-88.b	
321	96	b	(565) Transmission of Electricity by Others	321.96.b	
321	112	b	TOTAL Transmission Expenses	321.112.b	
323	185	b	(924) Property Insurance	323.185.b	
323	189	b	(928) Regulatory Commission Expenses	323.189.b	
323	191	b	(930.1) General Advertising Expenses	323.191.b	
323	197	b	Total Ádmin & General Expenses	323.197.b	
335	1-3,15	b	Industry Dues, R&D, C-V Nuc Pwr Assoc	335.1-3,15.b	
336	1	f	Intangible Amortization	336.1.f	
336	7	b	Transmission Depr. Expense	336.7.b	
336	9	b	General Depr. Expense	336.9.b	
350	12	b	FERC Order 641 Annual Charges	350.12.b	
354	21	b	Transmission O&M Labor	354.21.b	
354	27	b	A&G Labor	354.27.b	
354	28	b	Total Direct Payroll - O&M Labor	354.28.b	
400	17	b	Sum of Monthly Transmission Peaks	400.17.b	
400	17	e	Firm Network Service for Self	400.17.e	
400	17	f	Firm Network Service for Others	400.17.f	
400	17 17	g	Long-Term Firm P-t-P Reservations Other Long-Term Firm Service	400.17.g	
400 400	17 17	h i	Short-Term Firm P-t-P Reservations	400.17.h 400.17.i	
400	17	'	Shore rettir i itti F-e-r Reservations	400.17.1	

Exhibit PEC - 6 Page 2 of 6 Year Ending 12/31/yyyy

PROGRESS ENERGY CAROLINAS, INC. Transmission Rate Formula Support Deferred Income Tax Balances - GL A/C 190

	Balance 12/31/yyyy Dr(Cr)	Allocation Factor	OATT Amt
GL 190 - Electric	0		0

Exhibit PEC - 6 Page 3 of 6 Year Ending 12/31/yyyy

PROGRESS ENERGY CAROLINAS, INC. Transmission Rate Formula Support Deferred Income Tax Balances - GL A/C 282

	Balance 12/31/yyyy Dr(Cr)	Allocation Factor	OATT Amt
Total GL 282	0		0

Exhibit PEC - 6 Page 4 of 6 Year Ending 12/31/yyyy

PROGRESS ENERGY CAROLINAS, INC.

Transmission Rate Formula Support
Deferred Income Tax Balances - GL A/C 283

Balance
12/31/yyyy Allocation Factor OATT Amt
Dr(Cr)

Total GL 283 0 0

PROGRESS ENERGY CAROLINAS, INC. Transmission Rate Formula Support

Accumulated Misc. Operating Provision Balances - GL A/C 228.4

Balance 12/31/yyyy Dr(Cr)

Allocation Factor

OATT Amt

Total GL 228.4

0

0

Depr	eciation Rates by FER	C Account (20	04 Form-1)		
Account Nos.	Estimated Avg. Service Life	Net Salvage (Percent)	Applied Depr. Rates (Percent)	Mortality Curve Type	Average Remaining Life
Production - Fossil Steam:			(
Asheville #1 310*-316	48.50	-22.60	2.33	125L1.5	27.00
Asheville #1 310 -316 Asheville #2 310*-316	48.50	-22.60	8.07	125L1.5	7.00
Roxboro #1 310*-316	48.50	-22.60	2.69	125L1.5	29.00
Roxboro #2 310*-316	48.50	-22.60	2.03	125L1.5	31.00
Roxboro #3 310*-316	48.50	-22.60	1.88	125L1.5	32.00
Roxboro #4 310*-316	48.50	-22.60	4.02	125L1.5	15.00
Mayo #1 310*-316	48.50	-22.60	1.98	125L1.5	30.00
Cape Fear #1 310*-316	48.50	-22.60	2.99	125L1.5	16.00
Cape Fear #2 310*-316	48.50	-22.60	3.45	125L1.5	14.00
Cape Fear #3 310*-316	48.50	-22.60	15.56	125L1.5	7.00
Cape Fear #4 310*-316	48.50	-22.60	19.96	125L1.5	7.00
Cape Fear #5 310*-316	48.50	-22.60	2.36	125L1.5	21.00
Cape Fear #6 310*-316	48.50	-22.60	2.33	125L1.5	22.00
Lee #1 310*-316	48.50	-22.60	0.76	125L1.5	27.00
Lee #2 310*-316	48.50	-22.60	0.85	125L1.5	35.00
Lee #3 310*-316	48.50	-22.60	1.70	125L1.5	32.00
Robinson #1 310*-316	48.50	-22.60	1.34	125L1.5	31.00
Weatherspn #1 310*-316	48.50	-22.60	1.34	125L1.5	32.00
Weatherspn #2 310*-316	48.50	-22.60	1.28	125L1.5	26.00
Weatherspn #3 310*-316	48.50	-22.60	1.20	125L1.5	27.00
Sutton #1 310*-316	48.50	-22.60	2.75	125L1.5	8.00
Sutton #2 310*-316	48.50	-22.60	2.67	125L1.5	10.00
Sutton #3 310*-316	48.50	-22.60	1.51	125L1.5	31.00
Production - Nuclear:					_
Robinson #2 320*-325	52.50	-2.00	0.92	120L1.5	25.00
Brunswick #1 320*-325	52.50	-2.00	1.68	120L1.5	30.00
Brunswick #2 320*-325	52.50	-2.00	1.22	120L1.5	28.00
Harris Plant 320*-325	52.50	-2.00	1.20	120L1.5	39.00
Production - Hydro:	32.30	2.00			
Walters 330*-336	48.30	-8 40	2.23	100L0	33.00
Tillery 330*-336	48.30	-8.40	2.29	100L0	31.00
Blewett Falls 330*-336	48.30	-8.40	2.59	100L0	29.00
Marshall 330*-336	48.30	-8.40	3.41	100L0	27.00
Production - Other:	10.00	0.10	0	10020	21.00
Weatherspoon 340*-346	23.90	-8.50	3.88	2454	7.00
Cape Fear 340*-346	23.90	-8.50	4.95	2454	7.00
Lee 340*-346	23.90	-8.50	1.76	2454	4.00
Blewett 340*-346	23.90	-8.50	2.32	2454	6.00
Sutton 340*-346	23.90	-8.50	4.00	2454	6.00
Roxboro 340*-346	23.90	-8.50	3.12	2454	0.00
Darlington 340*-346	23.90	-8.50	3.52	2454	17.00
Asheville 340*-346	23.90	-8.50	3.47	2454	19.00
Richmond 340*-346	23.90	-8.50	3.84	2454	21.00
Wayne County 340*-346	23.90	-8.50	3.38	2454	20.00
Morehead 340*-346	23.90	-8.50	3.19	2454	1.00
Robinson 340*-346	23.90	-8.50	3.46	2454	
Transmission Plant:					
350*	50.00		2.21	50R2	30.00
352	60.00	-10.00	1.72	60R3	44.00
353	60.00	-10.00	1.71	60L1	46.00
354	75.00	-30.00	1.43	75R3	51.00
355	35.00	-75.00	5.13	35R2.5	21.00
356	60.00	-90.00	3.31	60R2	41.00
359	75.00		1.32	75R3	37.00
Distribution Plant:					
360*	50.00		2.09	50R2	38.00
361	35.00	-10.00	3.70	32L2	22.00
362	45.00	-20.00	2.34	45L0.5	35.00
364	35.00	-110.00	6.79	35R1.5	24.00
365	40.00	-75.00	4.82	4080.5	29.00
366	37.00	-10.00	3.30	37 S 6	27.00
367	25.00	-5.00	4.94	25R3	15.00
368	35.00	0.00	2.75	35R2	22.00
369	43.00	-80.00	4.53	43R2.5	32.00
370	38.00	-30.00	2.77	38R2.5	23.00
371	13.00	-5.00	8.93	13R2.5	6.00
373	27.00	-25.00	5.09	2750.5	18.00
General Plant:					
389*	50.00		12.82	50R2	33.00
390	35.00	40.00	1.83	3580.5	23.00
391	18.00	9.00	6.38	18R4	7.00
392	10.00	35.00	5.43	10L2	4.00
393	25.00	20.00	4.31	2556	12.00
394	35.00	25.00	2.04	35S6	22.00
395	16.00	50	7.04	16L4	6.00
396	12.00	15.00	12.39	12R5	5.00
397	18.00		5.41	18L1	10.00
398	35.00		3.00	35R5	28.00

PROGRESS ENERGY CAROLINAS
PREPAYMENTS FOR NETWORK UPGRADES - HYPOTHETICAL EXAMPLES

252 Customer advances for construction.

This account shall include advances by customers for construction which are to be refunded either wholly or in part. When a customer is refunded the entire amount to which he is entitled, according to the agreement or rule under which the advance was made the balance, if any, remaining in this account shall be credited to the respective plant account.

EXAMPLE

NETWORK UPGRADE COST		\$ 1,000,000
DEPRECIABLE LIFE		40-YRS
ANNUAL FERC INTEREST RATE	ANNUALLY	6%
REFLIND OVER 5 - VRS	ANNUALLY	\$ 200.000

SCENARIO 1:

YEAR OF IN-SERVICE:			
DESCRIPTION	FERC	DEBIT	CREDIT
ELEC. PLNT IN-SVC	101	\$ 1,000,000	
CUSTOMER ADVANCES	252		\$ 1,000,000

1st REFUND:

DESCRIPTION	FERC	DEBIT	CREDIT
CASH	130	0,000,000	\$ 260,000
CUSTOMER ADVANCES	252	\$ 200,000	
INTEREST EXP	431	\$ 60,000	

)	RATE BASE	
FORMULA INPUT - EPIS YR-1	\$ 1,000,000	
BEGINNING BAL.	\$ (1,000,000)	
INTEREST EXPENSE YR-1	\$ (60,000)	\$ 60,000
REFUND VR-1	\$ 260,000	
FORMULA INPUT YR-1	\$ (800,000)	\$ 60,000
FORMULA INPUT - EPIS YR2	\$ 1,000,000	
FORMULA ACCUM. DEP YR-2	\$ (25,000)	
BEGINNING BAL.	\$ (800,000)	
INTEREST EXPENSE YR-2	\$ (48,000)	\$ 48,000
REFUND YR-2	\$ 248,000	
FORMULA INPUT YR-2	\$ (600,000)	\$ 48,000

SCENARIO 2:
RECOVERY OF INTEREST: PER AGREEMENT WITH CUSTOMERS, INTEREST
WILL BE RECOVERED UPON PAYMENT AND NOT AS ACCRLED. THIS WILL
CREATE A REGULATORY ASSET TO RECOGNIZE THE DEFERRED COST
RECOVERY.

YEAR OF IN-SERVICE:

DESCRIPTION	FERC	DEBIT	CREDIT
ELEC. PLNT IN-SVC	101	\$ 1,000,000	 100000000000000000000000000000000000000
CUSTOMER ADVANCES	252		\$ 1,000,000
YR-1 NO REFUND:			
DESCRIPTION	FERC	DEBIT	CREDIT
CUSTOMER ADVANCES	252	100011100011101	\$ 60,000
INTEREST ACCRUED	431	\$ 60,000	
REG ASSET (INTEREST ACCRUED)	182.3	\$ 60,000	
INTEREST ACCRUED DEFERRAL	407.4	000.000.000	\$ 60,000
YR-5 WITH REFUND:			
DESCRIPTION	FERC	DEBIT	CREDIT
CUSTOMER ADVANCES	252	\$ 1,338,226	
CASH	131		\$ 1,338,226
REG ASSET (INTEREST ACCRUED)	182.3		\$ 338 226
INTEREST ACCRUED DEFERRAL	407.3	\$ 338,226	
	DATE DACE		CAUCHEL

	R	ATE BASE	E:	XPENSE
IF NOT REFUNDED UNTIL YR 5, THAN	l:			
BEGINNING BAL.	\$	(1,000,000)		
INTEREST ACCRUED YR-1	\$	(60 ,000)	\$	(60,000)
REG. ASSET (INTEREST ACCRUED) YR-1	- \$	60,000	\$	60,000
FORMULA INPUT YR4	\$	(1,000,000)	\$	-
INTEREST ACCRUED YR-2	\$	(63,600)	\$	(63,600)
REG. ASSET (INTEREST ACCRUED) YR-2	\$	63,600	\$	63,600
FORMULA INPUT YR2	\$	(1,000,000)	\$	
INTEREST ACCRUED YR3	\$	(67,416)	\$	(67,416)
REG. ASSET (INTEREST ACCRUED) YR3	\$	67,416	\$	67,416
FORMULA INPUT YR3	\$	(1,000,000)	\$	- 0
INTEREST ACCRUED YR4	\$	(71,461)	\$	(71,461)
REG. ASSET (INTEREST ACCRUED) YR4	\$	71,461	\$	71,461
FORMULA INPUT YR4	\$	(1,000,000)	\$	-
INTEREST ACCRUED YR-5	\$	(75,749)	\$	(75,749)
REG. ASSET (INTEREST ACCRUED) YR-5	\$	75,749	\$	75,749
REFUND YR5	\$	1,000,000	\$	338 226
FORMULA INPUT YRS	\$		\$	338,226

Attachment H.2 PEC Formula Rate Implementation Protocol

PEC's OATT formula transmission rates shall be implemented in accordance with these Formula Rate Implementation Protocols ("Protocols") as set forth below:

Section 1 Annual Updates

- a. The annual transmission revenue requirement and rates for transmission service derived therefrom for PEC's OATT shall be applicable to services on and after June 1 of a given calendar year through May 31 of the subsequent calendar year (the "Rate Year").
- b. On or before May 15th of each year, PEC, the Transmission Provider, shall recalculate its annual transmission revenue requirement and rates for transmission service, and the Transmission Provider shall produce an "Annual Update" for the upcoming Rate Year. The Transmission Provider shall:
 - (i) post such Annual Update on the Transmission Provider's OASIS website; and
 - (ii) file such Annual Update with the FERC as an Informational Filing.

 Consistent with FERC procedures concerning informational filings, the Informational Filing will not be noticed for filing and FERC need not issue an acceptance or approval of the Informational Filing for the rates to go into effect. If the Commission issues a Notice in response to the Informational Filings, the Transmission Provider shall advise the Commission of the challenge process in the Protocols and shall seek

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Notwithstanding Section 1.a, the commencement date of the Formula Rate in the first Rate Year of the Formula Rate shall be the effective date established by FERC.

- an abeyance of the Commission proceeding to permit that challenge process to proceed.
- c. If the date for making the Annual Update posting/filing should fall on a weekend or a holiday recognized by the FERC, then the posting/filing shall be due on the next business day.
- d. The date on which the last of the events listed in Section 1.b. or 1.c. occurs shall be that year's "Publication Date."
- e. Upon written request by any transmission customer taking service under the Tariff for the input(s) to a particular year's Annual Update, the Transmission Provider will promptly make available to such entity and/or a consultant designated by it, a "workable" Excel file containing that year's Annual Update data (by the Publication Date if so requested).
- f. The Formula Rate is premised upon the following predicates:
 - (i) the FERC's Uniform System of Accounts ("USoA"),
 - (ii) FERC Form No. 1² reporting requirements as applicable,
 - (iii) FERC's orders establishing generally applicable transmission ratemaking policies (including, but not limited to, FERC's policy that all charges billed under formula rates are subject to prudence challenges and after-the-fact refund), and
 - (iv) the Transmission Provider's accounting policies, practices and procedures that are consistent with Section 1.f.(i). above, as each of such predicates

If the referenced form is superseded, the successor form(s) shall be utilized and supplemented as necessary to provide equivalent information as that provided in the superseded form. If the referenced form(s) is (are) discontinued, equivalent information as that provided in the discontinued form(s) shall be utilized.

("Fundamental Predicates") exists as of the date of the initial filing by the Transmission Provider of the Formula Rate, subject to such Fundamental Predicate(s) being changed in accordance with the procedures provided for in these Protocols or by the FERC.

- g. The Transmission Provider's Annual Update for the Rate Year:
 - (i) shall be based upon the data properly recordable and recorded in FERC Form

 No. 1 for the most recent calendar year (to the extent the Formula Rate specifies

 Form 1 data as the input source), and, to the extent specified in the Formula

 Rate, be based upon the books and records of the Transmission Provider

 maintained in accordance with the USoA (as defined above) and other FERC

 accounting policies;
 - (ii) shall, to the extent specified in the Formula Rate, provide supporting documentation for data that is not otherwise publicly-available in the FERC Form No. 1 and that is used in the Formula Rate;³
 - (iii) shall provide notice of material changes in the Transmission Provider's accounting policies, practices and procedures from those in effect for the calendar year upon which the immediately preceding Annual Update was based ("Material Accounting Changes");⁴

It is the intent of the Formula Rate, including the supporting explanations and allocations described therein, that each input to the Formula Rate either will be (i) taken directly from the FERC Form No. 1 or (ii) reconcilable to the FERC Form No. 1 by the application of clearly identified and supported information. Where the reconciliation is provided through a worksheet included in the filed Formula Rate template, the inputs to the worksheet must meet this transparency standard, and doing so will satisfy this transparency requirement for the amounts that are output from the worksheet and input to the main body of the Formula Rate

Such notice may incorporate by reference applicable disclosure statements filed with the Securities and Exchange Commission ("SEC").

- (iv) shall be subject to review and challenge in accordance with the procedures set forth in these Protocols, to enable any interested party to verify that the input data is properly recordable and recorded, and otherwise consistent with Section 1.f(i) and the Fundamental Predicates, and that the Formula Rate has been applied according to its terms and the procedures in these Protocols (including terms and procedures related to challenges concerning consistency with and changes in Fundamental Predicates); and
- (v) shall not seek to modify the Formula Rate itself and, except as provided in Section 1.h below, shall not be subject to challenge by seeking to modify the Formula Rate itself (i.e., all such modifications to the Formula Rate, such as a change in return on equity and other items specified in Section 1.j below, will require, as applicable, a Federal Power Act ("FPA") Section 205 or Section 206 filing).
- h. All change(s) to the Fundamental Predicates set forth in Section 1.f., above, (other than through filings pursuant to Section 5 of these Protocols hereof that update FERC Form 1 references and do not make substantive changes to the Formula Rate), subsequent to the date specified in Section 1.f, shall warrant a re-assessment of all of the elements of the Formula Rate that are affected by the change or changes in one or more Fundamental Predicates to ensure that the Formula Rate operates together to produce a just, reasonable and not unduly discriminatory or preferential Formula Rate. If there is a change to the Fundamental Predicates that requires a change to the Formula Rate to ensure that the Formula Rate operates to produce a just, reasonable and not unduly discriminatory or preferential Formula Rate, the Transmission Provider

- will effectuate the change in the Formula Rate through a filing under Federal Power Act Section 205.
- i. Any interested party seeking changes in the application of the Formula Rate (including a change to the Formula Rate itself) due to a change in one or more of the Fundamental Predicates shall raise the matter with the Transmission Provider. If such changes to the application of the Formula Rate for the current Annual Update are not resolved within one hundred and twenty (120) days of the Publication Date, any interested party shall have the right to challenge such application of the Formula Rate, in the manner otherwise provided pursuant to these Protocols, due to the change(s) in such Fundamental Predicates. The final resolution of any such challenge(s), including interest calculated in accordance with 18 C.F.R. § 35.19a shall be effective on June 1 of each year affected by the resolution of the challenge.
- j. Formula Rate inputs for the following components of the Formula Rate shall be supported by Transmission Provider in its initial submittal of the Formula Rate: (i) rate of return on common equity; (ii) depreciation rates; (iii) extraordinary property losses and amortization thereof; and (iv) "Post-Employment Benefits other than Pensions" pursuant to Statement of Financial Accounting Standards No. 106, Employers' Accounting for Postretirement Benefits Other Than Pensions ("PBOP") charges. The values used in the Formula Rate calculations for each of these components may not be changed thereafter except pursuant to an FPA Section 205 or 206 filing.
- k. All data provided pursuant to and in accordance with the procedures set forth in this Attachment H.2 may be used in any challenge to the Annual Update of the Formula Rate.

Section 2 Annual Review Procedures

The Transmission Provider's Annual Update shall be subject to the following review procedures ("Annual Review Procedures"):

- a. Each year, prior to the posting of the Annual Update, the Transmission Provider shall convene a meeting or conference call among interested parties to preview the forthcoming Annual Update ("Pre-Posting Customer Meeting"). The Pre-Posting Customer Meeting shall be held no fewer than 10 days prior to the Publication Date. At the Pre-Posting Customer Meeting, the Transmission Provider shall provide an overview of the forthcoming Annual Update, including, on an informal (i.e., non-binding) basis, as much information about the updated inputs to the Formula Rate as is available to the Transmission Provider at that time.
- b. Each year, no later than thirty (30) days after the Publication Date, the Transmission

 Provider shall convene a meeting or conference call among interested parties ("Customer Meeting") during which the Transmission Provider shall present details about its Annual

 Update. The Customer Meeting also shall provide interested parties the chance to seek information and clarifications from the Transmission Provider about the Annual Update.

 The location, date and time of the Customer Meeting shall be posted on the Transmission Provider's internet website on or before the Publication Date but in no event fewer than fifteen (15) days before the Customer Meeting.
- c. Interested parties shall have up to ninety (90) days after each annual Publication Date (unless such period is extended with the written consent of the Transmission Provider) to serve reasonable information requests on the Transmission Provider; provided, however, that the potentially interested parties shall make a good faith effort to submit

consolidated sets of information requests that limit the number and overlap of questions to the maximum extent practicable. Such information requests shall be limited to what the submitting party believes is necessary to determine if the input data are properly recordable and recorded, consistent with Section 1.g and the procedures in this Attachment H.2, and what is necessary to determine the extent and effect(s) of changes in the Fundamental Predicates. In addition, such information requests shall not solicit information that solely relates to inputs that are stated values or cost allocation methods that have been determined by any final order by the FERC pursuant to FPA Sections 205, 206, or 306 with respect to the Transmission Provider (including an order approving a settlement), except that such information requests shall be permitted if they seek to determine if there have been material changed circumstances and to confirm consistency with the applicable order (and associated settlement, if any).

- d. The Transmission Provider shall make a good faith effort to respond to information requests pertaining to the Annual Update within fifteen (15) business days of receipt of such requests. Such data responses shall be served on all customers identifying themselves to the Transmission Provider as interested. The Transmission Provider may give reasonable priority to responding to requests that satisfy the practicable coordination and consolidation provision of Section 2.c above.
- e. Any interested party shall have up to one hundred and twenty (120) days after the

 Publication Date (unless such period is extended with the written consent of the

 Transmission Provider) to review the calculations ("Review Period") and to notify the

 Transmission Provider in writing of any specific challenges, including challenges

 related to Material Accounting Changes, to the application of the Formula Rate

("Preliminary Challenge"). Notice of such Preliminary Challenges shall be promptly posted (at the same location as the Annual Update) by the Transmission Provider. It is the intent of the Transmission Provider to attempt to informally resolve an issue(s) concerning the Annual Update with an interested party during the Review Period. If an interested party is not satisfied with the resolution of an issue(s), then the interested party may submit to the Transmission Provider a Preliminary Challenge regarding each such issue. The submittal of the Preliminary Challenge, which shall serve as notice to the Transmission Provider of the existence of the challenge, must occur on or before the last day of the Review Period.

- f. Subject to the limitations in Section 3(g), (i) a party's failure to make a Preliminary

 Challenge with respect to an Annual Update shall not bar that party from making a

 Formal Challenge with respect to that Annual Update, and (ii) a party's failure to make
 a Preliminary Challenge or Formal Challenge with respect to any Annual Update shall
 not bar that party from making a Preliminary Challenge or Formal Challenge with
 respect to any subsequent Annual Update.
- g. Preliminary Challenges and Formal Challenges shall be subject to the resolution procedures and limitations in Section 3. In any proceeding initiated to address a Preliminary or Formal Challenge or *sua sponte* by the Commission, a party or parties (other than the Transmission Provider) seeking to modify the Formula Rate in any respect shall bear the burden of proving that the Formula Rate is no longer just and reasonable without such modification and that the proposed modification is just, reasonable and consistent with the original intent of the Formula Rate and the procedures in these Protocols.

Section 3 Resolution of Challenges

- a. The Transmission Provider shall respond in writing, including supporting
 documentation, to the interested party making a Preliminary Challenge within thirty (30)
 days after the end of the Review Period.
- b. If a Transmission Provider and any Customer have not resolved any Preliminary

 Challenge to the Annual Update, an interested party shall be entitled to make a Formal

 Challenge with the FERC, pursuant to FPA Sections 206 and/or 306, which shall be

 served on the Transmission Provider by electronic service on the date of such filing.

 Any such Formal Challenge shall not be filed sooner than sixty (60) days after the end

 of the Review Period. However, there shall be no need to make a Formal Challenge or

 to await conclusion of the time periods in Section 2 if the FERC already has initiated a

 proceeding to consider the Annual Update. All other interested parties shall have the

 right to make a Formal Challenge at any time as provided in these Protocols.
- c. Any response by the Transmission Provider to a Formal Challenge must be submitted to the FERC within thirty (30) days of the date of the filing of the Formal Challenge, unless FERC establishes an earlier deadline for such response. The Transmission Provider shall serve its response, on the date it submits the response to FERC, on the party(ies) that filed the Formal Challenge.
- d. In any proceeding initiated by the FERC concerning one or more Annual Updates or in response to a Formal Challenge, the Transmission Provider shall bear the burden of proving that it has reasonably applied the terms of the Formula Rate (including, but not limited to, consistency with the Fundamental Predicates) and the applicable procedures in these Protocols, in the Annual Update(s) at issue; provided, however, that challenges to

- the prudency of costs shall apply then-existing criteria and evidentiary burdens established in FERC policy applicable to prudence challenges in a Section 205 context.
- e. In any proceeding initiated under Federal Power Act Section 206, interested parties seeking to change the Formula Rate shall bear the burden of proof. Notwithstanding any refund effective date that may be assigned to such Section 206 proceeding, any change to the Formula Rate or input data that results from such Section 206 proceeding, which was filed during the period when an Annual Update was not yet final pursuant to Section 3.f, shall be implemented using the same procedures included in Section 4.
- f. Subject to judicial review of FERC orders, each Annual Update shall become final and no longer subject to challenge pursuant to these Annual Review Protocols or by any other means by the FERC or any other entity on the later to occur of (i) passage of twelve (12) months from the Publication Date (or extended period, if applicable) if no such challenge has been made and the FERC has not initiated a proceeding to consider the Annual Update, or (ii) a final FERC order issued in response to a Formal Challenge or a proceeding initiated by the FERC to consider the Annual Update; provided, however, that if a mistake or error is made in an Annual Update in a given year ("Year X Update") that becomes apparent in the course of reviewing information requests or submitting a Preliminary Challenge to the Transmission Provider or submitting a Formal Challenge to FERC (or in a FERC-initiated proceeding) regarding the first or second subsequent Annual Update, refunds with interest, in accordance with 18 C.F.R. § 35.19a, will be due relating to the Year X Update.
- g. Except as may specifically be provided herein and/or in any settlement agreement accompanying the initial submittal of the Formula Rate, nothing herein shall limit in

- any way (i) the right of the Transmission Provider to file unilaterally, pursuant to FPA Section 205 and FERC's regulations thereunder, changes to the Formula Rate or any of its inputs, or (ii) the right of any other party to file unilaterally, pursuant to FPA Sections 206 and/or 306 and FERC's regulations thereunder, a request for changes to the Formula Rate or any of its inputs.
- h. Resolution of Formal Challenges concerning changes in Fundamental Predicates shall necessitate adjustments to the Formula Rate input data for the applicable Annual Update or changes to the Formula Rate that are affected by the change or changes in one or more Fundamental Predicates, so as to ensure that all elements of the Formula Rate that are affected by the change in the Fundamental Predicate(s) operate together to produce a just, reasonable and not unduly discriminatory or preferential Formula Rate, consistent with the intent of the Formula Rate.

Section 4 Adjustments to Charges to Reflect Resolution of Challenges

a. Except as set forth in Section 4.b below, any increase or decrease in charges paid or payable for transmission services that results from the procedures set forth herein shall be incorporated into the Formula Rate and the charges produced by the Formula Rate (with interest determined in accordance with 18 C.F.R. § 35.19a) in the Annual Update for the next effective Rate Period. For example, if the procedures set forth herein result in a determination that an increase or decrease in the charges paid during Year 1 is warranted, the charges payable during Year 2 shall reflect: (i) the recovery of any underpayment during Year 1 or the rebate of any overpayment during Year 1, plus (ii) interest on the underpayment or overpayment, calculated as set forth in Section 4.c.

- This reconciliation mechanism shall apply in lieu of mid-Rate Year adjustments and any refunds or surcharges.
- b. Any increase or decrease in charges paid or payable for transmission services that results from one of the following events shall be reflected as an increase or reduction in charges (with interest determined in accordance with 18 C.F.R. § 35.19a) on the next monthly billing statement following a determination of the need for the adjustment:
 - (i) revisions to the Transmission Provider's accounting and reporting of its costs to correct errors,
 - (ii) revisions to the Transmission Provider's accounting and reporting of its costs to reflect the resolution of Preliminary Challenges or Formal Challenges by FERC order or by settlement or as the result of any FERC proceeding to consider the Annual Update.
- c. For purposes of calculating interest due under Sections 4.a and 4.b, the effective date of any adjustment in the charges payable for any Rate Period shall be June 1 of any year affected by the adjustment.
- d. Notwithstanding the provisions of Section 4.a, actual refunds or surcharges (with interest determined in accordance with 18 C.F.R. § 35.19a) shall be made in the event that the Formula Rate is replaced by a stated rate for PEC.

Section 5 Update of Formula Rate for FERC Form No. 1 and USoA References

FERC occasionally changes the format and/or content of the FERC Form 1 and makes substantive changes to the USofA. In some instances, those changes (hereinafter, "Form/USoA Changes") may affect the calculations set forth in the Formula Rate.

- a. If FERC adopts any such Form/USoA Changes that do <u>not</u> affect the rates for

 Transmission Service derived from the Annual Update, the Transmission Provider may,
 at its discretion and at a time of its choosing, make a filing pursuant to FPA Section 205

 (the "Ministerial Filing") to update the references in the Formula Rate to reflect any
 such Form/USoA Changes. Any such proceeding shall be limited to the updating
 changes proposed by the Transmission Provider and may not be used to raise issues
 unrelated to the proposed changes ("Limited 205 Proceeding").
- b. As an alternative to a Limited 205 Proceeding pursuant to Section 5.a, the Transmission Provider instead may elect to include the updating changes that could have been made in a Ministerial Filing as part of a filing under FPA Section 205 to otherwise amend the Formula Rate ("Normal 205 Proceeding"). In that event, the scope of the Normal 205 Proceeding shall not be limited to the changes that update the references in the Formula Rate to reflect any Form/USoA Changes.
- c. If FERC adopts one or more Form/USoA Changes prior to or between any Limited 205
 Proceeding or Normal 205 Proceeding, and if such Form/USoA Changes cause the thencurrent Form 1 or USoA to depart from the Form 1 or USoA referenced in the Formula
 Rate but does <u>not</u> affect the rates for Transmission Service derived from the Annual
 Update, the Transmission Provider's Annual Update shall include a reconciliation so that
 interested parties can confirm that the Formula Rate is being applied consistent with the
 as-filed Formula Rate.
- d. If FERC adopts one or more Form/USoA Changes that cause the then-current Form 1 or USoA to depart from the Form 1 or USoA referenced in the Formula Rate and if such changes do affect the rates for Transmission Service derived from the Annual Update, the

Transmission Provider shall initiate a Normal 205 Proceeding to modify the references in the Formula Rate to reflect any such Form/USoA Changes, with the intent that the resulting calculations shall produce, to the greatest extent practicable, the same outcome as the calculations produced under the Formula Rate without consideration of the Form/USoA changes.

OATT ATTACHMENT H.3

FORMULA RATE NOTES

- 1.0 Non-load and Transmission-related Revenue Credits.
- (i) The non-load and transmission-related revenue credits in the Formula Rate shall be determined in the following manner:
- (1) All revenues associated with facilities allocated to the transmission function, including both direct and indirect allocations (e.g., general and intangible plant and administrative and general expense) shall be treated as revenue credits in the Formula Rate. Such revenue credits shall include, but shall not be limited to, transmission facilities lease/rental payments, direct assignment facilities charges, pole attachment fees, and general plant-related income.
- (2) Transmission revenues from Short-Term Firm and Non-Firm Transmission Services under the OATT and transmission service similar to Short-Term Firm or Non-Firm Transmission Services under the OATT shall be treated as revenue credits in the Formula Rate.
- (3) Transmission services revenues from FERC Account 456.1 shall be treated as revenue credits in the Formula Rate, but ancillary services revenues from FERC Account 456.1 shall not be revenue credits in the Formula Rate.
- (4) All transmission revenue credits shall be directly assigned to the transmission function in the Formula Rate (i.e., they shall not be allocated in the Formula Rate using a transmission plant allocator).
- (5) Revenues associated with indirect allocations of costs to the transmission function (e.g., general and intangible plant) shall be allocated to the transmission

function in the Formula Rate based on the same underlying indirect allocations of costs and treated as a revenue credit.

- 1.1 <u>End-of-Year Data</u>. The Formula Rate shall include the end-of-year balances from PEC's FERC Form No. 1 reports for the rate base items (other than Cash Working Capital) included in the Formula Rate.
- 1.2 <u>Cash Working Capital</u>. The Formula Rate shall include cash working capital based on a formulary approach as follows: 1/8 multiplied by the total of operation and maintenance expense, as specified in the Formula Rate template attached to this Settlement Agreement as Exhibit A.
- 1.3 Prepayments for Network Upgrades by Generators. The Formula Rate shall include as an offset to rate base in the Formula Rate the amount of refundable prepayments made by generators for network upgrades that PEC has not refunded to the OATT transmission customer as credits to its transmission charges; this will ensure PEC does not earn a return on those funds. Correspondingly, the amount of interest paid to OATT transmission customers as their balances are credited against their transmission service shall be included as an expense in the Formula Rate. PEC shall not capitalize and add any AFUDC to the completed cost of such network upgrades, but instead will include only the balance of any unrefunded interest accrued at the FERC refund interest rate as an addition to rate base. The Formula Rate includes a hypothetical example to illustrate how refundable prepayments for network upgrades are treated in the Formula Rate.
- 1.4 <u>Credits for Customer-owned Facilities</u>. The Formula Rate shall include a placeholder for any future credits for customer-owned facilities to prevent any under-recovery of

revenues by PEC due to any credits provided to OATT transmission customers for their own facilities

- 1.5 <u>Transmission Provider's Compliance with Order No. 2003</u>. In accordance with FERC Order No. 2003, the Formula Rate shall exclude any transmission plant that meets the definition of "Interconnection Facilities" and was placed in service for PEC's own generation facilities after March 15, 2000.
- 1.6 <u>Directly Assigned or Assignable Costs</u>. The Formula Rate shall exclude all costs that are properly directly assigned or assignable to one or more particular customers, including costs directly assigned or assignable to PEC.
- 1.7 PEC Payments to "Affected Transmission Owners" and Regional Cost Allocation.

 On December 7, 2007, pursuant to Order No. 890, Progress Energy, Inc., on behalf of PEC, submitted its Order No. 890 Attachment K (included in this Tariff as Attachment N-1) compliance filing in Docket No. OA08-51-000. The regional cost allocation methodology addressed in this compliance filing is incorporated in the Formula Rate. Should FERC reject the filed methodology, then, within thirty days of refiling a revised cost allocation methodology with FERC, PEC shall submit to the Customers a proposal to address the treatment under the Formula Rate of any payments made by PEC to Affected Transmission Owners, and payments received by PEC as an Affected Transmission Owner, under such revised filing. If the interested Customers and PEC reach agreement within ninety days, PEC shall make a filing, pursuant to FPA Section 205, to change the Formula Rate to properly account for such payments. If the interested Customers and PEC do not reach agreement within ninety days, PEC may make a filing, pursuant to FPA Section 205, to change the Formula Rate to properly account for such payments, and any such filing may be opposed by any Customer.

- 1.8 Accumulated Deferred Income Taxes (ADIT). Accumulated deferred income taxes (ADIT) reflected in the Formula Rate shall be only such amounts as are properly allocated or assigned to the transmission function. In each Annual Update (as defined in the Formula Rate Implementation Protocols), PEC shall provide a spreadsheet that shows the functionalization of the FERC Form No. 1 reported amounts for ADIT and supports the amount of ADIT to be reflected in the Formula Rate. For example, the following ADIT items shall not be included in the Formula Rate because they are not transmission-related ADIT:
- (i) Any future income tax deficiency items in ADIT shall be assigned to "other" in the Formula Rate.
- (ii) Deferred taxes related to existing Environmental Cleanup Reserve shall be assigned to "other" in the Formula Rate.
- (iii) Any future prepaid Pension related items shall be excluded from rate base in the Formula Rate and, accordingly, there shall be no ADIT balance offset for these items.
- (iv) Because the unamortized balance of GridSouth costs is excluded from rate base pursuant to provision 3.5(ii), there will be no ADIT offset in the formula rate calculation.
 - 1.9 Intangible Plant.
- (i) In future Annual Updates, PEC shall provide supporting information concerning gross intangible plant investment and associated depreciation in order to establish net intangible plant investments so that OATT transmission customers may compare PEC's net intangible plant investments from year to year.
- (ii) To the extent that the net intangible plant investment increases from one year to the next, PEC shall provide in the Annual Update sufficient information to explain the increase and to support the allocation of any portion of the increase to the transmission function. PEC

shall adjust the allocation of net intangible plant investment in the Formula Rate to the extent necessary to reflect an appropriate allocation to the transmission function. PEC shall include this adjustment and supporting information in the Annual Informational Filing submitted to FERC. If there is a disagreement between PEC and a transmission customer concerning this matter, the disagreement shall be resolved through a Preliminary Challenge and/or Formal Challenge under the Formula Rate Implementation Protocols (rather than through an FPA Section 206 complaint).

- 1.10 Prepaid Pension Expense and Other Prepayments.
- (i) The Formula Rate shall exclude prepaid pension expenses from rate base. The Formula Rate shall include any prepaid pension expenses as an expense to the extent set forth in Section 3.18(ii).
- (ii) To the extent that prepaid pension expenses increase from one year to the next, PEC shall provide in the Annual Update sufficient information to explain the increase and to support the allocation of any portion of the increase to the transmission function. PEC shall adjust the allocation of prepaid expenses, to the extent necessary, to reflect an appropriate allocation to transmission. PEC shall include this adjustment and the supporting information in the Annual Informational Filing submitted to FERC. If there is a disagreement between PEC and a transmission customer concerning this matter, such disagreement shall be resolved through a Preliminary Challenge and/or Formal Challenge under the Formula Rate Implementation Protocols (rather than through an FPA Section 206 complaint).
- 1.11 Extraordinary Property Loss. If a property loss meets the requirements for treatment as an Extraordinary Property Loss (FERC Account 182.1), PEC may request FERC's permission to record the loss in that manner in its books of account. Separately, PEC may seek

FERC's permission to recover through rates such prudently incurred costs as are associated with an Extraordinary Property Loss; provided, however, (i) pursuant to Section 3.7(ii) above, PEC may not include the amortization of any such Extraordinary Property Loss in the Formula Rate without having made a Section 205 filing to change the Formula Rate value for that item, and (ii) PEC may seek to reflect in the Formula Rate only that portion of such an Extraordinary Property Loss as may be properly allocated or assigned to the transmission function.

- 1.12 Extraordinary Transmission O&M Expenses. O&M expenses allocated or assigned to the transmission function that are extraordinary and non-recurring and have a material effect on charges shall be amortized in the Formula Rate over three to five years (subject to FERC approval), as appropriate under the circumstances. The Formula Rate shall include the unamortized balance in rate base.
- 1.13 <u>Property Taxes</u>. Property taxes shall be allocated in the Formula Rate using the Gross Plant allocator.
- 1.14 <u>Property Insurance</u>. Property insurance shall be allocated in the Formula Rate using the Gross Plant allocator.
 - 1.15 PEC Power Marketing Costs.
- (i) To the extent that any costs associated with PEC's power marketing operations may be included in Administrative and General ("A&G") expense accounts, those costs shall be excluded from the A&G expenses reflected in the Formula Rate.
- (ii) The divisor of the labor allocator in the Formula Rate shall include any laborrelated costs associated with PEC's power marketing operations.
- 1.16 <u>FERC Account 561</u>. Consistent with FERC Order No. 668, the Formula Rate reflects the appropriate treatment of Account 561 subaccounts such that the Formula Rate

includes only those items associated with transmission service and excludes all other costs (for example, costs chargeable to Schedule 1 – Load Control and Dispatch Service).

- 1.17 <u>Asset Retirement Obligations</u>. The Formula Rate shall not include asset retirement obligations in any plant investment.
- 1.18 <u>A&G Expenses</u>. The Administrative and General expenses reflected in the Formula Rate shall not include any portion of PEC's expenses for advertising, charitable contributions, or other voluntary payments for such items as industry association dues (e.g., Edison Electric Institute dues) or contributions to industry research and development activities (e.g., Electric Power Research Institute).

ATTACHMENT I

INDEX OF NETWORK INTEGRATION TRANSMISSION SERVICE CUSTOMERS

See Transmission Provider's Electric Quarterly Report at the following Internet address:

http://www.ferc.gov/docs-filing/eqr/data/spreadsheet.asp

ATTACHMENT J

STANDARD LARGE GENERATOR INTERCONNECTION PROCEDURES (LGIP)

including

STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT (LGIA)

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ATTACHMENT J.- STANDARD LARGE GENERATOR INTERCONNECTION PROCEDURES (LGIP)

(APPLICABLE TO GENERATING FACILITIES THAT EXCEED 20 MW)

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 shall mean the status of a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

Commercial Operation Date of a unit shall mean the date on which the Generating Facility commences Commercial Operation as agreed to by the Parties pursuant to 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 an Applicable Reliability Council.

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 FERC, or if filed unexecuted, upon the date specified by FERC.

Emergency Condition shall mean 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 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 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 acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

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 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 any designated generating resource owned, purchased, or leased by a Network Customer under the Network Integration Transmission Service Tariff. Network Resources do not include any resource, or any portion thereof, that is committed for sale to third parties or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis.

Network Resource 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 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 Facilities connect 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 FERC, 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.

Transmission Provider shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in this LGIP. 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 in LGIP Section 13.1. Transmission Provider is permitted to require that Interconnection Customer sign a confidentiality agreement before the release of commercially sensitive information or Critical Energy Infrastructure Information in the Base Case data. 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 Transmission Provider an Interconnection Request in the form of Appendix 1 to this LGIP and a refundable

deposit of \$10,000. Transmission Provider shall apply the deposit toward the cost of an Interconnection Feasibility Study. Interconnection Customer shall submit a separate Interconnection Request for each site and may submit multiple Interconnection Requests for a single site. 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 Energy Resource Interconnection Service or Network Resource Interconnection Service, as described; provided, however, any Interconnection Customer requesting Network Resource Interconnection Service may also request that it be concurrently studied for Energy Resource Interconnection Service, up to the point when an Interconnection Facility Study Agreement is executed. Interconnection Customer may then elect to proceed with Network Resource 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.

- 3.2.1.1 The Product. Energy Resource 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. Energy Resource Interconnection Service does not in and of itself convey any right to deliver electricity to any specific customer or Point of Delivery.
- 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.

3.2.2.1 **The Product**. 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 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 Network Resources. Network Resource Interconnection Service Allows 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 existing Network Resources interconnected to 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 Network Resource Interconnection Service shall assure that Interconnection Customer's Large Generating Facility meets the requirements for Network Resource Interconnection Service and as a general matter, that such Large Generating Facility's interconnection is also studied with 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 Transmission Provider's Transmission System, consistent with Transmission Provider's reliability criteria and procedures. This approach assumes that some portion of existing Network Resources are displaced by the output of Interconnection Customer's Large Generating Facility. Network Resource Interconnection Service in and of itself does not convey any right to deliver electricity to any specific customer or Point of Delivery. The Transmission Provider may also study the Transmission System under non-peak load conditions. However, upon request by the Interconnection Customer, the Transmission Provider must explain in writing to the Interconnection Customer why the study of non-peak load conditions is required for reliability purposes.

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 Transmission Provider's expansion planning period) not to exceed seven years from the date the Interconnection Request is received by Transmission Provider, unless 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 Transmission Provider by a period up to ten years, or longer where 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 Transmission Provider. If an Interconnection Request fails to meet the requirements set forth in Section 3.3.1, Transmission Provider shall notify 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 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.

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. Except in the case of an Affiliate, the list will not disclose the identity of Interconnection Customer until Interconnection Customer executes an LGIA or requests that Transmission Provider file an unexecuted LGIA with FERC. Before holding a Scoping Meeting with its Affiliate, Transmission Provider shall post on OASIS an advance notice of its intent to do

so. Transmission Provider shall post to its OASIS site any deviations from the study timelines set forth herein. Interconnection Study reports and Optional Interconnection Study reports shall be posted to Transmission Provider's OASIS site subsequent to the meeting between Interconnection Customer and Transmission Provider to discuss the applicable study results. Transmission Provider shall also post any known deviations in the Large Generating Facility's In-Service Date.

3.5 Coordination with Affected Systems.

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 (if available) in its applicable Interconnection Study within the time frame specified in this LGIP. Transmission Provider will include such Affected System Operators in all meetings held with Interconnection Customer as required by this LGIP. Interconnection Customer will cooperate with 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 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.

Interconnection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to Transmission Provider. In addition, if Interconnection Customer fails to adhere to all requirements of this LGIP, except as provided in Section 13.5 (Disputes), Transmission Provider shall deem the Interconnection Request to be withdrawn and shall provide written notice to Interconnection Customer of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Upon receipt of such written notice, Interconnection Customer shall have fifteen (15) Business Days in which to either respond with information or actions that cures the deficiency or to notify Transmission Provider of its intent to pursue Dispute Resolution.

Withdrawal shall result in the loss of Interconnection Customer's Queue Position. If an Interconnection Customer disputes the withdrawal and loss of its Queue Position, then during Dispute Resolution, 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 Transmission Provider all costs that Transmission Provider prudently incurs with respect to that Interconnection Request prior to Transmission Provider's receipt of notice described above. Interconnection Customer must pay all monies due to Transmission Provider before it is allowed to obtain any Interconnection Study data or results.

Transmission Provider shall (i) update the OASIS Queue Position posting and (ii) refund to Interconnection Customer any portion of Interconnection Customer's deposit or study payments that exceeds the costs that 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, Transmission Provider, subject to the confidentiality provisions of Section 13.1, shall provide, at Interconnection Customer's request, all information that 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.

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 Interconnection Customer provides such information in accordance with Section 3.3.3, then Transmission Provider shall assign 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.

Transmission Provider may allocate the cost of the common upgrades for clustered Interconnection Requests without regard to Queue Position.

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 Energy Resource Interconnection Service or Network Resource Interconnection Service. The 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 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.

Interconnection Customer shall submit to Transmission Provider, in writing, modifications to any information provided in the Interconnection Request. 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 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 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 Transmission Provider, modifications permitted under this Section shall include specifically: (a) a decrease of up to 60 percent of electrical output (MW) 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 Transmission Provider, the modifications permitted under
 this Section shall include specifically: (a) additional 15 percent decrease of
 electrical output (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 Transmission Provider evaluate whether such modification is a Material Modification. In response to Interconnection Customer's request, Transmission Provider shall evaluate the proposed modifications prior to making them and inform Interconnection Customer in writing of whether the modifications would constitute a Material Modification. Any change to the Point of Interconnection, except those deemed acceptable under Sections 4.4.1, 6.1, 7.2 or so allowed elsewhere, shall constitute a Material Modification. 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, Transmission Provider shall commence and perform any necessary additional studies as soon as practicable, but in no event shall 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, Transmission Provider must offer Interconnection Customer the option of either continuing under 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 FERC for approval before the effective date of the LGIP, then the LGIA would be grandfathered.

5.1.2 Transition Period.

To the extent necessary, Transmission Provider and Interconnection Customers with an outstanding request (i.e., an Interconnection Request for which an LGIA has not been submitted to FERC 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 Transmission Provider; (ii) where the related interconnection agreement has not yet been submitted to FERC 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 Transmission Provider to the extent consistent with the intent and process provided for under this LGIP.

5.2 New Transmission Provider.

If 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 Customer, 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 Transmission Provider has tendered a draft LGIA to Interconnection Customer but Interconnection Customer has not either executed the LGIA or requested the filing of an unexecuted LGIA with FERC, unless otherwise provided, Interconnection Customer must complete negotiations with the successor Transmission Provider.

Section 6. Interconnection Feasibility Study

6.1 Interconnection Feasibility Study Agreement.

Simultaneously with the acknowledgement of a valid Interconnection Request 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 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. Interconnection Customer shall execute and deliver to 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 Transmission Provider, 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 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.

If Interconnection Customer and Transmission Provider agree to forgo the Interconnection Feasibility Study, Transmission Provider will initiate an Interconnection System Impact Study under Section 7 of this LGIP and apply the \$10,000 deposit towards the Interconnection System Impact Study.

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.

Transmission Provider shall utilize existing studies to the extent practicable when it performs the study. Transmission Provider shall use Reasonable Efforts to complete the Interconnection Feasibility Study no later than forty-five (45) Calendar Days after Transmission Provider receives the fully executed Interconnection Feasibility Study Agreement. At the request of Interconnection Customer or at any time Transmission Provider determines that it will not meet the required time frame for completing the Interconnection Feasibility Study, Transmission Provider shall notify Interconnection Customer as to the schedule status of the Interconnection Feasibility Study. If Transmission Provider is unable to complete the Interconnection Feasibility Study within that time period, it shall

notify Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required. Upon request, Transmission Provider shall provide 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 Interconnection Customer, Transmission Provider shall provide to 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 Interconnection Customer shall compensate Transmission Provider for the actual cost of the Interconnection System Impact Study. Within three (3) Business Days following the Interconnection Feasibility Study results meeting, 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.

Interconnection Customer shall execute the Interconnection System Impact Study Agreement and deliver the executed Interconnection System Impact Study Agreement to Transmission Provider no later than thirty (30) Calendar Days after its receipt along with demonstration of Site Control, and a \$50,000 deposit.

If Interconnection Customer does not provide all such technical data when it delivers the Interconnection System Impact Study Agreement, Transmission Provider shall notify Interconnection Customer of the deficiency within five (5) Business Days of the receipt of the executed Interconnection System Impact

Study Agreement and 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 7.2, if 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

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. Transmission Provider shall utilize existing studies to the extent practicable when it performs the study. 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, 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 Interconnection Customer or at any time Transmission Provider determines that it will not meet the required time frame for completing the Interconnection System Impact Study, Transmission Provider shall notify Interconnection Customer as to the schedule status of the Interconnection System Impact Study. If Transmission Provider is unable to complete the Interconnection System Impact Study within the time period, it shall notify Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required. Upon request, Transmission Provider shall provide 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, or a modification of a higher queued project subject to Section 4.4, or re-designation of the Point of Interconnection pursuant to Section 7.2 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 Interconnection Customer, Transmission Provider shall provide to Interconnection Customer an Interconnection Facilities Study Agreement in the form of Appendix 4 to this LGIP. The Interconnection Facilities Study Agreement shall provide that Interconnection Customer shall compensate Transmission Provider for the actual cost of the Interconnection Facilities Study. Within three (3) Business Days following the Interconnection System Impact Study results meeting, Transmission Provider shall provide to Interconnection Customer a non-binding good faith estimate of the cost and timeframe for completing the Interconnection Facilities Study. Interconnection Customer shall execute the Interconnection Facilities

Study Agreement and deliver the executed Interconnection Facilities Study Agreement to 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.

Transmission Provider shall coordinate the Interconnection Facilities Study with any Affected System pursuant to Section 3.5 above. Transmission Provider shall utilize existing studies to the extent practicable in performing the Interconnection Facilities Study. Transmission Provider shall use Reasonable Efforts to complete the study and issue a draft Interconnection Facilities Study report to 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 Interconnection Customer requests a +/- 10 percent cost estimate.

At the request of Interconnection Customer or at any time Transmission Provider determines that it will not meet the required time frame for completing the Interconnection Facilities Study, Transmission Provider shall notify Interconnection Customer as to the schedule status of the Interconnection Facilities Study. If 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 Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required.

Interconnection Customer may, within thirty (30) Calendar Days after receipt of the draft report, provide written comments to Transmission Provider, which Transmission Provider shall include in the final report. Transmission Provider shall issue the final Interconnection Facilities Study report within fifteen (15) Business Days of receiving Interconnection Customer's comments or promptly upon receiving Interconnection Customer's statement that it will not provide comments. Transmission Provider may reasonably extend such fifteen-day period upon notice to Interconnection Customer if Interconnection Customer's comments require Transmission Provider to perform additional analyses or make other significant modifications prior to the issuance of the final Interconnection Facilities Report. Upon request, Transmission Provider shall provide 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 Transmission Provider to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. However, 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 Interconnection Customer to pay the cost of all activities authorized by Interconnection Customer and to make advance payments or provide other satisfactory security for such costs.

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 Interconnection Customer receives Interconnection System Impact Study results, Interconnection Customer may request, and Transmission Provider shall perform a reasonable number of Optional Studies. The request shall describe the assumptions that Interconnection Customer wishes 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, Transmission Provider shall provide to 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 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) Transmission Provider's estimate of the cost of the Optional Interconnection Study. To the extent known by 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, 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.

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 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 Interconnection Customer in the Optional Interconnection Study Agreement. The Optional Interconnection Study will also identify 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. 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. 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 Transmission Provider within ten (10) Business Days of Interconnection Customer receipt of the Optional Interconnection Study Agreement. 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 Transmission Provider is unable to complete the Optional Interconnection Study within such time period, it shall notify 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 Transmission Provider or refunded to Interconnection Customer, as appropriate. Upon request, Transmission Provider shall provide 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.

Interconnection Customer shall tender comments on the draft Interconnection Facilities Study Report within thirty (30) Calendar Days of receipt of the report. Within thirty (30) Calendar Days after the comments are submitted, Transmission Provider shall tender a draft LGIA, together with draft appendices. The draft LGIA shall be in the form of Transmission Provider's FERC-approved standard form LGIA, which is in Appendix 6. Interconnection Customer shall execute and return the completed draft appendices within thirty (30) Calendar Days.

11.2 Negotiation.

Notwithstanding Section 11.1, at the request of Interconnection Customer Transmission Provider shall begin negotiations with Interconnection Customer concerning the appendices to the LGIA at any time after Interconnection Customer executes the Interconnection Facilities Study Agreement. Transmission Provider and 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 Interconnection Customer determines that negotiations are at an impasse, it may request termination of the negotiations at any time after tender of the draft 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 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 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 (60) Calendar Days of tender of draft LGIA, it shall be deemed to have withdrawn its Interconnection Request. Transmission Provider shall provide to 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, Interconnection Customer shall provide 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 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.

Interconnection Customer shall either: (i) execute two originals of the tendered LGIA and return them to Transmission Provider; or (ii) request in writing that 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 FERC-approved standard form of interconnection agreement) or the request to file an unexecuted LGIA, Transmission Provider shall file the LGIA with FERC, together with its explanation of any matters as to which Interconnection Customer and Transmission Provider disagree and support for the costs that Transmission Provider proposes to charge to Interconnection Customer under the LGIA. An unexecuted LGIA should contain terms and conditions deemed appropriate by 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 FERC action.

11.4 Commencement of Interconnection Activities.

If Interconnection Customer executes the final LGIA, Transmission Provider and 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, 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.

Transmission Provider and Interconnection Customer shall negotiate in good faith concerning a schedule for the construction of 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 Interconnection Customer.

An Interconnection Customer with an LGIA, in order to maintain its In-Service Date, may request that 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 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 Interconnection Customer commits to pay Transmission Provider: (i) any associated expediting costs and (ii) the cost of such Network Upgrades.

Transmission Provider will refund to 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 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. Transmission Provider shall forward to 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 Interconnection Customer. 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 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 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 Interconnection Customer commits to pay Transmission Provider any associated expediting costs. 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 Affiliates (limited by the Standards of Conduct requirements), 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, its Staff, or a State.

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 FERC 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. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner, consistent with applicable state rules and regulations.

- **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 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.

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 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. 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) Interconnection Customer receives notice pursuant to Sections 6.3, 7.4 or 8.3 that Transmission Provider will not complete an Interconnection Study within the applicable timeframe for such Interconnection Study, or (iii) 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 Interconnection Customer may require 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 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 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 Transmission Provider determines that doing so will help maintain or accelerate the study process for Interconnection Customer's pending Interconnection Request and not interfere with Transmission Provider's progress on Interconnection Studies for other

pending Interconnection Requests. In cases where 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 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 Interconnection Customer or Transmission Provider at Transmission Provider's discretion. In the case of (iii) 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 Tariff procedures and protocols as would apply if 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. 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.

13.6 Local Furnishing Bonds.

13.6.1 Transmission Providers That Own Facilities Financed by Local Furnishing Bonds.

This provision is applicable only to a Transmission Provider that has financed facilities for the local furnishing of electric energy with tax-exempt bonds, as described in Section 142(f) of the Internal Revenue Code ("local furnishing bonds"). Notwithstanding any other provision of this LGIA and LGIP, Transmission Provider shall not be required to provide Interconnection Service to Interconnection Customer pursuant to this LGIA and LGIP if the provision of such Transmission Service would jeopardize the tax-exempt status of any local furnishing bond(s) used to

finance Transmission Provider's facilities that would be used in providing such Interconnection Service.

13.6.2 Alternative Procedures for Requesting Interconnection Service.

If Transmission Provider determines that the provision of Interconnection Service requested by Interconnection Customer would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance its facilities that would be used in providing such Interconnection Service, it shall advise the Interconnection Customer within thirty (30) Calendar Days of receipt of the Interconnection Request.

Interconnection Customer thereafter may renew its request for interconnection using the process specified in Article 5.2(ii) of the Transmission Provider's Tariff.

APPENDIX 1 to LGIP INTERCONNECTION REQUEST FOR A LARGE GENERATING FACILITY

1.	Gen	The undersigned Interconnection Customer submits this request to interconnect its Large Generating Facility with 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): Energy Resource Interconnection Service Network Resource Interconnection Service					
4.	Check here only if Interconnection Customer requesting Network Resource Interconnection Service also seeks to have its Generating Facility studied for Energy Resource Interconnection Service					
5.	Interconnection Customer provides the following information:					
	a.	Address or location or the proposed new Large Generating Facility site (to the extent known) or, in the case of an existing Generating Facility, the name and specific location of the existing Generating Facility;				
	b.	Maximum summer at degrees C and winter at degrees C megawatt electrical output of the proposed new Large Generating Facility or the amount of megawatt increase in the generating capacity of an existing Generating Facility;				
	c.	General description of the equipment configuration;				
	d.	. Commercial Operation Date (Day, Month, and Year);				
	e.	e. Name, address, telephone number, and e-mail address of Interconnection Customer's contact person;				
	f.	Approximate location of the proposed Point of Interconnection (optional); and				
	g.	Interconnection Customer Data (set forth in Attachment A)				
6.	Applicable deposit amount as specified in the LGIP.					
7.	Evid	lence of Site Control as specified in the LGIP (check one) Is attached to this Interconnection Request Will be provided at a later date in accordance with this LGIP				

8.	This Interconnection Request shall be submitted to the representative indicated below
	[To be completed by Transmission Provider]
9.	Representative of Interconnection Customer to contact:
	[To be completed by Interconnection Customer]
10.	This Interconnection Request is submitted by:
	Name of Interconnection Customer:
	By (signature):
	Name (type or print):
	Title:
	Date:

LARGE GENERATING FACILITY DATA

UNIT RATINGS

kVA °F	Voltage	
Power Factor		
Speed (RPM) Short Circuit Ratio Stator Amperes at Rated kVA	Connection	(e.g., Wye)
Short Circuit Ratio	Frequency,	Hertz
Stator Amperes at Rated kVA	Field Volts	
Max Turbine MW	_°F	
COMBINED TURB	INE-GENERATOR-E	XCITER INERTIA DATA
Inertia Constant, H = Moment-of-Inertia, WR ² =	1	b. ft. ²
REACTA	NCE DATA (PER UNI DIRECT AXIS	QUADRATURE AXIS
Synchronous - saturated	X_{dv}	X _{qv}
Synchronous - unsaturated		<u> </u>
Transient - saturated	$ m X_{di}$	X_{ai}
	$egin{array}{ccc} X_{ ext{di}} & & \underline{\hspace{1cm}} \\ X'_{ ext{dv}} & & \underline{\hspace{1cm}} \end{array}$	X _{qi} X' _{av}
Transient - unsaturated	X'_{dv}	X'qv
Transient - unsaturated Subtransient - saturated	X' _{dv} X' _{di}	X'qv
	X' _{dv} X' _{di} X" _{dv}	X'qv X'qi X"qv
Subtransient - saturated	X' _{dv} X' _{di}	X'qv X'qi X"qv X"qi
Subtransient - saturated Subtransient - unsaturated	X' _{dv} X' _{di} X'' _{dv} X'' _{di} X2 _v	X'qv X'qi X''qv X''qi
Subtransient - saturated Subtransient - unsaturated Negative Sequence - saturated Negative Sequence - unsaturated Zero Sequence - saturated	X' _{dv} X' _{di} X'' _{dv} X'' _{di} X2 _v	X'_qv X'_qi X''_qv X''_qi
Subtransient - saturated Subtransient - unsaturated Negative Sequence - saturated Negative Sequence - unsaturated	X' _{dv} X' _{di} X'' _{dv} X'' _{di} X2 _v	X'qv X'qi X"qv X"qi

FIELD TIME CONSTANT DATA (SEC)

Open Circuit Three-Phase Short Line to Line Short Line to Neutral Sho Short Circuit Subtr Open Circuit Subtr	Circuit Transier ort Circuit Trans ransient	nt	T'_{do} T'_{d3} T'_{d2} T'_{d1} T''_{d} T''_{do}		T'qo T'q T"q T"qo
	ARMATU	RE TIM	E CON	STANT DA	ΓA (SEC)
Three Phase Short	Circuit	T_{a3}			
Line to Line Short	Circuit	T_{a2}			
Line to Neutral Sho	ort Circuit	T_{a1}			
NOTE: If requested	MW CAPABI	LITY A	ND PL	·	GURATION
AF	RMATURE WI	NDING	RESIS	TANCE DA	ΓA (PER UNIT)
Positive	R_1				
Negative	R_2				
Zero	R_0				
Rotor Short Time Trield Current at Ra Field Current at Ra Three Phase Armat Field Winding Res	ited kVA, Arma ited kVA and A ture Winding Ca	ture Volt rmature `apacitanc	Voltage. e =	, 0 PF =	amps
Armature Winding				ohms	$^{\circ}\mathrm{C}$

CURVES

Provide Saturation, Vee, Reactive Capability, Capacity Temperature Correction curves. Designate normal and emergency Hydrogen Pressure operating range for multiple curves.

GENERATOR STEP-UP TRANSFORMER DATA RATINGS

Capacity	Self-cooled/		
	Maximum Nameplate		
	/kVA		
Voltage Ra	tio(Generator Side/System side/Tertiary)		
	/	_kV	
Winding Co	onnections (Low V/High V/Tertiary V (Delt	• //	
Fixed Taps	Available		
Present Tap	Setting		
	IMPEDANCI	E	
Positive	Z ₁ (on self-cooled kVA rating)		X/R
Zero	Z ₀ (on self-cooled kVA rating)	%	X/R

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 interconne	ected pursuant to this Interconnec	ction Request:
Elevation:	Single Phase	Three Phase
Inverter manufacturer, model name, n	umber, and version:	
List of adjustable setpoints for the pro	tective equipment or software:	

Note: A completed General Electric Company Power Systems Load Flow (PSLF) data sheet or other compatible formats, such as IEEE and PTI power flow models, 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.

INDUCTION GENERATORS

(*) Field Volts:	
(*) Field Amperes:	_
(*) Motoring Power (kW):	_
(*) Neutral Grounding Resistor (If A	applicable):
(*) I ₂ ² t or K (Heating Time Constant	t):
(*) 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	s (No Load):
(*) Reactive Power Required In Vars	s (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

THI	S AGREEMENT is made an	d entered into this	_ day of _	, 20
by and betw	een	, a		_ organized and existing
under the law	S AGREEMENT is made an een	, ("Interco	nnection C	Customer,") and
	, a	existing under	the laws o	tine State
OI	, (~1ransmissi n Provider each may be refer	on Provider "). Inter- ed to as a "Party" o	connection r collective	n Customer and
Transinissio	ii i i iovidei eacii iiiay be ieicii	ed to as a Tarty, of	. Concent	by as the Tarties.
		RECITALS		
Facility or g	EREAS, Interconnection Cus enerating capacity addition to ion Request submitted by Inte	an existing Generat	ing Facilit	y consistent with the
	EREAS, Interconnection Cus the Transmission System; ar		rconnect t	he Large Generating
an Interconn	EREAS, Interconnection Cus ection Feasibility Study to as rating Facility to the Transmis	sess the feasibility o	f interconn	necting the proposed
	W, THEREFORE, in consideraties agreed as follows:	eration of and subjec	t to the mu	itual covenants contained
1.0	When used in this Agreem have the meanings indicate			-
2.0	Interconnection Customer performed an Interconnect LGIP in accordance with the	ion Feasibility Study		
3.0	The scope of the Interconn assumptions set forth in At	•	•	•
4.0	The Interconnection Feasile provided by Interconnection modified as the result of the the right to request addition. Customer as may reasonab Practice during the course designated in accordance wo of the Point of Interconnection Customer Section 4.4, the time to conextended.	on Customer in the Inches Scoping Meeting. In all technical informably become necessary of the Interconnection with Section 3.3.4 of the tion pursuant to Section of the Interconnection in pursuant to Section of the Interconnection in pursuant to Section of the Interconnection in the Interconnectio	terconnection from a consistent on Feasibil the LGIP. tion 3.3.4 connection Research	tion Request, as may be sion Provider reserves Interconnection at with Good Utility ity Study and as If, after the designation of the LGIP, equest pursuant to

- 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 Interconnection Customer shall provide a deposit of \$10,000 for the performance of the Interconnection Feasibility Study.

Upon receipt of the Interconnection Feasibility Study 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 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 o	r Transmission Owner, if applicable]
By:	By:
Title:	Title:
Date:	Date:

By:	
Title:	
Date:	

[Insert name of Interconnection Customer]

Attachment A to Appendix 2 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 agreed upon in the Scoping Meeting held on	:

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 3 to LGIP INTERCONNECTION SYSTEM IMPACT STUDY AGREEMENT

THI	S AGREEMENT is mad	le and entered into this _	_day of	, 20
by and betw	een	, a		organized and existing
under the lav	eenaa, ("Transn n Provider each may be re	, ("Intercon	nnection Cu	ıstomer,") and
	a	existing under the la	ws of the St	ate
0I Transmissio	, ("Transn	nission Provider "). Intei	connection	Customer and
TTalisiiiissio.	ii Flovidei eacii iliay de i	eferred to as a rarry, or	conective	y as the faities.
		RECITALS		
Facility or g	EREAS, Interconnection enerating capacity addition Request submitted by	on to an existing Generati	ng Facility	consistent with the
	EREAS, Interconnection the Transmission System		rconnect the	E Large Generating
(the "Feasib:	EREAS, Transmission Prility Study") and provided to be omitted if Transmistudy.); and	d the results of said study	to Intercon	nection Customer
an Interconn	EREAS, Interconnection action System Impact Stu Facility to the Transmission	udy to assess the impact of	of interconn	ecting the Large
	W, THEREFORE, in conarties agreed as follows:	nsideration of and subject	to the mut	ual covenants contained
1.0		eement, with initial capit icated in Transmission P	•	
2.0	performed an Intercon	mer elects and Transmiss nection System Impact S ce with the Tariff.	tudy consis	tent with Section 7.0 of
3.0	-	connection System Impact n Attachment A to this A	•	ll be subject to the
4.0	Interconnection Feasib Interconnection Custon modifications in accor- reserves the right to re-	ystem Impact Study will bility Study and the technimer in the Interconnection dance with Section 4.4 or quest additional technical broably become necessary	ical informant ical information Request, so the LGIP.	ation provided by subject to any Transmission Provider on from Interconnection

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 Interconnection Customer shall provide a deposit of \$50,000 for the performance of the Interconnection System Impact Study. 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 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 Transmiss	sion Provider or Transmission Owne	r, if applicable]
By:	By:	
Title:	Title:	
Date:	Date:	
[Insert name of Interconn	ection 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

THI	S AGREEMENT is made	e and entered into this_	day of	, 20
by and betwo	een	, a	or	rganized and existing
under the lav	een		onnection Cust	omer,") and
- C	, a	existing under	r the laws of th	ie State
0I Transmissio	, ("Transm n Provider each may be re	iission Provider "). Inte	rconnection Ci	ustomer and as the "Parties "
Transmissio	ii i rovider each may be re	herred to as a Tarty, C	n concenvery a	is the Tarties.
		RECITALS		
Facility or go	EREAS, Interconnection enerating capacity addition Request submitted by	on to an existing General	ting Facility co	onsistent with the
	EREAS, Interconnection the Transmission System		erconnect the L	arge Generating
	EREAS, Transmission Pr System Impact Study") an nd			
an Interconn procurement System Impa	EREAS, Interconnection ection Facilities Study to and construction work neact Study in accordance was Generating Facility	specify and estimate the eeded to implement the with Good Utility Practic	e cost of the eq conclusions of ce to physically	uipment, engineering the Interconnection
	V, THEREFORE, in con arties agreed as follows:	sideration of and subjec	et to the mutual	l covenants contained
1.0		eement, with initial capi icated in Transmission I	•	-
2.0		mer elects and Transmis ies Study consistent wit ce with the Tariff.		
3.0	-	connection Facilities Stu n Attachment A and the	-	-
4.0	estimated cost of (cons	acilities Study report (i) sistent with Attachment ge Generating Facility t	A), schedule fo	or required facilities

- shall address the short circuit, instability, and power flow issues identified in the Interconnection System Impact Study.
- 5.0 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.

Imsert	name of Transmission Trovide	i di Transhiissidh v	Switci, ii applicablej
By:		By:	
Title:		Title:	
Date:		Date:	
[Insert	name of Interconnection Custo	omer]	
By:			
Title:			
Date:			

Unsert name of Transmission Provider or Transmission Owner if applicable

Attachment A To Appendix 4 Interconnection Facilities Study Agreement

INTERCONNECTION CUSTOMER SCHEDULE ELECTION FOR CONDUCTING THE INTERCONNECTION FACILITIES STUDY

Transmission Provider shall use Reasonable Efforts to complete the study and issue a draft Interconnection Facilities Study report to Interconnection Customer within the following number of days after of receipt of an executed copy of this 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 with no more than a +/- 10 percent cost estimate contained in the report.

DATA FORM 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.

One set of metering is required for each generation connection to the new ring bus or existing Transmission Provider station. Number of generation connections:

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
Will an alternate source of auxiliary power be available during CT/PT maintenance? YesNo
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 diagram).
What type of control system or PLC will be located at Interconnection Customer'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, transmission line, and property line.
Physical dimensions of the proposed interconnection station:
Bus length from generation to interconnection station:
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 coordinate	ntion with Transmission Provider.	
Is the Large Generating Facility in the Transi	mission 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 AGREEMENT

THIS	S AGREEMENT is made and entered into this	day of	, 20
by and betwe	een, aorganized and existing under the laws of	ftha Stata of	
	("Interconnection Customer") and	. the State of	a
existing und	er the laws of the State of		a Provider ")
Interconnect	er the laws of the State ofion Customer,") and ion Customer and Transmission Provider each may	v be referred to as a	a "Party." or
collectively	as the "Parties."	, 55 15151154 25 45	<i>a</i> 1 <i>a</i> 10 <i>j</i> , 01
	RECITALS		
Facility or go	EREAS, Interconnection Customer is proposing to enerating capacity addition to an existing Generation Request submitted by Interconnection Custom	ng Facility consiste	ent with the
	EREAS, Interconnection Customer is proposing to ssion System; and	establish an interc	connection with
	EREAS, Interconnection Customer has submitted ion Request; and	to Transmission Pr	ovider an
Interconnect	EREAS, on or after the date when Interconnection ion System Impact Study results, Interconnection ission Provider prepare an Optional Interconnection	Customer has furth	
	V, THEREFORE, in consideration of and subject arties agree as follows:	to the mutual cove	enants contained
1.0	When used in this Agreement, with initial capital have the meanings indicated in Transmission Pr		-
2.0	Interconnection Customer elects and Transmiss Optional Interconnection Study consistent with performed in accordance with the Tariff.		
3.0	The scope of the Optional Interconnection Student assumptions set forth in Attachment A to this A		o the
4.0	The Optional Interconnection Study shall be per purposes.	rformed solely for i	informational
5.0	The Optional Interconnection Study report shall based on the assumptions specified by Intercont to this Agreement. The Optional Interconnection Transmission Provider's Interconnection Facility	nection Customer in on Study will identi	n Attachment A ify

and the estimated cost thereof, that may be required to provide transmission service or interconnection service based upon the assumptions specified by Interconnection Customer in Attachment A.

6.0 Interconnection Customer shall provide a deposit of \$10,000 for the performance of the Optional Interconnection Study. 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, 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 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.

By:	By:	
Title:	Title:	
Date:	Date:	
[Insert name of Interconne	ction Customer]	
[Insert name of Interconne	•	

Appendix 6 to the Standard Large Generator Interconnection Procedures

STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT (LGIA)

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	Modification by the Parties
	Reservation of Rights
	No Partnership

STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT

THIS STANDARD LARGE GENERATOR I	NTERCONNECTION AGREEMENT
("Agreement") is made and entered into this day of	
, a	organized and existing under
the laws of the State/Commonwealth of	("Interconnection Customer" with a
Large Generating Facility), and	, a
organized and existing under	the laws of the State/Commonwealth of
("Transmission Provider and/or Tra	nsmission Owner"). Interconnection
Customer and Transmission Provider each may be referr	ed to as a "Party" or collectively as the
"Parties."	
Recitals	
WHEREAS, Transmission Provider operates the	e Transmission System; and
WHEREAS, Interconnection Customer intends the Generating Facility identified as a Large Generating	

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 or the Open Access Transmission Tariff (Tariff).

Article 1. Definitions

Agreement; and,

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 shall mean the status of a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

Commercial Operation Date of a unit shall mean the date on which the Generating Facility commences Commercial Operation as agreed to by the Parties pursuant to 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 the Applicable Reliability Council.

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 FERC, or if filed unexecuted, upon the date specified by FERC.

Emergency Condition shall mean 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 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 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 <u>et seq.</u>

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 acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

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 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 any designated generating resource owned, purchased, or leased by a Network Customer under the Network Integration Transmission Service Tariff. Network Resources do not include any resource, or any portion thereof, that is committed for sale to third parties or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis.

Network Resource 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 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 Facilities connect 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 FERC, 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 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.

- **2.3.1 Written Notice**. This LGIA may be terminated by Interconnection Customer after giving Transmission Provider ninety (90) Calendar Days advance written notice, or by Transmission Provider notifying FERC after the Generating Facility permanently ceases Commercial Operation.
- **2.3.2 Default**. Either Party may terminate this LGIA in accordance with Article 17.
- **2.3.3** Notwithstanding Articles 2.3.1 and 2.3.2, 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 a Party, the 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:
 - With respect to any portion of Transmission Provider's Interconnection Facilities 2.4.1 that have not yet been constructed or installed, 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 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 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 Transmission Provider has incurred expenses and has not been reimbursed by 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. Transmission Provider shall file this LGIA (and any amendment hereto) with the appropriate Governmental Authority, if required. Interconnection Customer may request that any information so provided be subject to the confidentiality provisions of Article 22. If Interconnection Customer has executed this LGIA, or any amendment thereto, 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.

- 4.1.1.1 The Product. Energy Resource 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 Energy Resource Interconnection Service, Transmission Provider shall construct facilities identified in Attachment A.
- 4.1.1.2 **Transmission Delivery Service Implications.** Under Energy Resource Interconnection Service, Interconnection Customer will be eligible 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 MWs identified in the applicable stability and steady state studies to the extent the upgrades initially required to qualify for Energy Resource Interconnection Service have been constructed. Where eligible to do so (e.g., PJM, ISO-NE, NYISO), 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 Interconnection Customer's bid clears. In all other instances, no transmission delivery service from the Large Generating Facility is assured, but Interconnection Customer may obtain Point-to-Point Transmission Service, Network Integration Transmission Service, or be used for secondary network transmission service, pursuant to Transmission Provider's Tariff, up to the maximum output identified in the stability and steady state studies. In those instances, in order for 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 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 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 or Network Integration Transmission Service may require the construction of additional Network Upgrades.

4.1.2 Network Resource Interconnection Service.

- 4.1.2.1 The Product. 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 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 Network Resources. To the extent Interconnection Customer wants to receive Network Resource Interconnection Service, Transmission Provider shall construct the facilities identified in Attachment A to this LGIA.
- 4.1.2.2 **Transmission Delivery Service Implications**. Network Resource Interconnection Service allows Interconnection Customer's Large Generating Facility to be designated by any Network Customer under the Tariff on Transmission Provider's Transmission System as a Network Resource, up to the Large Generating Facility's full output, on the same basis as existing Network Resources interconnected to Transmission Provider's Transmission System, and to be studied as a Network Resource on the assumption that such a designation will occur. Although Network Resource 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 Network Resources. A Large Generating Facility receiving Network Resource 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. The provision of Network Integration Transmission Service or firm Point-to-Point Transmission Service may require additional studies and the construction of additional upgrades. Because such studies and upgrades would be associated with a request for delivery service under the Tariff, cost responsibility for the studies and upgrades would be in accordance with FERC's policy for pricing

transmission delivery services.

Network Resource Interconnection Service does not necessarily provide Interconnection Customer with the capability to physically deliver the output of its Large Generating Facility to any particular load on Transmission Provider's Transmission System without incurring congestion costs. In the event of transmission constraints on Transmission Provider's Transmission System, Interconnection Customer's Large Generating Facility shall be subject to the applicable congestion management procedures in Transmission Provider's Transmission System in the same manner as Network Resources.

There is no requirement either at the time of study or interconnection, or at any point in the future, that Interconnection Customer's Large Generating Facility be designated as a Network Resource by a Network Service Customer under the Tariff or that 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 Transmission Provider's Tariff.

Once an Interconnection Customer satisfies the requirements for obtaining Network Resource Interconnection Service, any future transmission service request for delivery from the Large Generating Facility within 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. However, the reduction or elimination of congestion or redispatch costs may require additional studies and the construction of additional upgrades.

To the extent Interconnection Customer enters into an arrangement for long term transmission service for deliveries from the Large Generating Facility outside Transmission Provider's Transmission System, such request may require additional studies and upgrades in order for 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 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 a Transmission Provider or Transmission Owner, then that Party shall amend the LGIA and submit the amendment to FERC for approval.

- **4.4 No Transmission Delivery Service.** The execution of this LGIA does not constitute a request for, nor the provision of, any transmission delivery service under Transmission Provider's Tariff, and does not convey any right to deliver electricity to any specific customer or Point of Delivery.
- 4.5 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 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. Transmission Provider shall design, procure, and construct Transmission Provider's Interconnection Facilities and Network Upgrades, using Reasonable Efforts to complete Transmission Provider's Interconnection Facilities and Network Upgrades by the dates set forth in Appendix B, Milestones. 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 Transmission Provider reasonably expects that it will not be able to complete Transmission Provider's Interconnection Facilities and Network Upgrades by the specified dates, Transmission Provider shall promptly provide written notice to 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, Transmission Provider shall so notify Interconnection Customer within thirty (30) Calendar Days, and shall assume responsibility for the design, procurement and construction of 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, Transmission Provider shall so notify 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 on the dates specified in Article 5.1.2. 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. Except for Stand Alone Network Upgrades, Interconnection Customer shall have no right to construct Network Upgrades under this option.
- 5.1.4 Negotiated Option. If 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 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 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 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 Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades,
 - (1) Interconnection Customer shall engineer, procure equipment, and construct 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 Transmission Provider;
 - (2) Interconnection Customer's engineering, procurement and construction of 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 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 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 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 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 Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and specifications provided by Transmission Provider, Interconnection Customer shall be obligated to remedy deficiencies in that portion of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades;
- (7) Interconnection Customer shall indemnify Transmission Provider for claims arising from 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) Interconnection Customer shall transfer control of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades to Transmission Provider;
- (9) Unless Parties otherwise agree, Interconnection Customer shall transfer ownership of Transmission Provider's Interconnection Facilities and Stand-Alone Network Upgrades to Transmission Provider;
- (10) Transmission Provider shall approve and accept for operation and maintenance Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with this Article 5.2; and
- (11) Interconnection Customer shall deliver to Transmission Provider "as-built" drawings, information, and any other documents that are reasonably required by Transmission Provider to assure that the Interconnection Facilities and Stand-

Alone Network Upgrades are built to the standards and specifications required by Transmission Provider.

5.3 Liquidated Damages. The actual damages to Interconnection Customer, in the event Transmission Provider's Interconnection Facilities or Network Upgrades are not completed by the dates designated by Interconnection Customer and accepted by 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 Transmission Provider to Interconnection Customer in the event that Transmission Provider does not complete any portion of Transmission Provider's Interconnection Facilities or Network Upgrades by the applicable dates, shall be an amount equal to ½ of 1 percent per day of the actual cost of 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 Transmission Provider's Interconnection Facilities and Network Upgrades for which Transmission Provider has assumed responsibility to design, procure, and construct. The foregoing payments will be made by Transmission Provider to Interconnection Customer as just compensation for the damages caused to 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. Liquidated damages, when the Parties agree to them, are the exclusive remedy for the Transmission Provider's failure to meet its schedule.

No liquidated damages shall be paid to Interconnection Customer if: (1) Interconnection Customer is not ready to commence use of 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 Interconnection Customer would have been able to commence use of 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) Transmission Provider's failure to meet the specified dates is the result of the action or inaction of Interconnection Customer or any other Interconnection Customer who has entered into an LGIA with 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 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, Interconnection Customer shall immediately notify Transmission Provider's system operator, or its designated representative. The requirements of this paragraph shall not apply to wind generators.

- 5.5 Equipment Procurement. If responsibility for construction of Transmission Provider's Interconnection Facilities or Network Upgrades is to be borne by Transmission Provider, then Transmission Provider shall commence design of 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** Transmission Provider has completed the Facilities Study pursuant to the Facilities Study Agreement;
 - 5.5.2 Transmission Provider has received written authorization to proceed with design and procurement from Interconnection Customer by the date specified in Appendix B, Milestones; and
 - **5.5.3** Interconnection Customer has provided security to Transmission Provider in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.
- **5.6 Construction Commencement**. Transmission Provider shall commence construction of 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 Transmission Provider's Interconnection Facilities and Network Upgrades;
 - **5.6.3** Transmission Provider has received written authorization to proceed with construction from Interconnection Customer by the date specified in Appendix B, Milestones; and
 - **5.6.4** Interconnection Customer has provided security to 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, Interconnection Customer determines that the completion of Transmission Provider's Interconnection Facilities will not be required until after the specified In-Service Date, Interconnection Customer will provide written notice to Transmission Provider of such later date upon

which the completion of 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 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 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 Interconnection Customer's Interconnection Facilities may operate prior to the completion of 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 Interconnection Customer's 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 Interconnection Customer's Interconnection 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 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 technical specifications, operational control, and safety requirements of 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, Interconnection Customer shall deliver to 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 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 Facility. 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, if applicable.
- 5.11 Transmission Provider's Interconnection Facilities Construction. 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, Transmission Provider shall deliver to Interconnection Customer the following "as-built" drawings, information and documents for Transmission Provider's Interconnection Facilities [include appropriate drawings and relay diagrams].

Transmission Provider will obtain control of 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, its agents (if allowed under the applicable agency agreement), or any Affiliate, 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 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, 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 or on behalf of its Affiliates, 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 Transmission Provider or Transmission Owner's Interconnection Facilities and/or Network Upgrades upon such property.

- 5.14 Permits. Transmission Provider or Transmission Owner and Interconnection Customer shall cooperate with each other in good faith in obtaining all permits, licenses, and authorizations that are necessary to accomplish the interconnection in compliance with Applicable Laws and Regulations. With respect to this paragraph, Transmission Provider or Transmission Owner shall provide permitting assistance to Interconnection Customer comparable to that provided to 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 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 Transmission System shall be left in a safe and reliable condition in accordance with Good Utility Practice and 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. The three-

year period shall begin on the date the suspension is requested, or the date of the written notice to Transmission Provider, if no effective date is specified.

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 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 Transmission Provider for 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 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 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 the Cost Consequences of Current Tax Liability Imposed Upon the Transmission Provider. Notwithstanding Article 5.17.1, Interconnection Customer shall protect, indemnify and hold harmless Transmission Provider from the cost consequences of any current tax liability imposed against Transmission Provider as the result of payments or property transfers made by Interconnection Customer to Transmission Provider under this LGIA for Interconnection Facilities, 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 the cost consequences of any current tax liability 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; provided, however, that Transmission Provider may require Interconnection Customer to provide security for Interconnection Facilities, in a form reasonably acceptable to Transmission Provider (such as a parental guarantee or a letter of credit), in an amount equal to the cost consequences of any current tax liability under this Article 5.17. Interconnection Customer shall reimburse Transmission Provider for such costs 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.

The indemnification obligation shall terminate at the earlier of (1) the expiration of the ten year testing period and the applicable statute of limitation, as it may be extended by 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 the cost consequences of any current tax liability 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 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.

- 5.17.6 Subsequent Taxable Events. If, within 10 years from the date on which the relevant Transmission Provider's Interconnection Facilities are placed in service, (i) Interconnection Customer Breaches the covenants contained in Article 5.17.2, (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, Interconnection Customer shall pay a tax gross-up for the cost consequences of any current tax liability 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 may appeal, protest, seek abatement of, or otherwise

oppose such determination. Upon Interconnection Customer's written request and sole expense, Transmission Provider may 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. 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. The settlement amount shall be calculated on a fully grossed-up basis to cover any related cost consequences of the current tax liability. 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) interest on any amount 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)(iii) 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 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 Transmission Provider's Interconnection Facilities.

The intent of this provision is to leave the 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 may 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 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. 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, nonappealable 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

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 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 Transmission Provider's Interconnection Facilities or the Transmission System to facilitate the interconnection of a third party to Transmission Provider's Interconnection Facilities or the Transmission System, or to provide transmission service to a third party under Transmission Provider's

Tariff. Interconnection Customer shall be responsible for the costs of any additions, modifications, or replacements to Interconnection Customer's Interconnection Facilities that may be necessary to maintain or upgrade such Interconnection Customer's Interconnection Facilities consistent with Applicable Laws and Regulations, Applicable Reliability Standards or Good Utility Practice.

Article 6. Testing and Inspection

- Operation Date, Transmission Provider shall test Transmission Provider's Interconnection Facilities and Network Upgrades and Interconnection Customer shall test the Large Generating Facility and Interconnection Customer's 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 a Party obtains through the exercise of any of its rights under this Article 6.4 shall be deemed to be Confidential Information and treated pursuant to Article 22 of this LGIA.

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 the 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, Interconnection Customer shall notify Transmission Provider in writing of the Control Area in which the Large Generating Facility will be located. If 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 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 Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA. Interconnection Customer shall operate the Large Generating Facility and Interconnection Customer's 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, Interconnection Customer is responsible for the proper synchronization of the Large Generating Facility to 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. The requirements of this paragraph shall not apply to wind generators.
- **9.6.2** Voltage Schedules. Once 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, 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 when Transmission

Provider requests Interconnection Customer to operate its Large Generating Facility outside the range specified in Article 9.6.1, provided that if Transmission Provider pays its own or affiliated generators for reactive power service within the specified range, it must also pay Interconnection Customer. 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 the 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.** 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 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 Interconnection Customer would have incurred absent 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, 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 Interconnection Customer using Good Utility Practice to schedule the interruption or reduction during periods of least impact to Interconnection Customer and 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 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 Interconnection Customer's Interconnection Facilities.

 Transmission Provider shall install at Interconnection Customer's expense any System Protection Facilities that may be required on Transmission Provider's Interconnection Facilities or the Transmission System as a result of the interconnection of the Large Generating Facility and Interconnection Customer's 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 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.
- **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 loadinterrupting 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 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 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 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 Interconnection Customer's 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's 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 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 Transmission Provider or Transmission Owner elects to fund the capital for the Network Upgrades, they shall be solely funded by Interconnection Customer.

11.4 Transmission Credits.

11.4.1 Repayment of Amounts Advanced for Network Upgrades. Interconnection Customer shall be entitled to a cash repayment, 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 associated with Network Upgrades, 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 Transmission Provider's Tariff and Affected System's Tariff for transmission services with respect to the Large Generating Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. Interconnection Customer may assign such repayment rights to any person.

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 take one of the following actions no later than five years from the Commercial Operation Date: (1) return to Interconnection Customer any amounts advanced for Network Upgrades not previously repaid, or (2) declare in writing that Transmission Provider or Affected System Operator will continue to provide payments to Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid; however, full reimbursement shall not extend beyond twenty (20) years from the Commercial Operation Date.

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 reimburse Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the Generating Facility, if different, is responsible for identifying the entity to which reimbursement must be made.

- 11.4.2 Special Provisions for Affected Systems. Unless Transmission Provider provides, under the LGIA, for the repayment of amounts advanced to Affected System Operator for Network Upgrades, Interconnection Customer and Affected System Operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by Interconnection Customer to the Affected System Operator as well as the repayment by the Affected System Operator.
- 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 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 cash reimbursements 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 for these purposes.

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.
- directs 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, Transmission Provider agrees to compensate Interconnection Customer in such amount as would have been due 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.
- Provider's Interconnection Facilities and the Network Upgrades, Transmission Provider shall provide an invoice of the final cost of the construction of 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 either Party will not constitute a waiver of any rights or claims either Party 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)(iii).

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, 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 Interconnection Customer's 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 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 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 Interconnection Customer's Interconnection Facilities that may reasonably be expected to affect the Transmission System or 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 Interconnection Customer's Interconnection Facilities in response to an Emergency Condition either declared by 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 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 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 Interconnection Customer's 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 shut-down, 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 Interconnection Customer to assist with blackstart (if available) or restoration efforts; or altering the outage schedules of the Large Generating Facility and Interconnection Customer's 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 Interconnection Customer's 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 Transmission Provider pursuant to Transmission Provider's Tariff. When 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 Interconnection Customer using Good Utility Practice to schedule the reduction or disconnection during periods of least impact to Interconnection Customer and 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, Interconnection Customer may take actions or inactions with regard to the Large Generating Facility or Interconnection Customer's 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 Interconnection Customer's 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 Transmission Provider's Interconnection Facilities. Transmission Provider shall use Reasonable Efforts to assist Interconnection Customer in such actions.
- 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, the Public Utility Holding Company Act of 1935, as amended, or the Public Utility Regulatory Policies Act of 1978.

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 a 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 of omission of the other Party. Upon a Breach, the non-breaching Party shall give written notice of such Breach to the breaching Party. Except as provided in Article 17.1.2, the breaching Party shall have thirty (30) Calendar Days from receipt of the Default notice within which to cure such Breach; provided however, if such Breach is not capable of cure within thirty (30) Calendar Days, the breaching 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 Breach specified in such notice shall cease to exist.
- 17.1.2 Right to Terminate. If a Breach is not cured as provided in this article, or if a Breach is not capable of being cured within the period provided for herein, the non-breaching Party shall have the right to declare a Default and 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 breaching 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 hold 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 judgment 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 judgment 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.
 - 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 nonowned 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 policies 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) Calendar 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 policies 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 issued 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 meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 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 and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. 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 18.3.2 through 18.3.9. In the event that a Party is permitted to self-insure pursuant to this article, it shall notify the other Party that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 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 Interconnection Customer shall have the right to assign this LGIA, without the consent of Transmission Provider, for collateral security purposes to aid in providing financing for the Large Generating Facility, provided that Interconnection Customer will promptly 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), including providing the Transmission Provider with proof that it meets the requirements of Articles 11.5 and 18.3. 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 Interconnection Customer (or any third party, but only if such third party is not acting at the direction of 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 22 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 Affiliates (limited by the Standards of Conduct requirements), subcontractors, 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, its Staff, or a State. 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 FERC 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. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.
- **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.

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 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 Interconnection Customer to select equipment and meet any system protection and stability requirements, unless otherwise agreed to by the 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 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, Interconnection Customer will work with a consultant mutually agreed to by the Parties to develop and supply a standard model and associated information.

If 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 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 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 Transmission Provider for each individual generating unit in a station.

Subsequent to the Operation Date, Interconnection Customer shall provide Transmission Provider any information changes due to equipment replacement, repair, or adjustment.

Transmission Provider shall provide 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 Interconnection Customer's 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, Transmission Provider's efforts to allocate responsibility for the provision of reactive support to the Transmission System, 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 Transmission Provider be liable for the actions or inactions of Interconnection Customer or its subcontractors with respect to obligations of 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 threemember 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 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 Interconnection Customer shall not constitute a waiver of Interconnection Customer's legal rights to obtain an interconnection from 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 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 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 Transm	ission Provider or Transmission Owner	, if applicable]
By:	By:	
Title:	Title:	
Date:	Date:	
[Insert name of Intercor	inection Customer]	
By:		
Title:		
Date:		

Appendix A to LGIA

Interconnection Facilities, Network Upgrades and Distribution Upgrades

1.	Interconnection Facilities:
	(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. FERC 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 is letter confirms that [Interconnection Customer] commenced Commercial Operation of Unit Large Generating Facility, effective as of [Date plus one day].		
Thank you.		
[Signature]		
[Interconnection Custon	ner Representative]	

Appendix F to LGIA

Addresses for Delivery of Notices and Billings

Notices:.
Transmission Provider:
[To be supplied.]
Interconnection Customer:
[To be supplied.]
Billings and Payments:
<u>Transmission Provider</u> :
[To be supplied.]
Interconnection Customer:
[To be supplied.]
Alternative Forms of Delivery of Notices (telephone, facsimile or email):
<u>Transmission Provider</u> :
[To be supplied.]
Interconnection Customer:
[To be supplied.]

Appendix G to LGIA

Interconnection Requirements For A Wind Generating Plant

Appendix G sets forth requirements and provisions specific to a wind generating plant.

All other requirements of this LGIA continue to apply to wind generating plant interconnections.

A. Technical Standards Applicable to a Wind Generating Plant

i. Low Voltage Ride-Through (LVRT) Capability

A wind generating plant shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below. The LVRT standard provides for a transition period standard and a post-transition period standard.

Transition Period LVRT Standard

The transition period standard applies to wind generating plants subject to FERC Order 661 that have either: (i) interconnection agreements signed and filed with the Commission, filed with the Commission in unexecuted form, or filed with the Commission as non-conforming agreements between January 1, 2006 and December 31, 2006, with a scheduled in-service date no later than December 31, 2007, or (ii) wind generating turbines subject to a wind turbine procurement contract executed prior to December 31, 2005, for delivery through 2007.

1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 - 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the transmission provider. The maximum clearing time the wind generating plant shall be

required to withstand for a three-phase fault shall be 9 cycles at a voltage as low as 0.15 p.u., as measured at the high side of the wind generating plant step-up transformer (i.e., the transformer that steps the voltage up to the transmission interconnection voltage or "GSU"), after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the transmission system.

- 2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU or to faults that would result in a voltage lower than 0.15 per unit on the high side of the GSU serving the facility.
- 3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
- 4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAr Compensator, etc.) within the wind generating plant or by a combination of generator performance and additional equipment.
- 5. Existing individual generator units that are, or have been, interconnected to the network at the same location at the effective date of the Appendix G LVRT Standard are exempt from meeting the Appendix G LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Appendix G LVRT Standard.

Post-transition Period LVRT Standard

All wind generating plants subject to FERC Order No. 661 and not covered by the transition period described above must meet the following requirements:

- 1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the transmission provider. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the transmission system. A wind generating plant shall remain interconnected during such a fault on the transmission system for a voltage level as low as zero volts, as measured at the high voltage side of the wind GSU.
- 2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.
- 3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
- 4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAr Compensator) within the wind generating plant or by a combination of generator performance and additional equipment.
- 5. Existing individual generator units that are, or have been, interconnected to the network at the same location at the effective date of the Appendix G LVRT Standard are exempt from meeting the Appendix G LVRT Standard for the remaining life of the existing

generation equipment. Existing individual generator units that are replaced are required to meet the Appendix G LVRT Standard.

ii. Power Factor Design Criteria (Reactive Power)

A wind generating plant shall maintain a power factor within the range of 0.95 leading to 0.95 lagging, measured at the Point of Interconnection as defined in this LGIA, if the Transmission Provider's System Impact Study shows that such a requirement is necessary to ensure safety or reliability. The power factor range standard can be met by using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors if agreed to by the Transmission Provider, or a combination of the two. The Interconnection Customer shall not disable power factor equipment while the wind plant is in operation. Wind plants shall also be able to provide sufficient dynamic voltage support in lieu of the power system stabilizer and automatic voltage regulation at the generator excitation system if the System Impact Study shows this to be required for system safety or reliability.

iii. Supervisory Control and Data Acquisition (SCADA) Capability

The wind plant shall provide SCADA capability to transmit data and receive instructions from the Transmission Provider to protect system reliability. The Transmission Provider and the wind plant Interconnection Customer shall determine what SCADA information is essential for the proposed wind plant, taking into account the size of the plant and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

APPENDIX 7 to LGIP

Interconnection Procedures For A Wind Generating Plant

This Appendix 7 sets forth procedures specific to a wind generating plant. All other requirements of this LGIP continue to apply to wind generating plant interconnections.

A. Special Procedures Applicable to Wind Generators

The wind plant Interconnection Customer, in completing the Interconnection Request required by section 3.3 of this LGIP, may provide to the Transmission Provider a set of preliminary electrical design specifications depicting the wind plant as a single equivalent generator. Upon satisfying these and other applicable Interconnection Request conditions, the wind plant may enter the queue and receive the base case data as provided for in this LGIP.

No later than six months after submitting an Interconnection Request completed in this manner, the wind plant Interconnection Customer must submit completed detailed electrical design specifications and other data (including collector system layout data) needed to allow the Transmission Provider to complete the System Impact Study.

ATTACHMENT K

THE INDEPENDENT ENTITY

[DEC ZONE]

1 OVERVIEW

- 1.1 This Attachment sets forth the authority and responsibility of the Independent Entity ("IE") in its role as such in the DEC Zone, as well as the responsibilities of the Transmission Provider, Generator Owners, Load Serving Entities, and other market participants relating to the functions to be performed by the Independent Entity.
- 1.2 The Transmission Provider will retain operational control over the Transmission System, but will be obligated to follow the directives of the Independent Entity as set forth herein. The specific division of responsibilities and functions between the Independent Entity and the Transmission Provider are set forth in this Attachment K.
- 1.3 Nothing in this Attachment K precludes the Independent Entity from providing the same or similar functions to other entities under a separate contract or expanding to a larger regional entity, provided that the Transmission Provider is reimbursed in an equitable manner for its capital investment as well as ongoing operations and maintenance costs in connection with any such new contract or expansion.
- 1.4 The Transmission Provider will provide the Commission with timely written notice that the Independent Entity has commenced operations as the Independent Entity upon such commencement. No later than forty-five days prior to the five-year anniversary of such commencement, the Independent Entity and the Transmission Provider shall jointly convene a stakeholder conference to ascertain the views of any Transmission Customer, Load-Serving Entity, Generator, or any other entities doing business in the Transmission Provider's service area (collectively "Tariff Participants") on whether there is a continuing need for an Independent Entity, including the stakeholders' views of the benefits provided by the Independent Entity and the costs of maintaining the Independent Entity. At this stakeholder conference, the Independent Entity will also summarize stakeholder comments it has received in the prior three years, to the extent such comments relate to the need for, or lack of need for, an Independent Entity. The Transmission Provider may file, at its sole discretion and pursuant to Section 205 of the Federal Power Act, to modify, amend, terminate, or otherwise alter this Attachment K. Nothing in this Attachment K shall alter or limit any rights the Transmission Provider may otherwise enjoy under the Tariff, Commission regulation, or the Federal Power Act.

2 DEFINITIONS

The following definitions shall apply to this Attachment. Capitalized terms that are not specifically defined herein shall have the meaning assigned to them under the Tariff or Large Generator Interconnection Procedures ("LGIP"), as applicable.

- 2.1 [Reserved].
- ATC Methodology shall mean the criteria, standards, and procedures used to calculate Available Transfer Capability ("ATC") values as set forth in the following: (i) Tariff provisions applicable to ATC calculations, including Attachment C-3 to the Tariff; (ii) applicable North American Electric Reliability Council ("NERC") Reliability Standards and Southeastern Electric Reliability Council ("SERC") supplements to those standards; (iii) the Transmission Provider's ATC Procedures that are provided to the Independent Entity for posting on OASIS pursuant to Section 6.1.10 herein; and (iv) the Transmission Provider's local reliability criteria provided to the Independent Entity for posting on OASIS pursuant to Section 6.1.10 herein.
- 2.3 <u>Base Case Model</u> shall mean current power flow models representing the Transmission System used for reliability assessments, transmission service request studies, and economic studies. When referenced herein, "Base Case Model" refers to the annual, seasonal, monthly, or other power flow models used by the Independent Entity to evaluate TSRs or Interconnection Requests, as applicable to TSRs or Interconnection Requests.
- 2.4 <u>Facilities Study Criteria</u> shall mean the criteria, standards, and procedures used to perform Facilities Studies as set forth in the following: (i) Tariff provisions applicable to the performance of Facilities Studies; (ii) applicable NERC Reliability Standards and SERC supplements to those standards; (iii) the Transmission Provider's business practices related to Facilities Studies that are provided to the Independent Entity for posting on OASIS pursuant to Section 6.1.10 herein; and (iv) the Transmission Provider's local reliability criteria that are provided to the Independent Entity for posting on OASIS pursuant to Section 6.1.10 herein.
- 2.5 <u>Interconnection SIS</u> shall mean the Interconnection System Impact Study required under the LGIP.
- 2.6 <u>Interconnection Studies</u> shall mean studies required to interconnect new generation to the Transmission System under Order No. 2003.
- 2.7 Interconnection Study Criteria shall mean the criteria, standards, and procedures used to perform Interconnection Studies as set forth in the following: (i) the LGIP and LGIA provisions applicable to the performance of Interconnection Studies; (ii) applicable NERC Reliability Standards and SERC supplements to those standards; (iii) the Transmission Provider's business practices related to Interconnection Studies that are provided to the Independent Entity for posting on OASIS pursuant to Section 7.1.8 herein; and (iv) the Transmission Provider's local reliability criteria that are provided to the Independent Entity for posting on OASIS pursuant to Section 6.1.10 herein.
- 2.8 <u>LGIA</u> shall mean the Standard Large Generator Interconnection Agreement under Attachment J to the Tariff or the version of that agreement executed by an Interconnection Customer, as applicable.

- 2.9 <u>LGIP</u> shall mean the Standard Large Generator Interconnection Procedures under Attachment J to the Tariff.
- 2.10 <u>Long-Term TSRs</u> shall mean TSRs that are for a term of one year or greater in duration.
- 2.11 [Reserved].
- 2.12 Short-Term TSRs shall the mean TSRs that are for a term less than one-year in duration.
- 2.13 <u>SIS</u> shall mean the System Impact Study required under the Tariff to evaluate TSRs and to determine what magnitude of system upgrades, if any, might be required to grant a request.
- 2.14 SIS Criteria shall mean the criteria, standards and procedures used to perform System Impact Studies as set forth in the following: (i) Tariff provisions applicable to the performance of SISs, including Attachment D to the Tariff; (ii) applicable NERC Reliability Standards and SERC supplements to those standards; (iii) the Transmission Provider's business practices related to SISs that are provided to the Independent Entity for posting on OASIS pursuant to Section 6.1.10 herein; and (iv) the Transmission Provider's local reliability criteria that are provided to the Independent Entity for posting on OASIS pursuant to Section 6.1.10 herein.
- 2.15 [Reserved].
- 2.16 <u>Transmission Study Criteria</u> shall mean the ATC Methodology, the SIS Criteria, and the Facilities Study Criteria as defined herein.
- 2.17 <u>Transmission Service Request or TSR</u> shall mean a request submitted by an eligible Transmission Customer under the Tariff for either Point-to-Point Transmission Service or Network Integration Transmission Service, including a new designation of Network Resources or Network Load.
- 2.18 <u>TSR Processing Criteria</u> shall mean the criteria, standards, and procedures used to process TSRs as set forth in the following: (i) Tariff provisions applicable to TSR processing; (ii) FERC's OASIS Standards and Communication Protocols and Business Practice Standards for OASIS Transactions; and (iii) the Transmission Provider's business practices related to OASIS and TSR processing that are provided to the Independent Entity for posting on OASIS pursuant to Section 6.1.12 herein.

3 INDEPENDENCE

- 3.1 The Transmission Provider will retain the Independent Entity under an agreement that will be submitted to FERC for a determination that the agreement provides for the Independent Entity to be independent of the Transmission Provider, or any Tariff Participant.
- 3.2 If the Transmission Provider terminates its agreement with the Independent Entity in accordance with the provisions of such agreement, the Transmission Provider will retain

a replacement Independent Entity to perform the functions provided for under this Attachment K, and the agreement with such replacement Independent Entity likewise will be submitted to FERC. Provided, however, that notwithstanding anything in this Attachment K to the contrary, the Transmission Provider shall have the right to withdraw this Attachment K if the Commission directs the Independent Entity to take any action, or Congress enacts legislation imposing any requirement, with regard to the Transmission Provider's Transmission System or mandating or permitting the Independent Entity to assume responsibility for any functions or services currently performed or provided by the Transmission Provider that would materially or adversely diminish, interfere with, or otherwise impinge or intrude upon the state regulatory commissions' jurisdiction over the Transmission Provider under applicable state laws and regulations.

- 3.3 The Independent Entity and its employees shall not be affiliated with and shall remain independent of the Transmission Provider or any Tariff Participant. All functions and responsibilities of the Independent Entity shall be performed by employees or agents of the Independent Entity. No such employees or agents shall be employed by the Transmission Provider or any affiliate (as defined in 18 C.F.R. § 35.34(b)(3) of FERC's regulations) of the Transmission Provider. The Independent Entity and its employees and agents shall be Independent of the Transmission Provider and of any Market Participant (as defined in 18 C.F.R. § 35.34(a)(2) of FERC's regulations) and all Affiliates of the Transmission Provider and any such Market Participant. For purposes of this Attachment K, "Independent" shall mean that the Independent Entity and its employees and agents are not subject to the control of the Transmission Provider or any Market Participant, and have full decisionmaking authority to perform all functions and responsibilities assigned to the Independent Entity under this Attachment K.
- 3.4 The Independent Entity shall perform the functions enumerated herein in an independent manner and, in all cases, shall use its independent judgment in ensuring that Transmission Service is provided on a nondiscriminatory basis. The Independent Entity and the Transmission Provider shall perform their respective functions in a manner consistent with Good Utility Practice, the Transmission Provider's obligations to Native Load Customers, and their obligations to Transmission Customers under FERC Orders No. 888, 889, and 2003. The Independent Entity and its employees shall not discriminate against the Transmission Provider or any Tariff Participant, and shall implement the provisions of this Attachment K in a fair and non-discriminatory manner.
 - 3.4.1 All employees of the Independent Entity performing functions under this Attachment shall be treated, for the purposes of FERC's Standards of Conduct set forth 18 C.F.R. Part 358, as the equivalent of transmission/reliability employees of the Transmission Provider, and all restrictions related to information sharing and other relationships between merchant employees of the Transmission Provider and/or its affiliates and transmission/reliability employees of the Transmission Provider shall apply to the employees of the Independent Entity.
 - 3.4.2 The Independent Entity shall adopt a policy on conflicts of interest establishing appropriate standards for the professional and financial independence of the Independent Entity, consistent with FERC policies and regulations. In addition,

the Independent Entity shall adopt ethics policies and standards for its employees and subcontractors. The Independent Entity, including each member and employee of the Independent Entity's firm shall comply at all times with the conflicts of interest and ethics policies. The Independent Entity's conflict of interest and ethics policies shall be posted on the Transmission Provider's OASIS. The Independent Entity shall also immediately post on the Transmission Provider's OASIS each instance in which it sub-delegates any of its Independent Entity tasks or functions to the Transmission Provider. The Independent Entity's conflict of interest policies shall include provisions protecting against any discrimination by the Independent Entity in favor of third parties for whom the Independent Entity may perform services or enjoy a relationship that inures to the Independent Entity's financial benefit.

- 3.5 Nothing in this Attachment K shall be deemed (i) to restrict or to prohibit access by the Transmission Provider to transmission facilities owned by the Transmission Provider, or those acting under its authority, when such access is necessary for the Transmission Provider to operate and maintain such transmission facilities, or (ii) to restrict or prohibit the Transmission Provider from taking any actions it believes are reasonably necessary to protect against endangerment to the safety of employees or the public or damage to facilities.
- 3.6 In order to carry out its responsibilities under this Attachment K, the Independent Entity will have complete access, subject to appropriate confidentiality provisions, to all data and information prepared by or on behalf of or generated for the Transmission Provider's transmission operations personnel that are reasonably necessary to achieve the purposes and objectives of this Attachment K. To the extent that the Independent Entity requires access to data or information obtained by the Transmission Provider from other market participants, including the Transmission Provider's wholesale merchant function employees, such data or information shall be treated as confidential information unless otherwise available from public sources or public disclosures.

4 GENERAL

- 4.1 The Independent Entity, in consultation with the Transmission Provider and Tariff Participants, shall develop and revise, as appropriate, operating procedures governing its exercise of the responsibilities set out herein ("Operating Procedures"), which shall be made publicly available on the OASIS except to the extent the Independent Entity and the Transmission Provider jointly determine that certain of the procedures should not be made publicly available for security reasons.
- 4.2 The Independent Entity shall, in consultation with the Transmission Provider and any Tariff Participants, develop and post on the Transmission Provider's OASIS procedures pursuant to which the Transmission Provider, and any interested Tariff Participants may, as provided for herein, meet with representatives of the Independent Entity to discuss, among other things, the Operating Procedures, the Independent Entity's exercise of the responsibilities set out therein, and the division of responsibilities and functions set forth in this Attachment K.

- 4.2.1. At a reasonable date to be established before the Independent Entity begins operations under this Attachment K, the Independent Entity shall establish a mechanism to review the Operating Procedures and any related protocols with the Transmission Provider and Tariff Participants.
- 4.2.2. During the first six months of operation, the Independent Entity shall conduct monthly conference calls at which the Independent Entity shall solicit, consider, and respond to the input of the Transmission Provider and Tariff Participants as to the Independent Entity's provisions of the functions under this Attachment K.
- 4.2.3 During the term of this Agreement, the Independent Entity shall conduct regularly scheduled meetings at which it shall solicit, consider, and respond to the input of the Transmission Provider and Tariff Participants as to the Independent Entity's provision of the functions under this Attachment K. This process shall include an opportunity for both written and verbal input.
- 4.2.4 No later than six months from its first date of operations under this Attachment K, the Independent Entity shall make available and maintain a section on the Transmission Provider's OASIS (or related website) under which notices to the Transmission Provider and Tariff Participants and input from the Transmission Provider and Tariff Participants on the Independent Entity's role and performance may be posted.
- 4.3 The Independent Entity shall comply with all applicable Federal or State laws or authorities that would otherwise govern the Transmission Provider in performing the functions provided for herein.
- 4.4 The Independent Entity shall develop procedures for ensuring the confidentiality of any confidential information or materials, including information or materials that include or comprise Critical Energy Infrastructure Information, made available to the Independent Entity by the Transmission Provider or any Tariff Participant.
- 4.5 The Independent Entity shall take no action, nor request that any power plant operator take any action, that would impair the safety, reliability, or environmental compliance of any such facility. To the extent applicable, the Independent Entity shall perform all of its functions in a manner consistent with all Federal and State regulatory and licensing requirements applicable to the generating facilities, including but not limited to any applicable nuclear power plant license conditions and applicable requirements or orders of the Nuclear Regulatory Commission ("NRC") and licenses and other applicable Federal and State regulatory requirements for hydro-electric facilities.
- The Transmission Provider will not modify the TSR Processing Criteria, the Transmission Study Criteria, or the Interconnection Study Criteria, without first providing sixty (60) days notice to the Independent Entity. The Independent Entity may independently propose that the Transmission Provider modify the TSR Processing Criteria, the Transmission Study Criteria, or the Interconnection Study Criteria by raising such a proposal in a report to the Transmission Provider and Tariff Participants. The

Independent Entity will post on OASIS a notice of any modification to the relevant criteria. The Transmission Provider will remain the sole entity with the right to file with FERC modifications to the Tariff and the LGIP under Section 205 of the Federal Power Act.

- 4.7 The Independent Entity shall not have the right, nor shall it be authorized, under Section 205 of the Federal Power Act to file or make application to FERC to propose revisions to this Attachment K or any rates, terms, or conditions of the Tariff. Nothing in this Attachment K shall be interpreted or construed as in any way limiting the rights of the Transmission Provider under Section 205 of the Federal Power Act to file or make application to FERC to propose revisions to this Attachment K or any rates, terms, or conditions of the Tariff.
- 4.8 Except as otherwise provided herein, in the event that any dispute arises relating to this Attachment K between the Independent Entity and the Transmission Provider, or between the Independent Entity and any Tariff Participant, the dispute shall first be referred to an executive management representative of each party. If the executive management representatives are unable to resolve the dispute within ten (10) business days, the dispute resolution provisions of the Tariff shall apply, provided, however, that nothing in this Attachment K shall limit or abridge any rights of any Tariff Participant to seek any other relief that may be available under the Tariff.
- 4.9 In the event that the Independent Entity believes that any provision of this Attachment K is limiting or restricting the Independent Entity's ability to perform the functions provided for herein, it shall bring such concerns to the attention of the Transmission Provider and, if the Transmission Provider agrees, the Transmission Provider shall file or make application to FERC to propose revisions to this Attachment K. If the Transmission Provider disagrees as to the revisions proposed by the Independent Entity, the Independent Entity shall prepare a detailed analysis supporting such proposed revisions and the Transmission Provider shall submit to FERC such detailed analysis as well as the reason(s) that the Transmission Provider disagrees as to the revisions proposed by the Independent Entity, and FERC may act on such submissions pursuant to Section 206 of the Federal Power Act; provided, however, that the Independent Entity shall not propose to alter, nor shall it propose that the Transmission Provider file or make application to FERC to alter, the scope or nature of the functions provided for under this Attachment K.

5 GENERAL RESPONSIBILITIES OF THE INDEPENDENT ENTITY, THE TRANSMISSION PROVIDER, GENERATION OWNERS AND LOAD SERVING ENTITIES

5.1 The responsibilities and duties of the Independent Entity and Transmission Provider are set forth in this Attachment K. The Transmission Provider also shall participate in any ad hoc working groups established by the Independent Entity

- 5.2 Generation Owners shall have the following responsibilities:
 - 5.2.1 Notify the Independent Entity of any applicable NRC and/or other applicable requirements that govern the operation of any generating facilities interconnected with the Transmission System.
 - 5.2.2 Submit and coordinate unit schedules as necessary to permit the Independent Entity to assess transmission transfer capability and transmission reliability.
 - 5.2.3 Participate in ad hoc working groups established by the Independent Entity.
- 5.3 Load Serving Entities shall have the following responsibilities:
 - 5.3.1 Submit operating data as the Independent Entity may require to perform its various functions.
 - 5.3.2 Participate in ad-hoc working groups established by the Independent Entity.

6 PROCESSING OF TRANSMISSION SERVICE REQUESTS, DETERMINATION OF TRANSFER CAPABILITY, AND OASIS MANAGEMENT

Transmission Service Requests

- 6.1 The Independent Entity will process and evaluate (i.e., grant or deny) all TSRs, including those transactions associated with network service and point-to-point service agreements, on a non-discriminatory basis consistent with the Tariff, the TSR Processing Criteria, the Transmission Study Criteria, and accepted utility practice. The Independent Entity shall be responsible for documenting all transmission service requests under the Tariff, the disposition of such requests, and any supporting data required to support the decision with respect to such requests. The Independent Entity's responsibilities in processing and evaluating TSRs include the following:
 - 6.1.1 Collecting all necessary information for the processing and evaluation of a TSR;
 - 6.1.2 Coordinating as necessary with the Transmission Provider when processing requests for service into and out of transmission facilities or distribution facilities;
 - 6.1.3 Determining that all preconditions necessary for a TSR to be considered a Completed Application have been met;
 - 6.1.4 Maintaining appropriate TSR queues for Short-Term and Long-Term TSRs;
 - 6.1.5 Determining whether sufficient transmission capability exists to grant or deny a TSR;
 - 6.1.6 Providing and executing SIS Agreements and Facilities Studies Agreements;
 - 6.1.7 Performing SISs, consistent with Sections 6.4.1 to 6.4.5 of this Attachment K, as necessary to further evaluate whether sufficient transmission capability exists to

- accommodate a TSR or what additional facilities might be, subject to further review in a Facilities Study, required to allow the granting of a request;
- 6.1.8 Performing SISs in response to requests to designate new Network Resources under Section 30 of the Tariff, including requests by the Transmission Provider's wholesale merchant function on behalf of Native Load Customers, and verifying that applicable Tariff requirements have been met;
- 6.1.9 Providing all notices related to the processing and evaluation of a TSR to the Transmission Customer;
- 6.1.10 Independently reviewing the Transmission Provider's description of the ATC Methodology, SIS Criteria, Facilities Study Criteria, and TSR Processing Criteria to ensure that these criteria are sufficiently defined for Transmission Customers to understand how TSRs are processed and evaluated. If the Independent Entity concludes that additional explanatory detail is required, the Transmission Provider will modify the appropriate business practice documents to include the additional detail. The Independent Entity will post on OASIS the final versions of the criteria, including the Transmission Provider's local reliability criteria, subject to the confidentiality provisions of Section 3.6 herein.
- 6.1.11 Independently reviewing data, information and analyses, including Facilities Studies, provided or performed by the Transmission Provider;
- 6.1.12 Ensuring that the TSR Processing Criteria and the Transmission Study Criteria are posted on OASIS and are sufficiently detailed so that the evaluation and processing of TSRs is transparent and understandable, subject to the confidentiality provisions of Section 3.6 herein;
- 6.1.13 Responding to inquiries by Transmission Customers regarding TSRs concerning the functions performed by the Independent Entity as set forth in this Attachment K;
- 6.1.14 Determining the amount and applicability of Ancillary Services under Schedules 1-6 of the Tariff that are needed or required for each transaction by Transmission Customers to comport with reliability guidelines; and
- 6.1.15 Billing and normal collection of the applicable charges for SIS and Facilities Studies.
- 6.2 The processing and evaluation of TSRs requires coordination between the Independent Entity and the Transmission Provider. The Transmission Provider shall be responsible for the following functions associated with the processing and evaluation of TSRs, and the Independent Entity will ensure that these functions are performed on a non-discriminatory basis consistent with the TSR Processing and Transmission Study Criteria:
 - 6.2.1 Providing data inputs and other information and analyses required by the Independent Entity to study individual TSRs;

- 6.2.2 Tendering, entering into, and filing all Transmission Service Agreements in accordance with the Tariff;
- 6.2.3 Entering into any Facilities Study agreement with the Independent Entity and the Transmission Customer;
- 6.2.4 Performing Facilities Studies consistent with Sections 6.4.6 to 6.4.10 herein;
- 6.2.5 Billing and collecting the applicable charges for transmission service under the Tariff and Ancillary Services under Schedules 1-6 of the Tariff; and
- 6.2.6 Supplying the Independent Entity with detailed descriptions of the current Transmission Study Criteria and TSR Processing Criteria, including: (i) the Transmission Provider's current Tariff; (ii) applicable NERC Reliability Standards and SERC supplements to those standards; (iii) the Transmission Provider's local reliability criteria; and (iv) the Transmission Provider's business practices related to processing TSRs and OASIS administration, and the methodologies for calculating ATC values and conducting SISs and Facilities Studies.

TSR Processing Criteria

- 6.3 **Base Case Model Development:** Once the Base Case Model is complete, the Independent Entity will participate with the Transmission Provider in any additional regional model development processes necessary to create updated quarterly and monthly regional models from the seasonal and annual models. These models, which are updated quarterly or monthly, will serve as the basis for the annual, seasonal, monthly, or daily Base Case Models for the Transmission System used to evaluate TSRs.
 - 6.3.1 In order to develop the regional models for the Transmission System referenced above, the Transmission Provider will provide to the Independent Entity and other modeling group participants such data and information as may be necessary to prepare and update the models. The Independent Entity will review the data inputs provided by the Transmission Provider to ensure that the data inputs and resulting models are consistent with the Transmission Study Criteria.
- 6.4 **Studies for Long-Term TSRs:** All Long-Term TSRs will be evaluated in accordance with the Tariff. If a SIS indicates that additions or upgrades are needed to accommodate the TSR, the Transmission Customer may request a Facilities Study. The division of responsibilities and duties related to such studies are described in this Section 6.4.

System Impact Study:

6.4.1 If necessary, the Independent Entity shall inform the Transmission Customer of the need for an SIS and provide the Transmission Customer with the standard form SIS Agreement to be executed by the Independent Entity and the Transmission Customer. The SIS Agreement shall obligate the Transmission Customer to pay for the actual cost of the SIS, including any costs incurred by the Independent Entity or the Transmission Provider associated with performing their

- respective functions under Sections 6.4.1 to 6.4.5 herein. The Independent Entity will be responsible for determining whether the Transmission Customer has timely complied with all requirements necessary for an SIS and for a request to remain a Completed Application. The Independent Entity will provide a copy of the executed SIS Agreement to the Transmission Provider.
- 6.4.2 After confirming that all applicable requirements have been met by the Transmission Customer, the Independent Entity will perform or cause to be performed the required SIS. If the SIS is performed by someone other than the Independent Entity, the Independent Entity still retains the ultimate responsibility and authority for the study. To perform the SIS, the Independent Entity will use the current set of applicable Base Case Models developed pursuant to Section 6.4 herein. The Independent Entity will update the applicable Base Case Models to reflect then-current data from the Transmission Provider's OASIS regarding additional Long-Term TSRs, including new or expired rollover rights. The Independent Entity will perform the SIS as set forth in the SIS Criteria and will ensure that the Base Case Models, including any updates thereto, are consistent with the SIS Criteria.
- 6.4.3 The Independent Entity will provide the Transmission Provider or affected third-party Transmission Provider with an initial draft of the SIS report including a list of any constrained transmission elements. The Transmission Provider or affected third-party Transmission Provider will have the opportunity to review and comment on the report and will be responsible for developing a mitigation plan to address any constrained transmission elements. The Independent Entity will review the affected Transmission Provider's mitigation plan and will include the mitigation plan and the Transmission Provider's comments in the final SIS report provided to the Transmission Customer.
- 6.4.4 The Independent Entity, in conjunction with the Transmission Provider, will use due diligence to finalize the required SIS in accordance with the Tariff and will provide all notices to the Transmission Customer required under the Tariff. The Independent Entity will post the SIS on OASIS and respond to requests for work papers supporting the SIS. If the Transmission Provider and the Independent Entity cannot resolve any disagreements regarding the SIS, the Independent Entity will modify the draft SIS report to identify the areas of disagreement and will provide this SIS report to the Transmission Customer by posting on OASIS.
- 6.4.5 If the Transmission Provider and the Independent Entity agree that no additions or upgrades to the Transmission System are needed to accommodate the TSR, and the Independent Entity has determined that the Transmission Customer has met the necessary Tariff requirements, the Transmission Provider will provide the Transmission Customer with a Transmission Service Agreement to be executed by the Transmission Provider and the Transmission Customer. The Transmission Customer may request that the Transmission Provider file an unexecuted Transmission Service Agreement with FERC in accordance with the Tariff if: (i) the Transmission Provider and the Independent Entity cannot agree on whether

any additions or upgrades to the Transmission System are needed to accommodate the TSR; (ii) the Transmission Customer does not accept the results of the SIS; or (iii) the Transmission Provider and the Transmission Customer cannot agree on the terms and conditions of the Transmission Service Agreement. If the Transmission Provider and the Independent Entity cannot agree on the scope of the additions or upgrades to the Transmission System that are needed to accommodate the TSR, or if the Transmission Customer does not accept the scope of the necessary additions or upgrades, the parties shall attempt to resolve any such disagreement through the more detailed Facilities Study process in Section 0 below if the Transmission Customer elects to undertake such a study.

Facilities Study:

- 6.4.6 If a SIS indicates that additions or upgrades are needed to accommodate the TSR, the Independent Entity will provide the Transmission Customer with the standard form Facilities Study Agreement to be executed by the Independent Entity, the Transmission Provider, and the Transmission Customer. The Facilities Study Agreement shall obligate the Transmission Customer to pay for the actual cost of the Facilities Study, including any costs incurred by the Independent Entity or the Transmission Provider associated with performing their respective functions under Sections 6.4.6 to 6.4.10 herein. The Independent Entity will be responsible for determining whether the Transmission Customer has timely complied with all requirements necessary for a Facilities Study and for a request to remain a Completed Application.
- After confirming that all applicable requirements have been met by the 6.4.7 Transmission Customer, the Independent Entity shall direct the Transmission Provider to perform a Facilities Study. The Independent Entity will provide the Transmission Provider with the updated Base Case Models used by the Independent Entity in performing the SIS, including any additional data that the Independent Entity determines may have material impact on the Facilities Study results. The Independent Entity shall direct the Transmission Provider to determine the scope and estimate the cost of the additions or upgrades to the Transmission System needed to accommodate the TSR. The Transmission Provider shall use the updated Base Case Models provided by the Independent Entity as the basis for this determination and shall make this determination on a non-discriminatory basis consistent with the Facilities Study Criteria. The Transmission Provider will provide the Independent Entity with its determination of the scope and estimate of the cost of the necessary additions or upgrades and, upon request, supporting documents and work papers.
- 6.4.8 The Independent Entity will review the Transmission Provider's determination regarding the scope and cost of the necessary additions or upgrades. To the extent necessary, the Independent Entity shall coordinate the Facilities Study with other affected transmission providers and conduct any meetings between the Transmission Provider and any other affected transmission providers. The Independent Entity will prepare an initial draft of the Facilities Study report. The

Transmission Provider will have the opportunity to review and comment on the report and its comments will be included in the final Facilities Study report provided to the Transmission Customer. If the Independent Entity and the Transmission Provider cannot resolve any disagreements regarding the Facilities Study, the Independent Entity will modify the draft Facilities Study report to identify the areas of disagreement and will provide this Facilities Study report to the Transmission Customer.

- 6.4.9 The Independent Entity, in conjunction with the Transmission Provider, will use due diligence to finalize the required Facilities Study in accordance with the Tariff and will provide all notices to the Transmission Customer required under the Tariff. The Independent Entity will provide the Transmission Customer with the final Facilities Study report and will respond to requests for work papers supporting the Facilities Study.
- 6.4.10 If the Independent Entity and the Transmission Provider agree on the final Facilities Study, and the Independent Entity has determined that the Transmission Customer has met the necessary Tariff requirements, the Transmission Provider will provide the Transmission Customer with a Transmission Service Agreement to be executed by the Transmission Provider and the Transmission Customer. If the Independent Entity and the Transmission Provider cannot agree, or the Transmission Customer does not accept the final Facilities Study, or if the Transmission Provider and the Transmission Customer cannot agree on the terms and conditions of the Transmission Service Agreement, the Transmission Customer may request that the Transmission Provider file an unexecuted Transmission Service Agreement with FERC in accordance with the Tariff.
- 6.5 **Studies for Short-Term TSRs:** The Independent Entity will evaluate all Short-Term TSRs in accordance with the ATC Methodology using the Base Case Models described in Section 6.3.

TTC and ATC Calculation

- 6.6 The Independent Entity shall calculate TTC and ATC in accordance with the provisions of Attachment C-3 of the Tariff.
 - 6.6.1 ATC will be calculated by the Independent Entity on a Control Area-to-Control Area basis for the Transmission Provider's Control Area interfaces.
 - 6.6.2 The Independent Entity will be responsible for ensuring that ATC values are calculated on a nondiscriminatory basis consistent with the ATC Methodology. The Independent Entity's responsibilities in calculating ATC values will include (a) reviewing the data inputs to the ATC Base Case Models; (b) responding to Transmission Customer inquiries regarding the ATC process; (c) requiring modifications to the Base Case Models or data inputs to the extent such modifications are necessary to ensure consistency with the ATC Methodology as

- provided in Section 6.3.1 herein; and (d) requiring the recalculation (or resynchronization) of ATC values after modifications made under Section 6.6.6 are implemented.
- 6.6.3 ATC will be posted based in a manner that recognizes contract path limitations for so long as the contract-path basis is the prevailing mechanism for reserving transmission service under the Tariff.
- 6.6.4 The Independent Entity shall calculate the ATC for prospective Firm Point-to-Point Transmission Service in a manner that does not assume congestion management options, such as the redispatch of generation to provide such Firm Point-to-Point Transmission Service.
- 6.6.5 The Transmission Provider will supply data inputs and information necessary for the Base Case Models, and will assist the Independent Entity to the extent requested in responding to Transmission Customer inquiries. The Independent Entity will ensure that the Transmission Provider performs these functions on a nondiscriminatory basis consistent with the ATC Methodology.
- 6.6.6 The Independent Entity will have authority to direct the Transmission Provider to modify the Base Case Models or data inputs to ensure that the ATC values are calculated in a manner consistent with the ATC Methodology posted on OASIS. If the Independent Entity and the Transmission Provider cannot agree on a modification to the Base Case Models or data inputs proposed by the Independent Entity under this Section 6.6, the Independent Entity's position shall control and serve as the basis for evaluating TSRs pending resolution of any such disagreement. To the extent the Independent Entity directs a modification under this section, the Independent Entity shall also have the authority to direct the resynchronization of ATC values after the modification is implemented.
- 6.7 The Independent Entity shall review all data received from Reliability Coordinators, Control Areas, independent transmission system operators, regional reliability councils, or other security entities that impact ATC calculations, and shall share such ATC calculations with those Reliability Coordinators, Control Areas, transmission providers, independent transmission system operators, regional reliability councils, or other security entities that are or may be impacted by such ATC calculations.

OASIS Administration

- Independent Entity Duties and Responsibilities: The Independent Entity will administer the Transmission Provider's existing OASIS node for purposes of processing and evaluating TSRs and ensuring compliance with the Transmission Provider's obligation to publicly post transmission-related information pursuant to the Commission's OASIS regulations. The Independent Entity's responsibilities and duties in administering OASIS will include the following:
 - 6.8.1 Performing the duties of a Responsible Party as defined in the Commission's OASIS regulations, 18 C.F.R. § 37.5; and

- 6.8.2 Posting information required to be on the Transmission Provider's OASIS under the Commission's OASIS regulations, 18 C.F.R. § 37.6.
- 6.9 **Transmission Provider Duties and Responsibilities:** The Transmission Provider will be responsible for the following functions associated with OASIS operations, and the Independent Entity will ensure that these functions are performed consistent with the TSR Processing Criteria and the Commission's OASIS regulations:
 - 6.9.1 Providing the Independent Entity with the information necessary to comply with the posting requirements.

Transmission Scheduling

- 6.10 The Independent Entity shall act as the single contact for Transmission Customers scheduling transactions into, out of, or through the Transmission Provider's Control Area.
- 6.11 The Independent Entity shall process transmission reservations in accordance with currently accepted industry practice(s).
- 6.12 When a Transmission Customer submits an electronic tag to implement a transaction for a previously accepted transmission reservation, the Independent Entity shall be responsible for evaluating the tag to ensure that it contains the proper transmission reservation information. The Independent Entity is responsible for updating the electronic tagging system based upon such review.
- 6.13 When a Transmission Customer submits an electronic tag to implement a transaction for a previously accepted transmission reservation, the Transmission Provider shall be responsible for evaluating the tag to ensure that implementation of such transaction will not have adverse impact on system reliability. The Transmission Provider is responsible for updating the electronic tagging system based upon such review.
- 6.14 As operator of the transmission system, the Transmission Provider has responsibility for implementing approved tags (entering the tags into the energy management system), and verifying the resulting schedule with adjacent control areas.

7 GENERATOR INTERCONNECTIONS

7.1 <u>Independent Entity Duties and Responsibilities</u>: The Independent Entity shall process all generation interconnection requests and perform generation interconnection impact studies in a nondiscriminatory manner in accordance with the LGIP and the Transmission Provider's Interconnection Study Criteria. The Independent Entity will have authority to interpret and apply the guidelines, and shall have responsibility for administration of the Transmission Provider's LGIP, including queuing of interconnection requests, completion of specified studies associated with interconnection requests, and development of the transmission system modeling process, software, and assumptions used to evaluate requests to interconnect to the Transmission Provider transmission system. The Independent Entity's responsibilities in processing and evaluating Interconnection Requests include the following:

- 7.1.1 Collecting from the Interconnection Customer and the Transmission Provider all necessary information for the processing and evaluation of an Interconnection Request;
- 7.1.2 Determining that all preconditions necessary for a valid Interconnection Request have been met;
- 7.1.3 Performing Interconnection Feasibility Studies, Interconnection SISs, and Optional Interconnection Studies and coordinating such studies with Affected Systems;
- 7.1.4 Maintaining and administering a queue for Interconnection Study requests;
- 7.1.5 Posting on the Transmission Provider's OASIS a list of Interconnection Requests and related information as required under the LGIP;
- 7.1.6 Providing and executing Interconnection Study Agreements and Facility Study Agreements;
- 7.1.7 Providing all notices related to the processing and evaluation of an Interconnection Request to the Interconnection Customer;
- 7.1.8 Independently reviewing the Transmission Provider's description of the Interconnection Study Criteria to ensure that these criteria are sufficiently defined for Interconnection Customers to understand how Interconnection Requests are processed and evaluated. If the Independent Entity concludes that additional explanatory detail is required, the Transmission Provider will modify the appropriate business practice documents to include the additional detail. The Independent Entity will post on OASIS the final versions of the criteria, subject to the confidentiality provisions of Section 3.6 herein;
- 7.1.9 Independently reviewing data, information, and analyses, including Interconnection Facilities Studies, provided or performed by the Transmission Provider;
- 7.1.10 Responding to inquiries by Interconnection Customers.
- 7.2 <u>Transmission Provider Duties and Responsibilities</u>: The processing and evaluation of Interconnection Requests requires coordination between the Transmission Provider and the Independent Entity. The Transmission Provider will be responsible for the following functions associated with the processing and evaluation of Interconnection Requests, and the Independent Entity will ensure that these functions are performed consistent with the LGIP and the Interconnection Study Criteria:
 - 7.2.1 Providing data inputs, information, and analyses required by the Independent Entity to perform Interconnection Studies and process Interconnection Requests;

- 7.2.2 Entering into and filing all Interconnection Facilities Study Agreements and Large Generator Interconnection Agreements in accordance with the Tariff;
- 7.2.3 Supplying the Independent Entity with the Interconnection Study Criteria, including descriptions or copies of: (i) the LGIP and LGIA provisions applicable to the performance of Interconnection Studies; (ii) applicable NERC Reliability Standards and SERC supplements to those standards; (iii) the Transmission Provider's business practices related to Interconnection Studies; and (iv) the Transmission Provider's local reliability criteria; and
- 7.2.4 Performing Interconnection Facilities Studies consistent with Section 7.6 herein.
- 7.3 Studies for Interconnection Service Requests: The LGIP provisions of the Tariff shall determine the studies necessary to interconnect with the Transmission System. The Independent Entity will be responsible for coordinating all Interconnection Studies with any Affected Systems and conducting all meetings between the Affected Systems, the Transmission Provider and the Interconnection Customer, in accordance with the provisions of the LGIP. The division of additional responsibilities in performing Interconnection Studies is described below.

7.4 Interconnection Feasibility Study

- 7.4.1 Pursuant to the LGIP, the Independent Entity shall provide the Interconnection Customer with an Interconnection Feasibility Study Agreement to be executed by the Interconnection Customer and the Independent Entity. The Interconnection Feasibility Study Agreement shall obligate the Interconnection Customer to pay for the actual cost of the Interconnection Feasibility Study, including any costs incurred by the Independent Entity or the Transmission Provider associated with performing their respective functions under Sections 7.4.1 to 7.4.3 herein. The Independent Entity will be responsible for determining whether the Interconnection Customer has timely complied with all requirements necessary for an Interconnection Feasibility Study and a valid Interconnection Request, as provided in the LGIP. The Independent Entity will provide a copy of the executed Interconnection Feasibility Study Agreement to the Transmission Provider.
- 7.4.2 After confirming that all applicable requirements have been met by the Interconnection Customer, the Independent Entity will perform or cause to be performed the required Feasibility Study, including any Re-Studies. If the Feasibility study is performed by someone other than the Independent Entity, the Independent Entity still retains the ultimate responsibility and authority for the study. To perform the Feasibility Study, the Independent Entity will use the current set of applicable Base Case Models developed pursuant to Section 8.5 herein. The Independent Entity will update the applicable Base Case Models to reflect then-current data from the Transmission Provider's OASIS regarding additional Long-Term TSRs, including new or expired rollover rights. The Independent Entity will perform the Feasibility Study as set forth in the

Interconnection Study Criteria and will ensure that the Base Case Models, including any updates thereto, are developed as set forth in the Interconnection Study Criteria. The Independent Entity will provide the Transmission Provider with an initial draft of the Feasibility Study report, and the Transmission Provider will have the opportunity to review and comment on the report.

7.4.3 The Independent Entity will use Reasonable Efforts to finalize the Feasibility Study in accordance with the LGIP provisions of the Tariff and will provide all notices to the Interconnection Customer required in that section. The Independent Entity will be responsible for responding to requests for work papers or other supporting documentation under the LGIP. If the Transmission Provider and the Independent Entity cannot resolve any disagreements regarding the Feasibility Study, the Independent Entity will modify the draft Feasibility Study report to identify the areas of disagreement and will provide this Feasibility Study report to the Interconnection Customer. If the Transmission Provider, the Independent Entity, and the Interconnection Customer ultimately cannot agree on the final Interconnection Feasibility Study report, Section 13.5 of the LGIP will apply.

7.5 <u>Interconnection System Impact Study</u>

- 7.5.1 Pursuant to the LGIP, the Independent Entity shall provide the Interconnection Customer with the Interconnection SIS Agreement to be executed by the Independent Entity and the Interconnection Customer. The Interconnection SIS Agreement shall obligate the Interconnection Customer to pay for the actual cost of the Interconnection SIS, including any costs incurred by the Independent Entity or the Transmission Provider associated with performing their respective functions under Section 7.5 herein. The Independent Entity will be responsible for determining whether the Interconnection Customer has timely complied with all requirements necessary for an Interconnection SIS and for a valid Interconnection Request, as set forth in the LGIP. The Independent Entity will provide a copy of the executed Interconnection SIS Agreement to the Transmission Provider.
- 7.5.2 After confirming that all applicable requirements have been met by the Interconnection Customer, the Independent Entity shall perform or cause to be performed the required Interconnection SIS, including any Re-Studies. If the Interconnection SIS is performed by someone other than the Independent Entity, the Independent Entity still retains the ultimate responsibility and authority for the study. To perform the Interconnection SIS, the Independent Entity will use the current set of applicable Base Case Models. The Independent Entity will update the applicable Base Case Models to reflect then-current data from the Transmission Provider's OASIS regarding additional Long-Term TSRs, including new or expired rollover rights. The Independent Entity will perform the Interconnection SIS as set forth in the Interconnection Study Criteria and will ensure that the Base Case Models, including any updates thereto, are developed as set forth in the Interconnection Study Criteria.

- 7.5.3 The Independent Entity will provide the Transmission Provider or other Affected System with an initial draft of the Interconnection SIS report, including a list of any constrained transmission elements. The Transmission Provider will have the opportunity to review and comment on the report and will be responsible for developing a mitigation plan to address any constrained transmission elements. The Independent Entity will review the Transmission Provider's mitigation plan and will include the mitigation plan and the Transmission Provider's comments in the final Interconnection SIS report provided to the Interconnection Customer.
- 7.5.4 The Independent Entity, in conjunction with the Transmission Provider, will use Reasonable Efforts to finalize the required Interconnection SIS in accordance with the LGIP and will provide all notices to the Interconnection Customer required by the LGIP. The Independent Entity will be responsible for responding to requests for work papers supporting the Interconnection SIS. If the Transmission Provider and the Independent Entity cannot resolve any disagreements regarding the Interconnection SIS, the Independent Entity will modify the draft Interconnection SIS report to identify the areas of disagreement and will provide this Interconnection SIS report to the Interconnection Customer. If the Transmission Provider, the Independent Entity, and the Interconnection Customer ultimately cannot agree on the final Interconnection SIS report, Section 13.5 of the LGIP will apply.

7.6 <u>Interconnection Facilities Study</u>

- 7.6.1 Pursuant to the LGIP provisions of the Tariff, the Independent Entity will tender the Interconnection Facilities Study Agreement to the Interconnection Customer to be executed by the Independent Entity, the Transmission Provider, any Affected System, and the Interconnection Customer. The Interconnection Facilities Study Agreement shall obligate the Interconnection Customer to pay for the actual cost of the Interconnection Facilities Study, including any costs incurred by the Independent Entity or the Transmission Provider associated with performing their respective functions under Section 7.6 herein.
- 7.6.2 After confirming that all applicable requirements have been met by the Interconnection Customer, the Independent Entity shall direct the Transmission Provider to perform an Interconnection Facilities Study. The Independent Entity will provide the Transmission Provider with the relevant SIS data used by the Independent Entity in performing the Interconnection SIS, including any additional data that the Independent Entity determines may have material impact on the Interconnection Facilities Study results. The Independent Entity shall direct the Transmission Provider to determine the equipment, engineering, procurement, and construction work necessary to implement the conclusions in the Interconnection SIS. The Transmission Provider shall use the relevant SIS data provided by the Independent Entity as the basis for this determination and shall make this determination consistent with the Interconnection Study Criteria. The Transmission Provider will provide the Independent Entity with its determination and, upon request, supporting documents and work papers.

- 7.6.3 The Independent Entity will review the Transmission Provider's determination regarding the equipment, engineering, procurement, and construction work necessary to implement the conclusions in the Interconnection SIS. The Independent Entity will prepare an initial draft of the Interconnection Facilities Study report. The Transmission Provider will have the opportunity to review and comment on the report and the Transmission Provider's comments will be included in the final Interconnection Facilities Study report provided to the Interconnection Customer. If the Independent Entity and the Transmission Provider cannot resolve any disagreements regarding the Interconnection Facilities Study, the Independent Entity will modify the draft Interconnection Facilities Study report to identify the areas of disagreement and will provide this Interconnection Facilities Study report to the Interconnection Customer.
- 7.6.4 The Independent Entity, in conjunction with the Transmission Provider, will use Reasonable Efforts to finalize the required Interconnection Facilities Study in accordance with the LGIP and will provide all notices to the Interconnection Customer required in the LGIP. The Independent Entity will be responsible for providing the Interconnection Customer with the final Interconnection Facilities Study report and responding to requests for work papers and supporting documentation for the Interconnection Facilities Study.
- 7.6.5 If the Independent Entity and the Transmission Provider agree on the final Facilities Study, and the Interconnection Customer accepts the final Facilities Study, and the Independent Entity has determined that the Interconnection Customer has met the necessary LGIP requirements, the Transmission Provider will provide the Interconnection Customer with a LGIA to be executed by the Transmission Provider and the Interconnection Customer. If the Independent Entity and the Transmission Provider cannot agree, or the Interconnection Customer does not accept the final Interconnection Facilities Study, or if the Transmission Provider and the Interconnection Customer cannot agree on the terms and conditions of the LGIA, the parties may attempt to resolve the dispute pursuant to Section 13.5 of the LGIP or the Interconnection Customer may request that the Transmission Provider file an unexecuted LGIA with FERC in accordance with Section 11.3 of the LGIP.
- 7.7 Optional Interconnection Study: If the Interconnection Customer requests an Optional Interconnection Study, the division of responsibilities between the Transmission Provider and the Independent Entity shall be the same as for the Interconnection SIS.
- 8 [RESERVED].

ATTACHMENT L

THE NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION TRANSMISSION LOADING RELIEF PROCEDURES AND PROCEDURES FOR ADDRESSING PARALLEL FLOWS

The North American Electric Reliability Corporation's ("NERC")'s Transmission Loading Relief ("TLR") Procedures originally filed March 18, 1998, which are now the mandatory Reliability Standards that address TLR, and any amendments thereto, on file and accepted by the Commission, are hereby incorporated and made part of this tariff. See www.nerc.com for the current version of the NERC's TLR Procedures.

Notice of Adoption of Local Transmission Loading Relief Procedure in CP&L Zone

Pursuant to NERC Reliability Standard IRO-006-3 – Reliability Coordination – TLR, R2, CP&L adopts a local TLR procedure that will be used to supplement the current NERC TLR Procedures.

CP&L will implement this procedure with neighbors signing an agreement agreeing to the local procedure. CP&L will use the current NERC TLR Procedure that has a 5% Transfer Distribution Factor ("TDF") for determining Non-Firm schedule curtailment.

If the NERC TLR Procedure (NERC Standard IRO-006-3) does not provide the required relief from Non-Firm schedules, then the parties will curtail Non-Firm schedules down to 3% TDF in accordance with local procedures as described in section R2 of the NERC TLR Standard.

This will be done for any tagged schedule that has a 3% TDF that can provide relief on the flowgate, where either CP&L or the reciprocal party is a source or sink for the schedule.

If any schedules are identified that curtailment will provide relief on the flowgate, then that party will curtail the schedules until the flow is reduced on the flowgate or all of the schedules have been curtailed.

The local transmission loading relief procedure described above shall be used to supplement, and not as a substitute for, the Interconnection-wide procedure. The parties agree that they will comply with the NERC TLR Procedure and all NERC Reliability Standards at all times.

ATTACHMENT M

SMALL GENERATOR INTERCONNECTION PROCEDURES (SGIP)

(For Generating Facilities No Larger Than 20 MW)

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Section 1. Application

1.1 Applicability

- 1.1.1 A request to interconnect a certified Small Generating Facility (See Attachments 3 and 4 for description of certification criteria) no larger than 2 MW shall be evaluated under the section 2 Fast Track Process. A request to interconnect a certified inverter-based Small Generating Facility no larger than 10 kW shall be evaluated under the Attachment 5 10 kW Inverter Process. A request to interconnect a Small Generating Facility larger than 2 MW but no larger than 20 MW or a Small Generating Facility that does not pass the Fast Track Process or the 10 kW Inverter Process, shall be evaluated under the section 3 Study Process.
- 1.1.2 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of these procedures.
- 1.1.3 Neither these procedures nor the requirements included hereunder apply to Small Generating Facilities interconnected or approved for interconnection prior to 60 Business Days after the effective date of these procedures.
- 1.1.4 Prior to submitting its Interconnection Request (Attachment 2), the Interconnection Customer may ask the Transmission Provider's interconnection contact employee or office whether the proposed interconnection is subject to these procedures. The Transmission Provider shall respond within 15 Business Days.
- 1.1.5 Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. The Federal Energy Regulatory Commission expects all Transmission Providers, market participants, and Interconnection Customers interconnected with electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for electric system infrastructure and operational security, including physical, operational, and cyber-security practices.
- 1.1.6 References in these procedures to interconnection agreement are to the Small Generator Interconnection Agreement (SGIA).

1.2 Pre-Application

The Transmission Provider shall designate an employee or office from which information on the application process and on an Affected System can be obtained through informal requests from the Interconnection Customer presenting a proposed project for a specific site. The name, telephone number, and e-mail address of such contact employee or office shall be made available on the Transmission Provider's Internet web site. Electric system information provided to the Interconnection Customer should include relevant system studies, interconnection studies, and other materials useful to an understanding of an interconnection at a particular point on the Transmission Provider's Transmission System,

to the extent such provision does not violate confidentiality provisions of prior agreements or critical infrastructure requirements. The Transmission Provider shall comply with reasonable requests for such information.

1.3 Interconnection Request

The Interconnection Customer shall submit its Interconnection Request to the Transmission Provider, together with the processing fee or deposit specified in the Interconnection Request. The Interconnection Request shall be date- and time-stamped upon receipt. The original date- and time-stamp applied to the Interconnection Request at the time of its original submission shall be accepted as the qualifying date- and timestamp for the purposes of any timetable in these procedures. The Interconnection Customer shall be notified of receipt by the Transmission Provider within three Business Days of receiving the Interconnection Request. The Transmission Provider shall notify the Interconnection Customer within ten Business Days of the receipt of the Interconnection Request as to whether the Interconnection Request is complete or incomplete. If the Interconnection Request is incomplete, the Transmission Provider shall provide along with the notice that the Interconnection Request is incomplete, a written list detailing all information that must be provided to complete the Interconnection Request. The Interconnection Customer will have ten Business Days after receipt of the notice to submit the listed information or to request an extension of time to provide such information. If the Interconnection Customer does not provide the listed information or a request for an extension of time within the deadline, the Interconnection Request will be deemed withdrawn. An Interconnection Request will be deemed complete upon submission of the listed information to the Transmission Provider.

1.4 Modification of the Interconnection Request

Any modification to machine data or equipment configuration or to the interconnection site of the Small Generating Facility not agreed to in writing by the Transmission Provider and the Interconnection Customer may be deemed a withdrawal of the Interconnection Request and may require submission of a new Interconnection Request, unless proper notification of each Party by the other and a reasonable time to cure the problems created by the changes are undertaken.

1.5 Site Control

Documentation of site control must be submitted with the Interconnection Request. Site control may be demonstrated through:

- 1.5.1 Ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Small Generating Facility;
- 1.5.2 An option to purchase or acquire a leasehold site for such purpose; or
- 1.5.3 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.

1.6 Queue Position

The Transmission Provider shall assign a Queue Position based upon the date- and time-stamp of the Interconnection Request. The Queue Position of each Interconnection Request will be used to determine the cost responsibility for the Upgrades necessary to accommodate the interconnection. The Transmission Provider shall maintain a single queue per geographic region. At the Transmission Provider's option, Interconnection Requests may be studied serially or in clusters for the purpose of the system impact study.

1.7 Interconnection Requests Submitted Prior to the Effective Date of the SGIP Nothing in this SGIP affects an Interconnection Customer's Queue Position assigned before the effective date of this SGIP. The Parties agree to complete work on any interconnection study agreement executed prior the effective date of this SGIP in accordance with the terms and conditions of that interconnection study agreement. Any new studies or other additional work will be completed pursuant to this SGIP.

Section 2. Fast Track Process

2.1 Applicability

The Fast Track Process is available to an Interconnection Customer proposing to interconnect its Small Generating Facility with the Transmission Provider's Transmission System if the Small Generating Facility is no larger than 2 MW and if the Interconnection Customer's proposed Small Generating Facility meets the codes, standards, and certification requirements of Attachments 3 and 4 of these procedures, or the Transmission Provider has reviewed the design or tested the proposed Small Generating Facility and is satisfied that it is safe to operate.

2.2 Initial Review

Within 15 Business Days after the Transmission Provider notifies the Interconnection Customer it has received a complete Interconnection Request, the Transmission Provider shall perform an initial review using the screens set forth below, shall notify the Interconnection Customer of the results, and include with the notification copies of the analysis and data underlying the Transmission Provider's determinations under the screens.

2.2.1 Screens

- 2.2.1.1 The proposed Small Generating Facility's Point of Interconnection must be on a portion of the Transmission Provider's Distribution System that is subject to the Tariff.
- 2.2.1.2 For interconnection of a proposed Small Generating Facility to a radial distribution circuit, the aggregated generation, including the proposed Small Generating Facility, on the circuit shall not exceed 15 % of the line section annual peak load as most recently measured at the substation. A line section is that portion of a Transmission Provider's electric system connected to a customer

bounded by automatic sectionalizing devices or the end of the distribution line.

- 2.2.1.3 For interconnection of a proposed Small Generating Facility to the load side of spot network protectors, the proposed Small Generating Facility must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the smaller of 5 % of a spot network's maximum load or 50 kW.¹
- 2.2.1.4 The proposed Small Generating Facility, in aggregation with other generation on the distribution circuit, shall not contribute more than 10 % to the distribution circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed point of change of ownership.
- 2.2.1.5 The proposed Small Generating Facility, in aggregate with other generation on the distribution circuit, shall not cause any distribution protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or Interconnection Customer equipment on the system to exceed 87.5 % of the short circuit interrupting capability; nor shall the interconnection be proposed for a circuit that already exceeds 87.5 % of the short circuit interrupting capability.
- 2.2.1.6 Using the table below, determine the type of interconnection to a primary distribution line. This screen includes a review of the type of electrical service provided to the Interconnecting Customer, including line configuration and the transformer connection to limit the potential for creating over-voltages on the Transmission Provider's electric power system due to a loss of ground during the operating time of any anti-islanding function.

Primary Distribution Line	Type of Interconnection to	Result/Criteria
Туре	Primary Distribution Line	
Three-phase, three wire	3-phase or single phase,	Pass screen
	phase-to-phase	
Three-phase, four wire	Effectively-grounded 3 phase	Pass screen
	or Single-phase, line-to-	
	neutral	

-

A spot Network is a type of distribution system found within modern commercial buildings to provide high reliability of service to a single customer. (Standard Handbook for Electrical Engineers, 11th edition, Donald Fink, McGraw Hill Book Company)

- 2.2.1.7 If the proposed Small Generating Facility is to be interconnected on single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed Small Generating Facility, shall not exceed 20 kW.
- 2.2.1.8 If the proposed Small 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 % of the nameplate rating of the service transformer.
- 2.2.1.9 The Small Generating Facility, in aggregate with other generation interconnected to the transmission side of a substation transformer feeding the circuit where the Small 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 transmission busses from the point of interconnection).
- 2.2.1.10 No construction of facilities by the Transmission Provider on its own system shall be required to accommodate the Small Generating Facility.
- 2.2.2 If the proposed interconnection passes the screens, the Interconnection Request shall be approved and the Transmission Provider will provide the Interconnection Customer an executable interconnection agreement within five Business Days after the determination.
- 2.2.3 If the proposed interconnection fails the screens, but the Transmission Provider determines that the Small Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the Transmission Provider shall provide the Interconnection Customer an executable interconnection agreement within five Business Days after the determination.
- 2.2.4 If the proposed interconnection fails the screens, but the Transmission Provider does not or cannot determine from the initial review that the Small Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards unless the Interconnection Customer is willing to consider minor modifications or further study, the Transmission Provider shall provide the Interconnection Customer with the opportunity to attend a customer options meeting.

2.3 Customer Options Meeting

If the Transmission Provider determines the Interconnection Request cannot be approved without minor modifications at minimal cost; or a supplemental study or other additional studies or actions; or at significant cost to address safety, reliability, or power quality problems, within the five Business Day period after the determination, the Transmission

Provider shall notify the Interconnection Customer and provide copies of all data and analyses underlying its conclusion. Within ten Business Days of the Transmission Provider's determination, the Transmission Provider shall offer to convene a customer options meeting with the Transmission Provider to review possible Interconnection Customer facility modifications or the screen analysis and related results, to determine what further steps are needed to permit the Small Generating Facility to be connected safely and reliably. At the time of notification of the Transmission Provider's determination, or at the customer options meeting, the Transmission Provider shall:

- 2.3.1 Offer to perform facility modifications or minor modifications to the Transmission Provider's electric system(e.g., changing meters, fuses, relay settings) and provide a non-binding good faith estimate of the limited cost to make such modifications to the Transmission Provider's electric system; or
- 2.3.2 Offer to perform a supplemental review if the Transmission Provider concludes that the supplemental review might determine that the Small Generating Facility could continue to qualify for interconnection pursuant to the Fast Track Process, and provide a non-binding good faith estimate of the costs of such review; or
- 2.3.3 Obtain the Interconnection Customer's agreement to continue evaluating the Interconnection Request under the section 3 Study Process.

2.4 Supplemental Review

If the Interconnection Customer agrees to a supplemental review, the Interconnection Customer shall agree in writing within 15 Business Days of the offer, and submit a deposit for the estimated costs. The Interconnection Customer shall be responsible for the Transmission Provider's actual costs for conducting the supplemental review. The Interconnection Customer must pay any review costs that exceed the deposit within 20 Business Days of receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced costs, the Transmission Provider will return such excess within 20 Business Days of the invoice without interest.

- 2.4.1 Within ten Business Days following receipt of the deposit for a supplemental review, the Transmission Provider will determine if the Small Generating Facility can be interconnected safely and reliably.
 - 2.4.1.1 If so, the Transmission Provider shall forward an executable interconnection agreement to the Interconnection Customer within five Business Days.
 - 2.4.1.2 If so, and Interconnection Customer facility modifications are required to allow the Small Generating Facility to be interconnected consistent with safety, reliability, and power quality standards under these procedures, the Transmission Provider shall forward an executable interconnection agreement to the Interconnection Customer within five Business Days after

confirmation that the Interconnection Customer has agreed to make the necessary changes at the Interconnection Customer's cost.

- 2.4.1.3 If so, and minor modifications to the Transmission Provider's electric system are required to allow the Small Generating Facility to be interconnected consistent with safety, reliability, and power quality standards under the Fast Track Process, the Transmission Provider shall forward an executable interconnection agreement to the Interconnection Customer within ten Business Days that requires the Interconnection Customer to pay the costs of such system modifications prior to interconnection.
- 2.4.1.4 If not, the Interconnection Request will continue to be evaluated under the section 3 Study Process.

Section 3. Study Process

3.1 Applicability

The Study Process shall be used by an Interconnection Customer proposing to interconnect its Small Generating Facility with the Transmission Provider's Transmission System if the Small Generating Facility (1) is larger than 2 MW but no larger than 20 MW, (2) is not certified, or (3) is certified but did not pass the Fast Track Process or the 10 kW Inverter Process.

3.2 Scoping Meeting

- 3.2.1 A scoping meeting will be held within ten Business Days after the Interconnection Request is deemed complete, or as otherwise mutually agreed to by the Parties. The Transmission Provider and the Interconnection Customer will bring to the meeting personnel, including system engineers and other resources as may be reasonably required to accomplish the purpose of the meeting.
- 3.2.2 The purpose of the scoping meeting is to discuss the Interconnection Request and review existing studies relevant to the Interconnection Request. The Parties shall further discuss whether the Transmission Provider should perform a feasibility study or proceed directly to a system impact study, or a facilities study, or an interconnection agreement. If the Parties agree that a feasibility study should be performed, the Transmission Provider shall provide the Interconnection Customer, as soon as possible, but not later than five Business Days after the scoping meeting, a feasibility study agreement (Attachment 6) including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study.
- 3.2.3 The scoping meeting may be omitted by mutual agreement. In order to remain in consideration for interconnection, an Interconnection Customer who has requested a feasibility study must return the executed feasibility study agreement within 15 Business Days. If the Parties agree not to perform a feasibility study, the Transmission Provider shall provide the Interconnection Customer, no later

than five Business Days after the scoping meeting, a system impact study agreement (Attachment 7) including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study.

3.3 Feasibility Study

- 3.3.1 The feasibility study shall identify any potential adverse system impacts that would result from the interconnection of the Small Generating Facility.
- 3.3.2 A deposit of the lesser of 50 percent of the good faith estimated feasibility study costs or earnest money of \$1,000 may be required from the Interconnection Customer.
- 3.3.3 The scope of and cost responsibilities for the feasibility study are described in the attached feasibility study agreement (Attachment 6).
- 3.3.4 If the feasibility study shows no potential for adverse system impacts, the Transmission Provider shall send the Interconnection Customer a 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. If no additional facilities are required, the Transmission Provider shall send the Interconnection Customer an executable interconnection agreement within five Business Days.
- 3.3.5 If the feasibility study shows the potential for adverse system impacts, the review process shall proceed to the appropriate system impact study(s).

3.4 System Impact Study

- 3.4.1 A system impact study shall identify and detail the electric system impacts that would result if the proposed Small Generating Facility were interconnected without project modifications or electric system modifications, focusing on the adverse system impacts identified in the feasibility study, or to study potential impacts, including but not limited to those identified in the scoping meeting. A system impact study shall evaluate the impact of the proposed interconnection on the reliability of the electric system.
- 3.4.2 If no transmission system impact study is required, but potential electric power Distribution System adverse system impacts are identified in the scoping meeting or shown in the feasibility study, a distribution system impact study must be performed. The Transmission Provider shall send the Interconnection Customer a distribution system impact study agreement within 15 Business Days of transmittal of the feasibility study report, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, or following the scoping meeting if no feasibility study is to be performed.
- 3.4.3 In instances where the feasibility study or the distribution system impact study shows potential for transmission system adverse system impacts, within five Business Days following transmittal of the feasibility study report, the

Transmission Provider shall send the Interconnection Customer a transmission system impact 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, if such a study is required.

- 3.4.4 If a transmission system impact study is not required, but electric power Distribution System adverse system impacts are shown by the feasibility study to be possible and no distribution system impact study has been conducted, the Transmission Provider shall send the Interconnection Customer a distribution system impact study agreement.
- 3.4.5 If the feasibility study shows no potential for transmission system or Distribution System adverse system impacts, the Transmission Provider shall send the Interconnection Customer either a facilities study agreement (Attachment 8), including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, or an executable interconnection agreement, as applicable.
- 3.4.6 In order to remain under consideration for interconnection, the Interconnection Customer must return executed system impact study agreements, if applicable, within 30 Business Days.
- 3.4.7 A deposit of the good faith estimated costs for each system impact study may be required from the Interconnection Customer.
- 3.4.8 The scope of and cost responsibilities for a system impact study are described in the attached system impact study agreement.
- 3.4.9 Where transmission systems and Distribution Systems have separate owners, such as is the case with transmission-dependent utilities ("TDUs") whether investor-owned or not the Interconnection Customer may apply to the nearest Transmission Provider (Transmission Owner, Regional Transmission Operator, or Independent Transmission Provider) providing transmission service to the TDU to request project coordination. Affected Systems shall participate in the study and provide all information necessary to prepare the study.

3.5 Facilities Study

- 3.5.1 Once the required system impact study(s) is completed, a system impact study report shall be prepared and transmitted to the Interconnection Customer along with a facilities study agreement within five Business Days, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the facilities study. In the case where one or both impact studies are determined to be unnecessary, a notice of the fact shall be transmitted to the Interconnection Customer within the same timeframe.
- 3.5.2 In order to remain under consideration for interconnection, or, as appropriate, in the Transmission Provider's interconnection queue, the Interconnection Customer

- must return the executed facilities study agreement or a request for an extension of time within 30 Business Days.
- 3.5.3 The 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 system impact study(s).
- 3.5.4 Design for any required Interconnection Facilities and/or Upgrades shall be performed under the facilities study agreement. The Transmission Provider may contract with consultants to perform activities required under the facilities study agreement. The Interconnection Customer and the Transmission Provider may agree to allow the Interconnection Customer to separately arrange for the design of some of the Interconnection Facilities. In such cases, facilities design will be reviewed and/or modified prior to acceptance by the Transmission Provider, under the provisions of the facilities study agreement. If the Parties agree to separately arrange for design and construction, and provided security and confidentiality requirements can be met, the Transmission Provider shall make sufficient information available to the Interconnection Customer in accordance with confidentiality and critical infrastructure requirements to permit the Interconnection Customer to obtain an independent design and cost estimate for any necessary facilities.
- 3.5.5 A deposit of the good faith estimated costs for the facilities study may be required from the Interconnection Customer.
- 3.5.6 The scope of and cost responsibilities for the facilities study are described in the attached facilities study agreement.
- 3.5.7 Upon completion of the facilities study, and with the agreement of the Interconnection Customer to pay for Interconnection Facilities and Upgrades identified in the facilities study, the Transmission Provider shall provide the Interconnection Customer an executable interconnection agreement within five Business Days.

Section 4. Provisions that Apply to All Interconnection Requests

4.1 Reasonable Efforts

The Transmission Provider shall make reasonable efforts to meet all time frames provided in these procedures unless the Transmission Provider and the Interconnection Customer agree to a different schedule. If the Transmission Provider cannot meet a deadline provided herein, it shall notify the Interconnection Customer, explain the reason for the failure to meet the deadline, and provide an estimated time by which it will complete the applicable interconnection procedure in the process.

4.2 Disputes

4.2.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

- 4.2.2 In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.
- 4.2.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.
- 4.2.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at http://www.ferc.gov/legal/adr.asp.
- 4.2.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.
- 4.2.6 If neither Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of these procedures.

4.3 <u>Interconnection Metering</u>

Any metering necessitated by the use of the Small Generating Facility shall be installed at the Interconnection Customer's expense in accordance with Federal Energy Regulatory Commission, state, or local regulatory requirements or the Transmission Provider's specifications.

4.4 Commissioning

Commissioning tests of the Interconnection Customer's installed equipment shall be performed pursuant to applicable codes and standards. The Transmission Provider must be given at least five Business Days written notice, or as otherwise mutually agreed to by the Parties, of the tests and may be present to witness the commissioning tests.

4.5. Confidentiality

- 4.5.1 Confidential information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of these procedures all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed confidential information regardless of whether it is clearly marked or otherwise designated as such.
- 4.5.2 Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce these procedures. Each Party receiving Confidential Information shall

hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under these procedures, or to fulfill legal or regulatory requirements.

- 4.5.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.
- 4.5.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.
- 4.5.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC, 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 these procedures, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 C.F.R. § 388.112, request that the information be treated as confidential and non-public by FERC 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 FERC. The Party shall notify the other Party when it is notified by FERC 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. § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

4.6 Comparability

The Transmission Provider shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in this document. The Transmission Provider shall use the same reasonable efforts in processing and analyzing Interconnection Requests from all Interconnection Customers, whether the Small Generating Facility is owned or operated by the Transmission Provider, its subsidiaries or affiliates, or others.

4.7 Record Retention

The Transmission Provider shall maintain for three years records, subject to audit, of all Interconnection Requests received under these procedures, the times required to complete Interconnection Request approvals and disapprovals, and justification for the actions taken on the Interconnection Requests.

4.8 Interconnection Agreement

After receiving an interconnection agreement from the Transmission Provider, the Interconnection Customer shall have 30 Business Days or another mutually agreeable timeframe to sign and return the interconnection agreement, or request that the Transmission Provider file an unexecuted interconnection agreement with the Federal Energy Regulatory Commission. If the Interconnection Customer does not sign the interconnection agreement, or ask that it be filed unexecuted by the Transmission Provider within 30 Business Days, the Interconnection Request shall be deemed withdrawn. After the interconnection agreement is signed by the Parties, the interconnection of the Small Generating Facility shall proceed under the provisions of the interconnection agreement.

4.9 Coordination with Affected Systems

The Transmission Provider shall 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 (if available) in its applicable interconnection study within the time frame specified in these procedures. The Transmission Provider will include such Affected System operators in all meetings held with the Interconnection Customer as required by these procedures. 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.

4.10 Capacity of the Small Generating Facility

- 4.10.1 If the Interconnection Request is for an increase in capacity for an existing Small Generating Facility, the Interconnection Request shall be evaluated on the basis of the new total capacity of the Small Generating Facility.
- 4.10.2 If the Interconnection Request is for a Small Generating Facility that includes multiple energy production devices at a site for which the 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.
- 4.10.3 The Interconnection Request shall be evaluated using the maximum rated capacity of the Small Generating Facility.

Glossary of Terms

10 kW Inverter Process - The procedure for evaluating an Interconnection Request for a certified inverter-based Small Generating Facility no larger than 10 kW that uses the section 2 screens. The application process uses an all-in-one document that includes a simplified Interconnection Request, simplified procedures, and a brief set of terms and conditions. See SGIP Attachment 5.

Affected System - An electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

Business Day - Monday through Friday, excluding Federal Holidays.

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

Fast Track Process - The procedure for evaluating an Interconnection Request for a certified Small Generating Facility no larger than 2 MW that includes the section 2 screens, customer options meeting, and optional supplemental review.

Good Utility Practice - 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.

Interconnection Customer - Any entity, including the Transmission Provider, the Transmission Owner or any of the affiliates or subsidiaries of either, that proposes to interconnect its Small Generating Facility with the Transmission Provider's Transmission System.

Interconnection Facilities - The Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small 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 Request - The Interconnection Customer's request, in accordance with the Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the Transmission Provider's Transmission System.

Material Modification - A modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

Network Upgrades - Additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Transmission Provider's Transmission System to accommodate the interconnection with the Small Generating Facility to the Transmission Provider's Transmission System. Network Upgrades do not include Distribution Upgrades.

Party or Parties - The Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

Point of Interconnection - The point where the Interconnection Facilities connect with the Transmission Provider's Transmission System.

Queue Position - 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.

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

Study Process - The procedure for evaluating an Interconnection Request that includes the section 3 scoping meeting, feasibility study, system impact study, and facilities study.

Transmission Owner - The 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 Small Generator Interconnection Agreement to the extent necessary.

Transmission Provider - 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 System - The facilities owned, controlled or operated by the Transmission Provider or the Transmission Owner that are used to provide transmission service under the Tariff.

Upgrades - 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.

SMALL GENERATOR INTERCONNECTION REQUEST (Application Form)

Transmission Provider:		
Designated Contact Person:		
Address:		
Telephone Number:		
Fax:		
E-Mail Address:		
An Interconnection Request is considered complete when it provides all applicable and correct information required below. Per SGIP section 1.5, documentation of site control must be submitted with the Interconnection Request.		
Preamble and Instructions		
An Interconnection Customer who requests a Federal Energy Regulatory Commission jurisdictional interconnection must submit this Interconnection Request by hand delivery, mail, e-mail, or fax to the Transmission Provider.		
Processing Fee or Deposit:		
If the Interconnection Request is submitted under the Fast Track Process, the non-refundable processing fee is \$500.		
If the Interconnection Request is submitted under the Study Process, whether a new submission or an Interconnection Request that did not pass the Fast Track Process, the Interconnection Customer shall submit to the Transmission Provider a deposit not to exceed \$1,000 towards the cost of the feasibility study.		
Interconnection Customer Information		
Legal Name of the Interconnection Customer (or, if an individual, individual's name)		
Name:		
Contact Person:		
Mailing Address:		
City: State: Zip:		

Facility Location (if different from above):				
Telephone (Day):	Telephone (Evening):			
Fax:	E-Mail Address:			
Alternative Contact Informatic	on (if different from the Interconnection Customer)			
Contact Name:				
Title:				
Telenhone (Day):	Telephone (Evening):			
	E-Mail Address:			
Application is for:NevCap				
Net Metering? Yes To Supply Power to the	ility be used for any of the following? _ No e Interconnection Customer? YesNo thers? Yes No			
For installations at locations w	with existing electric service to which the proposed Small connect, provide:			
(Local Electric Service Provide	er*) (Existing Account Number*)			
[*To be provided by the Int different from the Transmissio	terconnection Customer if the local electric service provider is on Provider]			
Contact Name:				

Telephone (Day):	Telephone (Evening):
Fax:	E-Mail Address:
Requested Point of Interconn	ection:
Interconnection Customer's F	Requested In-Service Date:
Small Generating Facility I	nformation
	Generating Facility, not the Interconnection Facilities.
	Wind Hydro Hydro Type (e.g., Run-of-River): fas Fuel Oil Other (state type)
Prime Mover:Fuel CellMicroture	Recip EngineGas TurbSteam Turb pinePVOther
Type of Generator:Sync	chronousInduction Inverter
Generator Nameplate Rating	kW (Typical) Generator Nameplate kVAR:
Interconnection Customer or	Customer-Site Load:kW (if none, so state)
Typical Reactive Load (if kn	own):
Maximum Physical Export C	apability Requested:kW
List components of the Small	Generating Facility equipment package that are currently certified:
Equipment Type 1. 2. 3. 4. 5.	
Is the prime mover compatib	le with the certified protective relay package?YesNo
Generator (or solar collector) Manufacturer, Model Name of Version Number:	& Number:
Nameplate Output Power Rat Nameplate Output Power Rat	ting in kW: (Summer) (Winter) ting in kVA: (Summer) (Winter)
Individual Generator Power I Rated Power Factor: Leading	Factor g:Lagging:
Total Number of Generators	in wind farm to be interconnected pursuant to this

Interconnection Request:	Elevation:	Single phase _	Three phase
Inverter Manufacturer, Model N	Vame & Number (if used):		
List of adjustable set points for	the protective equipment of	or software:	
Note: A completed Power Syste Interconnection Request.	ms Load Flow data sheet i	must be supplied with	the
Small Generating Fa	cility Characteristic Data (for inverter-based mac	hines)
Max design fault contribution of	urrent: I	nstantaneous or R	MS?
Harmonics Characteristics:			
Start-up requirements:			
Small Generating	Facility Characteristic Da	ta (for rotating machin	es)
RPM Frequency:(*) Neutral Grounding Resistor	(If Applicable):		
Synchronous Generators:			
Direct Axis Synchronous React Direct Axis Transient Reactance Direct Axis Subtransient Reacta Negative Sequence Reactance, Z Zero Sequence Reactance, X ₀ : KVA Base: Field Volts: Field Amperes:	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_P.U.	
Induction Generators:			
Motoring Power (kW):			

Design Letter:					
Reactive Power Required In	Vars (No Lo	ad):			
Reactive Power Required In	Vars (Full L	oad):			
Total Rotating Inertia, H: _		Per Unit	on kVA Bas	e	
Note: Please contact the Tra to determine if the specified		-		g the Interconnection	n Request
Excitation and Governor Sy	stem Data for	Synchrono	ıs Generator	s Only	
Provide appropriate IEEE m system stabilizer (PSS) in a be determined to be required may not be substituted.	ccordance wit	h the region	al reliability	council criteria. Al	PSS may
Interconnection Facilities	<u>Information</u>				
Will a transformer be used bNo	etween the go	enerator and	the point of	common coupling?	_Yes
Will the transformer be pro-	vided by the In	nterconnecti	on Custome	r?YesNo	
Transformer Data (If Applie	cable, for Inte	rconnection	Customer-O	wned Transformer):	
Is the transformer:sin	ole nhase	three nha	se?	Size:	kVΔ
Transformer Impedance:	% on	timee pha	VA Base	5120.	
If Three Phase:					
Transformer Primary:	Volts	Delta	Wye	Wye Grounded	
Transformer Secondary:	Volts	— Delta	Wye	Wye Grounded	
Transformer Secondary: Transformer Tertiary:	Volts	Delta	Wye	Wye Grounded	
Transformer Fuse Data (If A	Applicable, for	r Interconne	ction Custon	ner-Owned Fuse):	
(Attach copy of fuse manufa	acturer's Mini	mum Melt a	nd Total Cle	aring Time-Current	Curves)
Manufacturer:	Туре:		Size:	Speed:	
Interconnecting Circuit Brea	aker (if applic	able):			
Manufacturer:		Ty	pe:		
Load Rating (Amps):	Interrupting			Trip Speed (Cycle	es):

Interconnection Protective Relays (If Applicable):

If Microprocessor-Controlled:

List of Functions and Adjustable Setpoints for the protective equipment or software:

Setpoint Function		Minim	num Maximum	
1				
3				
4				
6				
If Discrete Compone	ents:			
(Enclose Conv of an	v Proposed Time-Os	vercurrent Coordination ('urves)	
` ' '			,	
			Proposed Setting:	
			Proposed Setting:	
			Proposed Setting:	
Manufacturer:	Type:	Style/Catalog No.:	Proposed Setting:	
Manufacturer:	Type:	Style/Catalog No.:	Proposed Setting:	
Comment Transferme	. Data (If Annicality	۸.		
Current Transformer	r Data (If Applicable	<u>):</u>		
(Enclose Copy of M	anufacturer's Excitat	ion and Ratio Correction	Curves)	
Manufacturer:				
Type:	Accuracy Class	: Proposed Ratio Co	onnection:	
Manufacturer:				
Type:	Accuracy Class	: Proposed Ratio Co	onnection:	
Potential Transforme	er Data (11 Applicabl	<u>e):</u>		
Manufacturer:				
Type:	Accuracy Class	:: Proposed Ratio Co	onnection:	
		Proposed Ratio Co		
Tyme:	Acqueacy Class	Proposed Ratio Co	onnection:	

General Information

-	tential circuits, and protection and control schemes
This one-line diagram must be signed and star Small Generating Facility is larger than 50 kWNo	nped by a licensed Professional Engineer if the V. Is One-Line Diagram Enclosed?Yes
Enclose copy of any site documentation that in proposed Small Generating Facility (e.g., USC documentation).	1 1 1
Proposed location of protective interface equip from the Interconnection Customer's address)	oment on property (include address if different
	escribes and details the operation of the protection mentation Enclosed?YesNo
Enclose copies of schematic drawings for all prelay potential circuits, and alarm/monitoring Are Schematic Drawings Enclosed?Yes_	` 11 /
Applicant Signature	
I hereby certify that, to the best of my knowled Interconnection Request is true and correct.	dge, all the information provided in this
For Interconnection Customer:	Date:

Certification Codes and Standards

IEEE1547 Standard for Interconnecting Distributed Resources with Electric Power Systems (including use of IEEE 1547.1 testing protocols to establish conformity)

UL 1741 Inverters, Converters, and Controllers for Use in Independent Power Systems

IEEE Std 929-2000 IEEE Recommended Practice for Utility Interface of Photovoltaic (PV) Systems

NFPA 70 (2002), National Electrical Code

IEEE Std C37.90.1-1989 (R1994), IEEE Standard Surge Withstand Capability (SWC) Tests for Protective Relays and Relay Systems

IEEE Std C37.90.2 (1995), IEEE Standard Withstand Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers

IEEE Std C37.108-1989 (R2002), IEEE Guide for the Protection of Network Transformers

IEEE Std C57.12.44-2000, IEEE Standard Requirements for Secondary Network Protectors

IEEE Std C62.41.2-2002, IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000V and Less) AC Power Circuits

IEEE Std C62.45-1992 (R2002), IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000V and Less) AC Power Circuits

ANSI C84.1-1995 Electric Power Systems and Equipment - Voltage Ratings (60 Hertz)

IEEE Std 100-2000, IEEE Standard Dictionary of Electrical and Electronic Terms NEMA MG 1-1998, Motors and Small Resources, Revision 3

IEEE Std 519-1992, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems

NEMA MG 1-2003 (Rev 2004), Motors and Generators, Revision 1

Certification of Small Generator Equipment Packages

- 1.0 Small Generating Facility equipment proposed for use separately or packaged with other equipment in an interconnection system shall be considered certified for interconnected operation if (1) it has been tested in accordance with industry standards for continuous utility interactive operation in compliance with the appropriate codes and standards referenced below by any Nationally Recognized Testing Laboratory (NRTL) recognized by the United States Occupational Safety and Health Administration to test and certify interconnection equipment pursuant to the relevant codes and standards listed in SGIP Attachment 3, (2) it has been labeled and is publicly listed by such NRTL at the time of the interconnection application, and (3) such NRTL makes readily available for verification all test standards and procedures it utilized in performing such equipment certification, and, with consumer approval, the test data itself. The NRTL may make such information available on its website and by encouraging such information to be included in the manufacturer's literature accompanying the equipment.
- 2.0 The Interconnection Customer must verify that the intended use of the equipment falls within the use or uses for which the equipment was tested, labeled, and listed by the NRTL.
- 3.0 Certified equipment shall not require further type-test review, testing, or additional equipment to meet the requirements of this interconnection procedure; however, nothing herein shall preclude the need for an on-site commissioning test by the parties to the interconnection nor follow-up production testing by the NRTL.
- 4.0 If the certified equipment package includes only interface components (switchgear, inverters, or other interface devices), then an Interconnection Customer must show that the generator or other electric source being utilized with the equipment package is compatible with the equipment package and is consistent with the testing and listing specified for this type of interconnection equipment.
- 5.0 Provided the generator or electric source, when combined with the equipment package, is within the range of capabilities for which it was tested by the NRTL, and does not violate the interface components' labeling and listing performed by the NRTL, no further design review, testing or additional equipment on the customer side of the point of common coupling shall be required to meet the requirements of this interconnection procedure.
- 6.0 An equipment package does not include equipment provided by the utility.
- 7.0 Any equipment package approved and listed in a state by that state's regulatory body for interconnected operation in that state prior to the effective date of these small generator interconnection procedures shall be considered certified under these procedures for use in that state.

Application, Procedures, and Terms and Conditions for Interconnecting a Certified Inverter-Based Small Generating Facility No Larger than 10 kW ("10 kW Inverter Process")

- 1.0 The Interconnection Customer ("Customer") completes the Interconnection Request ("Application") and submits it to the Transmission Provider ("Company").
- 2.0 The Company acknowledges to the Customer receipt of the Application within three Business Days of receipt.
- 3.0 The Company evaluates the Application for completeness and notifies the Customer within ten Business Days of receipt that the Application is or is not complete and, if not, advises what material is missing.
- 4.0 The Company verifies that the Small Generating Facility can be interconnected safely and reliably using the screens contained in the Fast Track Process in the Small Generator Interconnection Procedures (SGIP). The Company has 15 Business Days to complete this process. Unless the Company determines and demonstrates that the Small Generating Facility cannot be interconnected safely and reliably, the Company approves the Application and returns it to the Customer. Note to Customer: Please check with the Company before submitting the Application if disconnection equipment is required.
- 5.0 After installation, the Customer returns the Certificate of Completion to the Company. Prior to parallel operation, the Company may inspect the Small Generating Facility for compliance with standards which may include a witness test, and may schedule appropriate metering replacement, if necessary.
- Generating Facility is authorized. If the witness test is not satisfactory, the Company has the right to disconnect the Small Generating Facility. The Customer has no right to operate in parallel until a witness test has been performed, or previously waived on the Application. The Company is obligated to complete this witness test within ten Business Days of the receipt of the Certificate of Completion. If the Company does not inspect within ten Business Days or by mutual agreement of the Parties, the witness test is deemed waived.
- 7.0 Contact Information The Customer must provide the contact information for the legal applicant (i.e., the Interconnection Customer). If another entity is responsible for interfacing with the Company, that contact information must be provided on the Application.
- 8.0 Ownership Information Enter the legal names of the owner(s) of the Small Generating Facility. Include the percentage ownership (if any) by any utility or public utility holding company, or by any entity owned by either.

9.0 UL1741 Listed - This standard ("Inverters, Converters, and Controllers for Use in Independent Power Systems") addresses the electrical interconnection design of various forms of generating equipment. Many manufacturers submit their equipment to a Nationally Recognized Testing Laboratory (NRTL) that verifies compliance with UL1741. This "listing" is then marked on the equipment and supporting documentation.

Application for Interconnecting a Certified Inverter-Based Small Generating Facility No Larger than 10kW

This Application is considered complete when it provides all applicable and correct information required below. Per SGIP section 1.5, documentation of site control must be submitted with the Interconnection Request. Additional information to evaluate the Application may be required.

Processing Fee

A non-refundable processing fee of \$100 must accompany this Application.

<u>Interconnection Customer</u>			
Name:			
Contact Person:			
Address:			
City:	State:	Zip:	
Telephone (Day):	(Evening):		
Fax:	E-Mail Address:		
Name: Address:		Zin:	
	State:	Zip:	
Telephone (Day):	(Evening):		
Fax:	E-Mail Address:		
Small Generating Facility Information (if different from above	e):		
Account Number:			

Inverter Manufacturer:	Model
Nameplate Rating: (kW) (kVA)_	(AC Volts)
Single Phase	Three Phase
System Design Capacity:(kW)	(kVA)
Prime Mover: Photovoltaic Reciprocating	Engine Fuel Cell
Turbine Other	
Energy Source: Solar Wind Hydro	Diesel Natural Gas
Fuel Oil Other (describe	·)
Is the equipment UL1741 Listed? Yes N If Yes, attach manufacturer's cut-sheet	
Estimated Installation Date:E	stimated In-Service Date:
larger than 10 kW that meet the codes, standar 3 and 4 of the Small Generator Interconnection	for inverter-based Small Generating Facilities no rds, and certification requirements of Attachments in Procedures (SGIP), or the Transmission Provider I Small Generating Facility and is satisfied that it is
List components of the Small Generating Facil	lity equipment package that are currently certified:
Equipment Type 1	Certifying Entity
2	
3 4	
5	
Interconnection Customer Signature	
true. I agree to abide by the Terms and Condit Generating Facility No Larger than 10kW and Small Generating Facility has been installed.	dge, the information provided in this Application is tions for Interconnecting an Inverter-Based Small return the Certificate of Completion when the
Signed:	
Title:	Date:
Contingent Approval to Interconnect the Smal	1 Generating Facility
(For Company use only)	

10kW and return of the Certificate of Completion.	
Company Signature:	
Title:	Date:
Application ID number:	
Company waives inspection/witness test? Yes	No

Interconnection of the Small Generating Facility is approved contingent upon the Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than

Small Generating Facility Certificate of Completion

Is the Small Generating Facility	y owner-installed? Yes No _	
Interconnection Customer:		
Address:		
	ng Facility (if different from above):	
City:	State:	Zip Code:
Telephone (Day):	(Evening):	
Fax:	E-Mail Address:	
Electrician:		
Name:		
Address:		
City:	State:	Zip Code:
Telephone (Day):	(Evening):	
Fax:	E-Mail Address:	
License number:		
Date Approval to Install Facility	y granted by the Company:	
Application ID number:		
Inspection:		
The Small Generating Facility l	has been installed and inspected in c	ompliance with the local
building/electrical code of		
	inspector, or attach signed electrical	
Date:		

copy of the sign	ed electrical permit to (insert Company information below):
1	Name:
(Company:
E.	Address:
-	City, State ZIP:
I	'ax:
Approval to En	ergize the Small Generating Facility (For Company use only)
0 0	Small Generating Facility is approved contingent upon the Terms and Conditions ing an Inverter-Based Small Generating Facility No Larger than 10kW
Company Signa	ture:
Title:	Date:

As a condition of interconnection, you are required to send/fax a copy of this form along with a

Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW

1.0 Construction of the Facility

The Interconnection Customer (the "Customer") may proceed to construct (including operational testing not to exceed two hours) the Small Generating Facility when the Transmission Provider (the "Company") approves the Interconnection Request (the "Application") and returns it to the Customer.

2.0 **Interconnection and Operation**

The Customer may operate Small Generating Facility and interconnect with the Company's electric system once all of the following have occurred:

- 2.1 Upon completing construction, the Customer will cause the Small Generating Facility to be inspected or otherwise certified by the appropriate local electrical wiring inspector with jurisdiction, and
- 2.2 The Customer returns the Certificate of Completion to the Company, and
- 2.3 The Company has either:
 - 2.3.1 Completed its inspection of the Small Generating Facility to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with applicable codes. All inspections must be conducted by the Company, at its own expense, within ten Business Days after receipt of the Certificate of Completion and shall take place at a time agreeable to the Parties. The Company shall provide a written statement that the Small Generating Facility has passed inspection or shall notify the Customer of what steps it must take to pass inspection as soon as practicable after the inspection takes place; or
 - 2.3.2 If the Company does not schedule an inspection of the Small Generating Facility within ten business days after receiving the Certificate of Completion, the witness test is deemed waived (unless the Parties agree otherwise); or
 - 2.3.3 The Company waives the right to inspect the Small Generating Facility.
- 2.4 The Company has the right to disconnect the Small Generating Facility in the event of improper installation or failure to return the Certificate of Completion.
- 2.5 Revenue quality metering equipment must be installed and tested in accordance with applicable ANSI standards.

3.0 Safe Operations and Maintenance

The Customer shall be fully responsible to operate, maintain, and repair the Small Generating Facility as required to ensure that it complies at all times with the interconnection standards to which it has been certified.

4.0 Access

The Company shall have access to the disconnect switch (if the disconnect switch is required) and metering equipment of the Small Generating Facility at all times. The Company shall provide reasonable notice to the Customer when possible prior to using its right of access.

5.0 **Disconnection**

The Company may temporarily disconnect the Small Generating Facility upon the following conditions:

- 5.1 For scheduled outages upon reasonable notice.
- 5.2 For unscheduled outages or emergency conditions.
- 5.3 If the Small Generating Facility does not operate in the manner consistent with these Terms and Conditions.
- 5.4 The Company shall inform the Customer in advance of any scheduled disconnection, or as is reasonable after an unscheduled disconnection.

6.0 **Indemnification**

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.

7. 0 Insurance

The Parties agree to follow all applicable insurance requirements imposed by the state in which the Point of Interconnection is located. All insurance policies must be maintained with insurers authorized to do business in that state.

8.0 **Limitation of Liability**

Each party's liability to the other party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either party be liable to the other party for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever, except as allowed under paragraph 6.0.

9.0 **Termination**

The agreement to operate in parallel may be terminated under the following conditions:

9.1 **By the Customer**

By providing written notice to the Company.

9.2 **By the Company**

If the Small Generating Facility fails to operate for any consecutive 12 month period or the Customer fails to remedy a violation of these Terms and Conditions.

9.3 **Permanent Disconnection**

In the event this Agreement is terminated, the Company shall have the right to disconnect its facilities or direct the Customer to disconnect its Small Generating Facility.

9.4 Survival Rights

This Agreement shall continue in effect after termination to the extent necessary to allow or require either Party to fulfill rights or obligations that arose under the Agreement.

10.0 Assignment/Transfer of Ownership of the Facility

This Agreement shall survive the transfer of ownership of the Small Generating Facility to a new owner when the new owner agrees in writing to comply with the terms of this Agreement and so notifies the Company.

Feasibility Study Agreement

	S AGREEMENT is made and entered into this	day of	20	_ by and
betw a	, organized and exi	isting under the laws	s of the State	of
)('	interconnection Cu	stomer,) and	l ovictino
unde	er the laws of the State of	, a	("Trans	_ existing mission
Prov:	er the laws of the State of	on Provider each ma	y be referred	to as a
	RECITALS	,		
gene	EREAS, Interconnection Customer is proposing to trating capacity addition to an existing Small Generoonnection Request completed by Interconnection	rating Facility consi	stent with the	;
	EREAS, Interconnection Customer desires to inter the Transmission Provider's Transmission System		Generating Fa	cility
feasi	EREAS, Interconnection Customer has requested a bility study to assess the feasibility of interconnect lity with the Transmission Provider's Transmission	ting the proposed Sr	nall Generati	ng
	W, THEREFORE, in consideration of and subject Parties agreed as follows:	to the mutual cover	nants contain	ed herein
1.0	When used in this Agreement, with initial capit the meanings indicated or the meanings specific Interconnection Procedures.	•	-	
2.0	The Interconnection Customer elects and the Tr performed an interconnection feasibility study of Interconnection Procedures in accordance with	consistent the standa	ard Small Ger	nerator
3.0	The scope of the feasibility study shall be subje Attachment A to this Agreement.	ect to the assumption	ns set forth in	
4.0	The feasibility study shall be based on the techn Interconnection Customer in the Interconnection result of the scoping meeting. The Transmission additional technical information from the Interconnection procedures. If the Interconnection Procedures. If the Interconnection Procedures.	on Request, as may be no Provider reserves connection Customer Practice during the see with the standard	the modified as the right to re r as may reas course of the Small Genera	s the equest onably ator

- Request, the time to complete the feasibility study may be extended by agreement of the Parties.
- 5.0 In performing the study, the Transmission Provider shall rely, to the extent reasonably practicable, on existing studies of recent vintage. The Interconnection Customer shall not be charged for such existing studies; however, the Interconnection Customer shall be responsible for charges associated with any new study or modifications to existing studies that are reasonably necessary to perform the feasibility study.
- 6.0 The feasibility study report shall provide the following analyses for the purpose of identifying any potential adverse system impacts that would result from the interconnection of the Small Generating Facility as proposed:
 - 6.1 Initial identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection:
 - 6.2 Initial identification of any thermal overload or voltage limit violations resulting from the interconnection;
 - 6.3 Initial review of grounding requirements and electric system protection; and
 - 6.4 Description and non-binding estimated cost of facilities required to interconnect the proposed Small Generating Facility and to address the identified short circuit and power flow issues.
- 7.0 The feasibility study shall model the impact of the Small Generating Facility regardless of purpose in order to avoid the further expense and interruption of operation for reexamination of feasibility and impacts if the Interconnection Customer later changes the purpose for which the Small Generating Facility is being installed.
- 8.0 The study shall include the feasibility of any interconnection at a proposed project site where there could be multiple potential Points of Interconnection, as requested by the Interconnection Customer and at the Interconnection Customer's cost.
- 9.0 A deposit of the lesser of 50 percent of good faith estimated feasibility study costs or earnest money of \$1,000 may be required from the Interconnection Customer.
- 10.0 Once the feasibility study is completed, a feasibility study report shall be prepared and transmitted to the Interconnection Customer. Barring unusual circumstances, the feasibility study must be completed and the feasibility study report transmitted within 30 Business Days of the Interconnection Customer's agreement to conduct a feasibility study.
- 11.0 Any study fees shall be based on the Transmission Provider's actual costs and will be invoiced to the Interconnection Customer after the study is completed and delivered and will include a summary of professional time.
- 12.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within 30 calendar days on receipt of the invoice or resolution of any dispute. If

the deposit exceeds the invoiced fees, the Transmission Provider shall refund such excess within 30 calendar days of the invoice without interest.

13.0 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 of ______ (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, or regulations of a Governmental Authority.

14.0 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties.

15.0 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.

16.0 Waiver

- 16.1 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.
- 16.2 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 the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

17.0 <u>Multiple Counterparts</u>

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.

18.0 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.

19.0 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.

20.0 Subcontractors

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.

- 20.1 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 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.
- 20.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

21.0 Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement 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 the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; 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 Agreement 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, except to the extent that the Parties otherwise agree as provided herein.

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	Signad
Name (Printed):	Name (Printed):
Title	Title

Attachment A to Feasibility Study Agreement

Assumptions Used in Conducting the Feasibility Study

	asibility study will be based upon the information set forth in the Interconnection Request reed 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.
-	2) are to be completed by the Interconnection Customer. Other assumptions (listed below) be provided by the Interconnection Customer and the Transmission Provider.

System Impact Study Agreement

THIS	AGREEMENT is made and entered into this	day of	20	_ by and
betwe	een, organized and existi		, a , e41 54-44	c
	, organized and existing the control of the c	ing under the law Interconnection (s of the State of Customer.") and	<u>L</u>
		, a	, ,	existing
under Provid "Party	the laws of the State of	n Provider each n	, ("Transi nay be referred t	mission to as a
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	CREAS, the Interconnection Customer desires to in the Transmission Provider's Transmission System;	nterconnect the Si	mall Generating	g Facility
result	CREAS, the Transmission Provider has completed s of said study to the Interconnection Customer (Transmed to forego the feasibility study.); and			
a syst	EREAS, the Interconnection Customer has requested the impact study(s) to assess the impact of intercondine Transmission Provider's Transmission System,	nnecting the Sma	ll Generating Fa	-
	, THEREFORE, in consideration of and subject that agreed as follows:	to the mutual cov	enants containe	d herein
1.0	When used in this Agreement, with initial capital the meanings indicated or the meanings specified Interconnection Procedures.		-	
2.0	The Interconnection Customer elects and the Traperformed a system impact study(s) consistent was Interconnection Procedures in accordance with the	vith the standard S	Small Generator	r
3.0	The scope of a system impact study shall be subj	ect to the assump	ptions set forth i	in

- 4.0 A system impact study will be based upon the results of the feasibility study and the technical information provided by Interconnection Customer in the Interconnection Request. The Transmission Provider reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the system impact study. If the Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the time to complete the system impact study may be extended.
- 5.0 A system impact study shall consist of 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, as necessary. A system impact study shall state the assumptions upon which it is based, state the results of the analyses, and provide the requirement 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. A system impact study shall provide a list of facilities that are required as a result of the Interconnection Request and non-binding good faith estimates of cost responsibility and time to construct.
- A distribution system impact study shall incorporate a distribution load flow study, an analysis of equipment interrupting ratings, protection coordination study, voltage drop and flicker studies, protection and set point coordination studies, grounding reviews, and the impact on electric system operation, as necessary.
- 7.0 Affected Systems may participate in the preparation of a system impact study, with a division of costs among such entities as they may agree. All Affected Systems shall be afforded an opportunity to review and comment upon a system impact study that covers potential adverse system impacts on their electric systems, and the Transmission Provider has 20 additional Business Days to complete a system impact study requiring review by Affected Systems.
- 8.0 If the Transmission Provider uses a queuing procedure for sorting or prioritizing projects and their associated cost responsibilities for any required Network Upgrades, the system impact study shall consider all generating facilities (and with respect to paragraph 8.3 below, any identified Upgrades associated with such higher queued interconnection) that, on the date the system impact study is commenced -
 - 8.1 Are directly interconnected with the Transmission Provider's electric system; or
 - 8.2 Are interconnected with Affected Systems and may have an impact on the proposed interconnection; and
 - 8.3 Have a pending higher queued Interconnection Request to interconnect with the Transmission Provider's electric system.

- 9.0 A distribution system impact study, if required, shall be completed and the results transmitted to the Interconnection Customer within 30 Business Days after this Agreement is signed by the Parties. A transmission system impact study, if required, shall be completed and the results transmitted to the Interconnection Customer within 45 Business Days after this Agreement is signed by the Parties, or in accordance with the Transmission Provider's queuing procedures.
- 10.0 A deposit of the equivalent of the good faith estimated cost of a distribution system impact study and the one half the good faith estimated cost of a transmission system impact study may be required from the Interconnection Customer.
- 11.0 Any study fees shall be based on the Transmission Provider's actual costs and will be invoiced to the Interconnection Customer after the study is completed and delivered and will include a summary of professional time.
- 12.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within 30 calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, the Transmission Provider shall refund such excess within 30 calendar days of the invoice without interest.

13.0 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 of ______ (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, or regulations of a Governmental Authority.

14.0 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties.

15.0 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.

16.0 Waiver

- 16.1 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.
- 16.2 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 the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

17.0 Multiple 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.

18.0 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.

19.0 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.

20.0 Subcontractors

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.

- 20.1 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 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.
- 20.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

21.0 Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement 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 the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; 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 Agreement 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, except to the extent that the Parties otherwise agree as provided herein.

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	Title

Assumptions Used in Conducting the System Impact Study

The system impact study shall be based upon the results of the feasibility study, subject to any modifications in accordance with 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 the Interconnection Customer. Other assumptions (listed below) are to be provided by the Interconnection Customer and the Transmission Provider.

Facilities Study Agreement

THI	S AGREEMENT is made and entered into this	day of	20	by and
betw	reen, organized and existi		, a	
	, organized and existi	ng under the law	s of the State of	f
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unde	er the laws of the State of	, a	. ("Trans	_ caisting mission
Prov "Part	or the laws of the State of	Provider each m	nay be referred	to as a
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a factors	EREAS, the Interconnection Customer has requested ilities study to specify and estimate the cost of the estruction work needed to implement the conclusions redance with Good Utility Practice to physically and erating Facility with the Transmission Provider's Transmissio	equipment, engine of the system im electrically conn	eering, procured pact study in lect the Small	•
	W, THEREFORE, in consideration of and subject to Parties agreed as follows:	o the mutual cov	renants containe	ed herein
1.0	When used in this Agreement, with initial capital the meanings indicated or the meanings specified Interconnection Procedures.			
2.0	The Interconnection Customer elects and the Tra facilities study consistent with the standard Smal to be performed in accordance with the Open Ac	1 Generator Inter	connection Pro	
3.0	The scope of the facilities study shall be subject to	to data provided	in Attachment A	A to this

Agreement.

- 4.0 The 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 system impact study(s). The 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 the 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.
- 5.0 The Transmission Provider may propose to group facilities required for more than one Interconnection Customer in order to minimize facilities costs through economies of scale, but any Interconnection Customer may require the installation of facilities required for its own Small Generating Facility if it is willing to pay the costs of those facilities.
- 6.0 A deposit of the good faith estimated facilities study costs may be required from the Interconnection Customer.
- 7.0 In cases where Upgrades are required, the facilities study must be completed within 45 Business Days of the receipt of this Agreement. In cases where no Upgrades are necessary, and the required facilities are limited to Interconnection Facilities, the facilities study must be completed within 30 Business Days.
- 8.0 Once the facilities study is completed, a facilities study report shall be prepared and transmitted to the Interconnection Customer. Barring unusual circumstances, the facilities study must be completed and the facilities study report transmitted within 30 Business Days of the Interconnection Customer's agreement to conduct a facilities study.
- 9.0 Any study fees shall be based on the Transmission Provider's actual costs and will be invoiced to the Interconnection Customer after the study is completed and delivered and will include a summary of professional time.
- 10.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within 30 calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, the Transmission Provider shall refund such excess within 30 calendar days of the invoice without interest.
- 11.0 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 of ______ (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, or regulations of a Governmental Authority.

12.0 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties.

13.0 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.

14.0 Waiver

- 14.1 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.
- 14.2 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 the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

15.0 Multiple 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.

16.0 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.

17.0 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.

18.0 Subcontractors

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.

- 18.1 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 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.
- 18.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

19.0 Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement 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 the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; 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 Agreement 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, except to the extent that the Parties otherwise agree as provided herein.

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_	

Data to Be Provided by the Interconnection Customer with the 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

, 1				
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 Small 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:			
Line length from interconnection station to Tr	ransmission Provider's Transmission System.		
Tower number observed in the field. (Painted	on tower leg)*:		
Number of third party easements required for	transmission lines*:		
* To be completed in coordination wi Is the Small Generating Facility located in Tra Yes No If No, please	ansmission Provider's service area?		
Please provide the following proposed Begin Construction	schedule dates: Date:		
Generator step-up transformers receive back feed power	Date:		
Generation Testing	Date:		
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SMALL GENERATOR INTERCONNECTION AGREEMENT (SGIA)

(For Generating Facilities No Larger Than 20 MW)

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	Needs
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	opgrade costs

This I	Interconnection Agreem	ent ("Agreement")	is made and entere	d into this day	√ of
("Tra	, 20, 0. nsmission Provider"). at	, nd		o individually as "Party	
("Inte	rconnection Customer") each hereinafter s	ometimes referred 1	o individually as "Party	" or
both 1	referred to collectively a	s the "Parties."		, ,	
	·				
Tran	smission Provider Info	ormation			
	Transmission Provide	r:			
	Attention:				
	Address:				
	City:Phone:		State:	Zip:	
	Phone:	Fax:			
	Interconnection Custo Attention: Address: City: Phone:				
	City:		State:	Zip:	
	Phone:	Fax:			
	connection Customer Ap	oplication No:			
Artic	le 1. Scope and Limita	ntions of Agreeme	nt		
1.1		ction Procedures (S	GIP) except for the	sts submitted under the S se submitted under the I	

- ıll
- This Agreement governs the terms and conditions under which the Interconnection 1.2 Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Transmission Provider's Transmission System.
- 1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements if any. The Interconnection Customer will be responsible for separately making all necessary arrangements (including scheduling) for delivery of electricity with the applicable Transmission Provider.
- Nothing in this Agreement is intended to affect any other agreement between the 1.4 Transmission Provider and the Interconnection Customer.

1.5 Responsibilities of the Parties

- 1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.
- 1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.
- 1.5.3 The Transmission Provider shall construct, operate, and maintain its Transmission System and Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.
- 1.5.4 The Interconnection Customer agrees to construct its facilities or systems 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. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Transmission Provider and any Affected Systems.
- 1.5.5 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 the Attachments to 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. The Transmission Provider and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the 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 the Attachments to this Agreement.
- 1.5.6 The Transmission Provider shall coordinate with all Affected Systems to support the interconnection.

1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the applicable control area, including, but not limited to; 1) the rules and procedures concerning the operation of

generation set forth in the Tariff or by the applicable system operator(s) for the Transmission Provider's Transmission System and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement.

1.7 Metering

The Interconnection Customer shall be responsible for the 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 Attachments 2 and 3 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

1.8 Reactive Power

- 1.8.1 The Interconnection Customer shall design its Small 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 the Transmission Provider has established different requirements that apply to all similarly situated generators in the control area on a comparable basis. The requirements of this paragraph shall not apply to wind generators.
- 1.8.2 The Transmission Provider is required to pay the Interconnection Customer for reactive power that the Interconnection Customer provides or absorbs from the Small Generating Facility when the Transmission Provider requests the Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1. In addition, if the Transmission Provider pays its own or affiliated generators for reactive power service within the specified range, it must also pay the Interconnection Customer.
- 1.8.3 Payments shall be in accordance with the Interconnection Customer's applicable rate schedule then in effect unless the provision of such service(s) is subject to a regional transmission organization or independent system operator FERC-approved rate schedule. To the extent that no rate schedule is in effect at the time the Interconnection Customer is required to provide or absorb reactive power under this Agreement, the Parties agree to expeditiously file such rate schedule and agree to support any request for waiver of the Commission's prior notice requirement in order to compensate the Interconnection Customer from the time service commenced.
- 1.9 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement.

Article 2. Inspection, Testing, Authorization, and Right of Access

2.1 Equipment Testing and Inspection

- 2.1.1 The Interconnection Customer shall test and inspect its Small Generating Facility and Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the Transmission Provider of such activities no fewer than five Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Transmission Provider may, at its own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the Transmission Provider a written test report when such testing and inspection is completed.
- 2.1.2 The Transmission Provider shall provide the Interconnection Customer written acknowledgment that it has received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Transmission Provider of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

2.2 Authorization Required Prior to Parallel Operation

- 2.2.1 The Transmission Provider shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the Transmission Provider shall notify the Interconnection Customer of any changes to these requirements as soon as they are known. The Transmission Provider shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.
- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the Transmission Provider's Transmission System without prior written authorization of the Transmission Provider. The Transmission Provider will provide such authorization once the Transmission Provider receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

2.3 Right of Access

2.3.1 Upon reasonable notice, the Transmission Provider may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection,

and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Transmission Provider at least five Business Days prior to conducting any on-site verification testing of the Small Generating Facility.

- 2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Transmission Provider shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.
- 2.3.3 Each Party shall be responsible for its own costs associated with following this article.

Article 3. Effective Date, Term, Termination, and Disconnection

3.1 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 the FERC. The Transmission Provider shall promptly file this Agreement with the FERC upon execution, if required.

3.2 Term of Agreement

This Agreement shall become 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 Interconnection Customer may request and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

3.3 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.

- 3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the Transmission Provider 20 Business Days written notice.
- 3.3.2 Either Party may terminate this Agreement after Default pursuant to article 7.6.
- 3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the Transmission Provider's 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

SGIA or such non-terminating Party otherwise is responsible for these costs under this SGIA.

- 3.3.4 The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.
- 3.3.5 This provisions of this article shall survive termination or expiration of this Agreement.

3.4 Temporary Disconnection

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

Emergency Conditions -- "Emergency Condition" shall mean 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, 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 (3) that, in the case of the 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 Small Generating Facility or the Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, the Transmission Provider may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The Transmission Provider shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility. The Interconnection Customer shall notify the Transmission Provider promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Transmission Provider's Transmission System or any Affected Systems. 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 both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

3.4.2 Routine Maintenance, Construction, and Repair

The Transmission Provider may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the Transmission Provider's Transmission System when necessary for routine maintenance, construction, and repairs on the Transmission Provider's Transmission System. The Transmission Provider shall provide the Interconnection Customer with five Business Days notice prior to such interruption. The Transmission Provider shall use Reasonable Efforts to

coordinate such reduction or temporary disconnection with the Interconnection Customer.

3.4.3 Forced Outages

During any forced outage, the Transmission Provider may suspend interconnection service to effect immediate repairs on the Transmission Provider's Transmission System. The Transmission Provider shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Transmission Provider shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

3.4.4 Adverse Operating Effects

The Transmission Provider shall notify the Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other customers served from the same electric system, or if operating the Small Generating Facility could cause damage to the Transmission Provider's Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Transmission Provider may disconnect the Small Generating Facility. The Transmission Provider shall provide the Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

3.4.5 <u>Modification of the Small Generating Facility</u>

The Interconnection Customer must receive written authorization from the Transmission Provider before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the Transmission System. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the Transmission Provider's prior written authorization, the latter shall have the right to temporarily disconnect the Small Generating Facility.

3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, and the Transmission Provider's Transmission System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades

4.1 Interconnection Facilities

- 4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Transmission Provider shall 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 the Interconnection Customer, such other entities, and the Transmission Provider.
- 4.1.2 The Interconnection Customer shall be responsible for its share of 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 the Transmission Provider's Interconnection Facilities.

4.2 Distribution Upgrades

The Transmission Provider shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer.

Article 5. Cost Responsibility for Network Upgrades

5.1 Applicability

No portion of this article 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades.

5.2 Network Upgrades

The Transmission Provider or the Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Transmission Provider elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

5.2.1 Repayment of Amounts Advanced for Network Upgrades

The Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid to the Transmission Provider and Affected System operator, if any, for Network Upgrades, including any tax gross-up or other tax-related payments associated with the Network Upgrades, and not otherwise refunded to

the Interconnection Customer, to be paid to the 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 Small Generating Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. The Interconnection Customer may assign such repayment rights to any person.

- 5.2.1.1 Notwithstanding the foregoing, the Interconnection Customer, the Transmission Provider, and any applicable Affected System operators may adopt any alternative payment schedule that is mutually agreeable so long as the Transmission Provider and said Affected System operators take one of the following actions no later than five years from the Commercial Operation Date: (1) return to the Interconnection Customer any amounts advanced for Network Upgrades not previously repaid, or (2) declare in writing that the Transmission Provider or any applicable Affected System operators will continue to provide payments to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid; however, full reimbursement shall not extend beyond twenty (20) years from the commercial operation date.
- 5.2.1.2 If the Small Generating Facility fails to achieve commercial operation, but it or another generating facility is later constructed and requires use of the Network Upgrades, the Transmission Provider and Affected System operator shall at that time reimburse the Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the generating facility, if different, is responsible for identifying the entity to which reimbursement must be made.

5.3 Special Provisions for Affected Systems

Unless the Transmission Provider provides, under this Agreement, for the repayment of amounts advanced to any applicable Affected System operators for Network Upgrades, the Interconnection Customer and Affected System operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to Affected System operator as well as the repayment by Affected System operator.

5.4 Rights Under Other Agreements

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 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 cash reimbursements or transmission credits for transmission service that is not associated with the Small Generating Facility.

Article 6. Billing, Payment, Milestones, and Financial Security

6.1 Billing and Payment Procedures and Final Accounting

- 6.1.1 The Transmission Provider shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. The Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.
- Within three months of completing the construction and installation of the 6.1.2 Transmission Provider's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Transmission Provider shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Transmission Provider for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Transmission Provider shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Transmission Provider within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility under this Agreement, the Transmission Provider shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.

6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, it shall immediately notify the other Party of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) requesting appropriate amendments to Attachment 4. The Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless it will suffer significant uncompensated economic or operational harm from the

delay, (2) attainment of the same milestone has previously been delayed, or (3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

6.3 Financial Security Arrangements

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Transmission Provider's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Transmission Provider, at the Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the 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, designing, procuring, and installing the applicable portion of the Transmission Provider's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Transmission Provider under this Agreement during its term. In addition:

- 6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Transmission Provider, and contain terms and conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.
- 6.3.2 The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Transmission Provider and must specify a reasonable expiration date.

Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default

7.1 Assignment

This Agreement may be assigned by either Party upon 15 Business Days prior written notice and opportunity to object by the other Party; provided that:

- 7.1.1 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, provided that the Interconnection Customer promptly notifies the Transmission Provider of any such assignment;
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Transmission Provider, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the Transmission Provider of any such assignment.

7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

7.2 Limitation of Liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

7.3 Indemnity

- 7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.
- 7.3.2 The Parties shall at all times indemnify, defend, and hold 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 failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.
- 7.3.3 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 judgment with respect to, or pay in full, such claim.
- 7.3.4 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.
- 7.3.5 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.

7.4 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.

7.5 Force Majeure

- 7.5.1 As used in this article, a Force Majeure Event 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."
- 7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

7.6 Default

7.6.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event 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 7.6.2, the defaulting Party shall have 60

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 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

7.6.2 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.

Article 8. Insurance

- 8.1 The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Transmission Provider, except that the Interconnection Customer shall show proof of insurance to the Transmission Provider no later than ten Business Days prior to the anticipated commercial operation date. An Interconnection Customer of sufficient creditworthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.
- 8.2 The Transmission Provider agrees to maintain general liability insurance or self-insurance consistent with the Transmission Provider's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Transmission Provider's liabilities undertaken pursuant to this Agreement.
- 8.3 The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

Article 9. Confidentiality

- 9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.
- 9.2 Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.
 - 9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.
 - 9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.
- 9.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC, 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, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 C.F.R. § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Party to this Agreement when it is notified by FERC 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. § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

Article 10. Disputes

10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

- 10.2 In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.
- 10.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.
- 10.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at http://www.ferc.gov/legal/adr.asp.
- 10.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.
- 10.6 If neither Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

Article 11. Taxes

- 11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with FERC policy and Internal Revenue Service requirements.
- 11.2 Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Agreement is intended to adversely affect the Transmission Provider's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

Article 12. Miscellaneous

12.1 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 of ______ (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, or regulations of a Governmental Authority.

12.2 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties or under article 12.12 of this Agreement.

12.3 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.

12.4 Waiver

- 12.4.1 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.
- 12.4.2 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 the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

12.5 Entire Agreement

This Agreement, including all Attachments, 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.

12.6 Multiple 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.

12.7 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.

12.8 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.

12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC 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.

12.10 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 Small 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 24 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.

12.11 Subcontractors

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.

- 12.11.1 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 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.
- 12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

12.12 Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement 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 the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; 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 Agreement 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, except to the extent that the Parties otherwise agree as provided herein.

Article 13. Notices

If to the Interconnection Customer:

13.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national currier service, or sent by first class mail, postage prepaid, to the person specified below:

| Attention: _______ | Attention: ______ | Address: ______ | City: _____ | State: ____ | Zip: _____ | Fax: _____ |
| If to the Transmission Provider: _____ | Attention: _____ | Address: _____ | City: ____ | State: ____ | Zip: ____ | Fax: ____ | State: ____ | Zip: ____ | Fax: ____ | State: ____ | Zip: ____ | Fax: ____ | State: ____ | Zip: ____ | Zip: ____ | State: ____ | Zip: _____ | Zip: ____ | Zip:

13.2	Billing and Payment Billings and payments shall be sent to the addresses set out below:					
	Interconnection Customer:					
	Attention:					
	Address:					
	City:	State:	Zip:			
	Transmission Provider:					
	Attention:					
	Address:			<u> </u>		
	City:					
13.3	Alternative Forms of Notice					
	Any notice or request required or protection to the telephon of telephon of the telephon of telephon of telephon of telephon o	be given in writi e numbers and e	ng may be so g	iven by telephone,		
	Interconnection Customer:					
	Attention:					
	Address:					
	City:					
	Phone:	Fax:				
	If to the Transmission Provider:					
	Transmission Provider:					
	Attention:					
	Address:					
	City:		Zip:			

13.4 <u>Designated Operating Representative</u>

Phone: _____

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This

Fax: _____

person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

	Interconnection Customer:			_
	Attention:			
				_
		State:		_
	Phone:	Fax:		
	Transmission Provider's Ope	erating Representative:		
	Transmission Provider:			_
		State:		
	Phone:	Fax:		
13.5	Changes to the Notice Infor Either Party may change the prior to the effective date of le 14. Signatures	is information by giving f	ive Business D	ays written notice
their r	IN WITNESS WHEREOF, respective duly authorized rep		nis Agreement	to be executed by
For th	e Transmission Provider			
Name	:		-	
me:			_	
Date:				

Name:			

Title:

Date: _____

For the Interconnection Customer

Glossary of Terms

Affected System - An electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

Applicable Laws and Regulations - 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.

Business Day - Monday through Friday, excluding Federal Holidays.

Default - The failure of a breaching Party to cure its breach under the Small Generator Interconnection Agreement.

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

Good Utility Practice - 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 - 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 the Interconnection Customer, the Interconnection Provider, or any Affiliate thereof.

Interconnection Customer - Any entity, including the Transmission Provider, the Transmission Owner or any of the affiliates or subsidiaries of either, that proposes to interconnect its Small Generating Facility with the Transmission Provider's Transmission System.

Interconnection Facilities - The Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small 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 Request - The Interconnection Customer's request, in accordance with the Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the Transmission Provider's Transmission System.

Material Modification - A modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

Network Upgrades - Additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Transmission Provider's Transmission System to accommodate the interconnection of the Small Generating Facility with the Transmission Provider's Transmission System. Network Upgrades do not include Distribution Upgrades.

Operating Requirements - Any operating and technical requirements that may be applicable due to Regional Transmission Organization, Independent System Operator, control area, or the Transmission Provider's requirements, including those set forth in the Small Generator Interconnection Agreement.

Party or Parties - The Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

Point of Interconnection - The point where the Interconnection Facilities connect with the Transmission Provider's Transmission System.

Reasonable Efforts - With respect to an action required to be attempted or taken by a Party under the 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.

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

Tariff - The Transmission Provider or Affected System'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.

Transmission Owner - The 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 Small Generator Interconnection Agreement to the extent necessary.

Transmission Provider - 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 System - The facilities owned, controlled or operated by the Transmission Provider or the Transmission Owner that are used to provide transmission service under the Tariff.

Upgrades - 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.

Attachment 2

Description and Costs of the Small Generating Facility, Interconnection Facilities, and Metering Equipment

Equipment, including the Small Generating Facility, Interconnection Facilities, and metering equipment shall be itemized and identified as being owned by the Interconnection Customer, the Transmission Provider, or the Transmission Owner. The Transmission Provider will provide a 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.

Attachment 3

One-line Diagram Depicting the Small Generating Facility, Interconnection Facilities, Metering Equipment, and Upgrades

Milestones

In-Service Date:	
Critical milestones and responsibility as agreed to by t	the Parties:
Milestone/Date	Responsible Party
(1)	
2)	
3)	
4)	
(5)	
6)	
7)	
8)	
9)	
[10]	
Agreed to by:	
For the Transmission Provider	Date
For the Transmission Owner (If Applicable)	Date
For the Interconnection Customer	Date

Attachment 5

Additional Operating Requirements for the Transmission Provider's Transmission System and Affected Systems Needed to Support the Interconnection Customer's Needs

The Transmission Provider shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the Transmission Provider's Transmission System.

Transmission Provider's Description of its Upgrades and Best Estimate of Upgrade Costs

The 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. The Transmission Provider shall functionalize Upgrade costs and annual expenses as either transmission or distribution related.

ATTACHMENT N-1

TRANSMISSION PLANNING PROCESS (CP&L Zone and DEC Zone)

1. INTRODUCTION

Duke Energy Carolinas, LLC (Duke) and Progress Energy Carolinas, Inc. (Progress), Transmission Providers with transmission facilities located in the states of North Carolina and South Carolina, ensure that their entire Transmission Systems (i.e., both the portions located in North Carolina and the portions located in South Carolina) are planned in accordance with the requirements imposed by Order No. 890 through the process developed by the North Carolina Transmission Planning Collaborative Process (NCTPC Process). The NCTPC was formed by the following load serving entities (LSEs) in the State of North Carolina: Duke, Progress, ElectriCities of North Carolina (ElectriCities), and the North Carolina Electric Membership Corporation (NCEMC) (collectively, NCTPC Participants or Participants).

In addition to engaging in regional planning through the NCTPC Process, as discussed in Section 10, the Transmission Providers engage in "inter-regional" coordination activities with transmission providers located outside their Control Areas. Such activities include participation in SERC and the Southeast Inter-Regional Participation Process (Appendix 1), which focus on reliability assessments and economic studies respectively.

2. NCTPC PROCESS OVERVIEW INCLUDING THE PROCESS FOR CONSULTING WITH CUSTOMERS

The NCTPC will annually develop a single, coordinated transmission plan (Collaborative Transmission Plan) that appropriately balances costs, benefits, and risks associated with the use of transmission, generation, and demand-side resources to meet the needs of LSEs as well as Transmission Customers under this Tariff.

- 2.1 The North Carolina Transmission Planning Collaborative Participation Agreement (Participation Agreement) governs the NCTPC and the NCTPC Process. The Participation Agreement is located on the NCTPC Website (http://www.nctpc.org/nctpc/).
- 2.2 The NCTPC Process is summarized in a document entitled *North Carolina Transmission Planning Collaborative Process* that is located on the NCTPC Website.
- 2.3 Participation in the NCTPC
 - 2.3.1 Pursuant to the *Participation Agreement*, the NCTPC has four components: the Oversight/Steering Committee (OSC), the Planning Working Group (PWG), the Transmission Advisory Group (TAG), and the Independent Third Party (ITP).

- 2.3.2 Eligibility for participation in the four NCTPC components is as follows:
 - 2.3.2.1 The appointment of OSC members by the NCTPC Participants is governed by the *Participation Agreement*. The ITP is an *ex officio* member of the committee. The qualifications required to serve on the OSC are set forth in a document entitled *Scope Oversight/Steering Committee* that is located on the NCTPC Website.
 - 2.3.2.2 The appointment of PWG members by the NCTPC Participants is governed by the *Participation Agreement*. The ITP also has a representative on the PWG. The qualifications required to serve on the PWG are set forth in a document entitled *Scope Planning Working Group* that is located on the NCTPC Website.
 - 2.3.2.3 Anyone may participate in TAG meetings and sign-up to receive TAG communications. The TAG is comprised of TAG participants. An employee or agent of a NCTPC Participant who 1) performs or supervises transmission planning activities or 2) is a member of the OSC or PWG may not be a TAG participant, but employees or agents of NCTPC Participants that perform activities other than transmission planning activities may be TAG participants.
 - 2.3.2.4 The Independent Third Party (ITP) is selected by the OSC. The ITP must have qualifications similar to OSC and PWG members.
- 2.4 Responsibilities and Decision-Making of NCTPC Components

The responsibilities of the components within the NCTPC are determined by the *Participation Agreement* and/or the OSC. Decision-making likewise is established in the *Participation Agreement*, or by policies established by the OSC.

2.4.1 Oversight/Steering Committee

- 2.4.1.1 The OSC is responsible for overseeing and directing all the activities associated with this NCTPC Process. A list of the OSC's responsibilities is found in *Scope Oversight/Steering Committee*.
- 2.4.1.2 OSC decision-making is governed by the *Participation Agreement*.
- 2.4.1.3 Officers of the OSC are selected in the manner set forth in the *Participation Agreement*.

2.4.2 Planning Working Group

- 2.4.2.1 The PWG is responsible for developing and performing the appropriate simulation studies to evaluate the transmission conditions in the Participants' service territories and recommend a coordinated solution for the various transmission limitations identified in the studies. A list of the PWG's responsibilities is found in *Scope Planning Working Group*.
- 2.4.2.2 PWG decision-making is governed by the *Participation Agreement*.
- 2.4.2.3 Officers of the PWG are selected in the manner set forth in the *Participation Agreement*.

2.4.3 Transmission Advisory Group

- 2.4.3.1 The purpose of the TAG is to provide advice and recommendations to the NCTPC Participants to aid in the development of an annual Collaborative Transmission Plan. The TAG participants may propose enhanced transmission access projects for evaluation as described in Section 4.2.2 hereof. The TAG participants select which of those projects should be evaluated through the TAG Sector Voting Process. The TAG participants also provide input on the annual study scope elements of both the Reliability Planning Process as well as the Enhanced Transmission Access Planning Process, including input on the following: Study Assumptions; Study Criteria; Study Methodology; Case Development and Technical Analysis; Problem Identification; Assessment and Development of Solutions (including proposing alternative solutions for evaluation); Comparison and Selection of the Preferred Transmission Plan; and the Transmission Plan Study Results Report. A full list of the TAG's responsibilities is found in Scope - Transmission Advisory Group, which is located on the NCTPC Website.
- 2.4.3.2 The ITP will chair the TAG meetings and serve as a facilitator for the group. TAG decision-making is by consensus among the TAG participants. However, in the event consensus cannot be reached, voting will be conducted through the TAG Sector Voting Process. The ITP will provide notice to the TAG participants in advance of the TAG meeting that specific votes will be taken during the TAG meeting.
- 2.4.3.3 Only TAG participants attending the meeting (in person or by telephone) will be allowed to participate in the TAG Sector Voting Process. No voting by proxy is permitted.

2.4.4 TAG Sector Voting Process.

- 2.4.4.1 In order for a TAG participant to participate in the TAG Sector Voting Process, the TAG participant must have registered with the ITP at least two weeks prior to the first meeting at which the TAG participant intends to vote. Such web-based registration will require the TAG participant to provide the following information to the ITP: name, home or business address, place of employment (if any), email address (if any), and telephone number. The registration form will require the TAG participant to indicate whether the TAG participant is registering as an "Individual" or as an agent or employee of a "TAG Sector Entity." If the TAG participant registers as an agent, member, or employee of a TAG Sector Entity, s/he must identify such TAG Sector Entity. An individual TAG participant may register as an agent, member, or employee of more than one TAG Sector Entity.
- 2.4.4.2 A TAG Sector Entity may be any organized group (e.g., corporation, partnership, association, trust, agency, government body, etc.) but can not be an individual person. A TAG Sector Entity may be a member of only one TAG Sector. A TAG Sector Entity and its affiliates or member organizations all may register as separate TAG Sector Entities, as long as such affiliates or member organizations meet the definition of a TAG Sector Entity.
- 2.4.4.3 A TAG Sector Entity should elect to be a member of one of the following TAG Sectors: Cooperative LSEs (that serve load in the NCTPC footprint); Municipal LSEs (that serve load in the NCTPC footprint); Investor-Owned LSEs (that serve load in the NCTPC footprint); Transmission Providers/Transmission Owners (that are not LSEs in the NCTPC footprint); Transmission Customers (a customer taking Transmission Service from at least one Transmission Provider in the NCTPC); Generator Interconnection Customers (a customer taking FERC- or state-jurisdictional generator interconnection service from at least one of the Transmission Providers in the NCTPC); Eligible Customers and Ancillary Service Providers (includes developers; ancillary service providers; power marketers not currently taking transmission service; and demand response providers); and General Public. An Individual is only eligible to join the General Public Sector.
- 2.4.4.4. Only one individual TAG participant that has registered as an agent or employee of a TAG Sector Entity may vote on behalf of a particular TAG Sector Entity with regard to any particular vote. An individual TAG participant may vote on behalf of more than one TAG Sector Entity, if authorized to do so. Questions to be voted on will be answerable with a Yes or No.

2.4.4.5 If a vote is to be taken, each TAG Sector that has at least one TAG Sector Entity representative, or at least one Individual or TAG Sector Entity representative in the case of the General Public Sector, present will receive a Sector Vote with a worth of 1.00. A Sector Vote is divisible. The vote of each TAG participant eligible to vote in a Sector Vote is not divisible. The vote of each TAG participant in a TAG Sector will be multiplied by 1.00 divided by the total number or TAG participants voting in such Sector to determine how the Sector Vote with a total worth of 1.00 will be allocated between "Sector Yes Votes" and "Sector No Votes." That is, each Sector Vote will be allocated such that the Sector Yes Vote(s) and Sector No Vote(s) totals 1.00. The Sector Yes Vote and Sector No Vote for each TAG Sector will then each be weighted by multiplying each of them by 1.00 divided by the number of TAG Sectors participating in the relevant vote. The results will be called "Weighted Sector Yes Vote" and "Weighted Sector No Vote." The winning position will be the larger of the Weighted Sector Yes Vote and Weighted Sector No Vote. Appendix 3 contains an example of the voting process.

2.4.5. Independent Third Party

- 2.4.5.1 The ITP facilitates the overall NCTPC Process.
- 2.4.5.2 A list of the ITP's primary responsibilities is found in Scope Planning Working Group and Scope Oversight/Steering Committee.
- 2.4.5.3 The ITP also provides the leadership role in developing the Enhanced Transmission Access Planning (ETAP) Process, subject to the oversight of the OSC.
- 2.4.5.4 The ITP maintains the NCTPC Website.
- 2.4.5.5 The ITP's role in decision-making varies based on which group s/he is participating as documented in the NCTPC documents posted on the NCTPC Website.

2.5 Participation of State Regulators

State regulators, including state-sanctioned entities representing the public, like other members of the public, may choose to be TAG participants. State public utility regulatory commissions also may seek to receive periodic status updates and the progress reports on the NCTPC Process. State public utility regulatory commissions may be TAG Sector Entities in the General Public Sector.

3. NOTICE PROCEDURES, MEETINGS, AND PLANNING-RELATED COMMUNICATIONS

All information regarding transmission planning meetings and communications are located on the NCTPC Website.

3.1 Notice

- 3.1.1 Notice of all meetings of a component (TAG, PWG, OSC) will be by email to such component. All TAG meeting notices and agendas will be posted on the NCTPC Website.
- 3.1.2 Information about signing up to be a TAG participant and to receive email communications is posted on the NCTPC Website.
- 3.1.3 The OSC will publish highlights of its meetings on the NCTPC Website.

3.2 Location

- 3.2.1 The location of an OSC or PWG meeting will be determined by the component.
- 3.2.2 The location of a TAG meeting will be determined by the OSC.
- 3.2.3 Conference call dial-in technology will be available for meetings upon request.

3.3 Meeting Protocols

3.3.1 OSC

- 3.3.1.1 The OSC chair schedules meetings, provides notice, ensures that meeting minutes are taken, develops the agenda, chairs the meetings.
- 3.3.1.2 The OSC generally will meet at least monthly, and more frequently as necessary.
- 3.3.1.3 OSC meetings are open to the OSC members (including the ITP), their alternates, PWG members, and, if approved, guests.

3.3.2 PWG

- 3.3.2.1 The PWG chair schedules meetings, provides notice, ensures that meeting minutes are taken, develops the agenda, and chairs the meetings.
- 3.3.2.2 The PWG generally meets at least monthly, and more frequently as necessary.

3.3.2.3 PWG meetings are open to the PWG members, the ITP, the OSC (and their alternates), and, if approved, guests.

3.3.3 TAG

- 3.3.3.1 TAG meetings are chaired and facilitated by the ITP.
- 3.3.3.2 The TAG generally meets four times a year.
- 3.3.3.3 Meetings of the TAG generally are open to the public, i.e., TAG participants. When necessary, TAG meetings may be restricted by the ITP to TAG participants that are qualified to receive Confidential Information.
- 3.3.3.4 A yearly meeting and activity schedule is proposed, discussed with, and provided to TAG participants annually.

4. DESCRIPTION OF THE METHODOLOGY, CRITERIA, AND PROCESSES USED TO DEVELOP TRANSMISSION PLANS

The NCTPC Process is a coordinated regional planning process that includes both a "Reliability Planning" and an "Enhanced Transmission Access Planning" (ETAP) process, both of which ultimately result in the development of a Collaborative Transmission Plan. The entire, iterative process ultimately results in a single Collaborative Transmission Plan that appropriately balances the costs, benefits and risks associated with the use of transmission, generation, and demand-side resources.

In order to ensure comparability, customers taking Network Transmission Service are expected to accurately reflect their demand response resources appropriately in their annual load forecast projections. Customers taking Point-to-Point Transmission Service are expected to accurately reflect their demand response resources in submitting their requests for Transmission Service and in submitting information about potential needs for Point-to-Point Transmission Service. Eligible Customers providing information about potential needs for Point-to-Point Transmission Service are expected to accurately reflect their demand response resources in submitting information. To the extent a TAG participant has a demand response resource or a generation resource that the TAG participant desires the NCTPC to specifically consider as an alternative to transmission expansion, or otherwise in conjunction with the NCTPC Process, such TAG participant sponsoring such demand response resource or generation resource shall provide the necessary information (cost, performance, lead time to install, etc.) in order for the NCTPC to consider such demand response resource or generation resource alternatives comparably with other alternatives.

4.1 Overview of Reliability Planning Process

The Reliability Planning Process addresses transmission upgrades needed to maintain reliability and to integrate new generation resources and/or loads. The Reliability Planning Process includes a base reliability study (base case) that evaluates each Transmission System's ability to meet projected load with a defined set of resources as

well as the needs of firm point-to-point customers, whose needs are reflected in their transmission contracts and reservations. A resource supply analysis also is conducted to evaluate transmission system impacts for other potential resource supply options to meet future load requirements. The final results of the Reliability Planning Process include summaries of the estimated costs and schedules to provide any transmission upgrades and/or additions needed to maintain a sufficient level of reliability necessary to serve customers. Throughout the Reliability Planning Process, TAG participants (including TAG participants representing transmission solutions, generation solutions, and solutions utilizing demand resources) may participate.

- 4.2 Overview of Enhanced Transmission Access Planning Process
 - 4.2.1 The ETAP Process is the economic planning process that allows the TAG participants to propose economic upgrades to be studied as part of the transmission planning process. The ETAP Process evaluates the means to increase transmission access to potential supply resources inside and outside the Control Areas of the Transmission Providers. This economic analysis provides the opportunity to study what transmission upgrades would be required to reliably integrate new resources. In addition, this economic analysis would include, if requested, the evaluation of Regional Economic Transmission Paths (RETPs) that would facilitate potential regional point-to-point economic transactions. RETPs are described in more detail below and in the document entitled NCTPC Transmission Cost Allocation on the NCTPC Website.
 - 4.2.2 The ETAP Process begins with the TAG participants proposing scenarios and interfaces to be studied. The information required and the form necessary to submit a request as well as the submittal deadline is reviewed and discussed with the TAG participants early in the annual planning cycle. The form is posted on the NCTPC Website. The PWG will determine if it would be efficient to combine and/or cluster any of the proposed scenarios and will also determine if any of the proposed scenarios are of an Inter-Regional nature. The OSC will direct the TAG participants to submit the Inter-Regional study requests to the Southeast Inter-Regional Participation Process since those studies would have to be evaluated within that forum. Throughout the ETAP Process, TAG participants (including TAG participants representing transmission solutions, generation solutions, and solutions utilizing demand resources) may participate.
 - 4.2.3 The OSC will review the PWG analysis, approve the compiled study list, and provide the study list to the TAG. For the study scenarios that impact the NCTPC region, but are not Inter-Regional in nature, the TAG participants will select a maximum of five scenarios that will be studied within the current NCTPC planning cycle. If consensus cannot be reached as to which scenarios to study, the choice will be resolved through the

- TAG Sector Voting Process. The TAG participants may request that the five scenarios be combined or clustered.
- 4.2.4 There will be no charge to the TAG participants for the five studies selected by the TAG participants. However, if a particular TAG participant wants the NCTPC to evaluate a scenario that was not chosen by the TAG participants, then the TAG participant can request to have the NCTPC conduct the study. The NCTPC will evaluate this request and will conduct the study if the study can be reasonably accommodated, however the cost of conducting this additional study will be allocated to that specific TAG participant.

4.2.5 RETPs

- 4.2.5.1 As part of the ETAP, TAG participants may propose that a particular RETP be studied. The creation of an RETP would permit energy to be transferred on a Point-to Point basis from an interface or a Point of Receipt on one Transmission Provider's system to an interface or a Point of Delivery on another Transmission Provider's system for a specific period of time. A subscriber to an RETP is under no obligation to use the complete RETP, it may resell its rights to portions of the RETP. An RETP ensures that Point-to-Point Transmission Service can be provided over the Duke and/or Progress systems. The costs of the projects necessary to create an RETP will be subject to the "requestor pays" cost allocation methodology described *infra*. A network customer may seek to use an RETP as the firm Point-to-Point Transmission Service necessary to support a designated network resource external to the Control Area in which its load is located.
- 4.2.5.2 The TAG participants will identify RETPs that they would like studied. There would be a need for an initial study of an RETP ("Initial RETP Study"). If a proposed RETP would be solely contained within the NCTPC, then the NCTPC Process would be used to address the RETP. However, if a proposed RETP would impact transmission providers outside the NCTPC, there will be a need to coordinate such an initial study with other transmission providers.
- 4.2.5.3 If an Initial RETP Study is performed, it would identify any transmission system problems/limitations related to the Transmission Providers impacted by the RETP and would identify the transmission solutions/upgrades that would be needed to accommodate the RETP. An RETP would be evaluated in the Initial RETP Study as if it was a request for Point-to Point Transmission Service from a source control area (Point of Receipt) to a sink control area (Point of Delivery) over a specific period of

- time (the TAG participants requesting the study would determine the time period), but it will not be considered to be a request that is in the transmission queue. The Point of Receipt and Point of Delivery can be interfaces.
- 4.2.5.4 The Initial RETP Study would only provide preliminary information on the projected cost and scope of the facilities that would be needed to create the RETP, and the time it would take to complete the RETP. In the Initial RETP Study, each Transmission Provider along the RETP would identify the estimated costs for any upgrades necessary to provide service over the RETP.
- 4.2.5.5 If the RETP was totally contained within the NCTPC, then the following process would be used to move the RETP through the study to potential project commitment phases. Once the Initial RETP Study is complete, a determination would be made as to whether there is sufficient interest in the project to move the RETP from the "initial study" mode to the establishment of an "Open Season" for the RETP. The Open Season will provide the structure whereby Duke and Progress will be able to process these RETP Point-to Point Transmission Service requests for the entire proposed MW of the RETP from the source control area to the sink control area for the relevant time period. During this Open Season all potential transmission customers would have a 60-day window to put in their request to subscribe to all or a portion of the MW of service being made available along the RETP.
- 4.2.5.6 When the Open Season process is initiated by Duke and Progress, the transmission queue positions for these RETP requests will be established.
- 4.2.5.7 Through the Open Season process, which will be iterative, if the RETP is fully subscribed, it would move forward to a Facilities Study stage. After such stage, if it remained fully subscribed, the RETP would be included in the Collaborative Transmission Plan (and/or a supplement to such Plan) and Service Agreements will be executed (or filed on an unexecuted basis).
- 4.2.5.8 If an RETP encompasses Transmission Providers outside the NCTPC, the impacted Transmission Providers will work individually and through applicable stakeholder forums to perform the necessary studies and develop the processes that would be used to move from a study of a RETP to actual transmission reservations that would be needed to support the RETP. The above study and Open Season concepts could be used by these larger inter-regional transmission provider groups.

- 4.2.6 The final results of the ETAP Process include the estimated costs and schedules to provide the increased transmission capabilities. The enhanced transmission access study results are reviewed and discussed with the TAG participants.
- 4.3 Overview of the Steps in the Planning Processes
 - 4.3.1 Each year, the OSC will initiate the process to develop the annual Collaborative Transmission Plan.
 - 4.3.2 The OSC will provide notice of the commencement of the process to develop the annual Collaborative Transmission Plan via e-mail to the TAG and posts a notice on the NCTPC Website.
 - 4.3.3 The process will allow for flexibility to make modifications to the development of the plan throughout the year as needs change, new needs arise, or new solutions to problems are identified.
 - 4.3.4 The schedule for all of the activities will be set by the PWG and OSC, but will vary from year to year. The basic order of events is as set forth in Section 5, although the planning process is an iterative one. A list of relevant dates established for the planning cycle will be posted on the NCTPC website.
- 4.4 Summary Flow Chart of Process

The following page contains a flow chart of the NCTPC Process.

TAG feedback on final draft Collaborative Collaborative OSC creates final draft Collaborative OSC approves Plan Plan final Plan OSC selects reliability and through enhanced access solutions; checks for improved reliability enhanced access solutions resource planning Participants ' Participants and TAG review the Participants and reliability study TAG review the enhanced access processes study results results estimates of costs and PWG coordinates the identifies reliability problems, develops PWG coordinates the problems, develops estimates of costs study analysis, solutions with identifies access solutions with and schedules study analysis, schedules Feedback and Iterative Studies identifies if requests are of an Inter -PWG compiles the Regional scope. OSC approves the provides to the TAG. TAG selects study list and approves the reliability study study list and **Enhanced Transmission Access Planning** PWG develops and the OSC NCTPC study scenarios. scope k.Ink Reliability reliability problems and current transmission recommends scenarios and interfaces. PWG evaluates upgrade plans The TAG

Figure 1

North Carolina Transmission Planning Collaborative Process Flowchart

CRITERIA, ASSUMPTIONS, AND DATA UNDERLYING THE PLAN AND METHOD OF DISCLOSURE OF TRANSMISSION PLANS AND STUDIES

5.1 Study Assumptions

- 5.1.1 The PWG will select the study assumptions for the analysis based on direction provided by the OSC.
- 5.1.2 Once the PWG identifies the study assumptions, they will be reviewed with the TAG participants before the set of final assumptions are approved by the OSC. The process for this dialogue is in-person meetings, written submissions, and/or other forms of communication selected by TAG participants. Input should be provided in the timeframes agreed upon.
- 5.1.3 The study assumptions shall be set forth in an annual *Study Scope Document*.
- 5.1.4 The Transmission Providers will prepare the base case models. These models will be reviewed with the PWG to ensure that they represent the study assumptions approved by the OSC. TAG participants also may, upon request, review the base case models and provide input to the PWG with regard to whether the models represent the study assumptions approved by the OSC.
- 5.1.5 The Transmission Providers will also develop the necessary change case models as required to evaluate different resource supply scenarios and enhanced transmission access scenarios as directed by the OSC. Such change case models will also be reviewed with the PWG to ensure that they represent the study assumptions approved by the OSC. TAG participants also may, upon request, request to review the change case models and provide input to the PWG with regard to whether the models represent the study assumptions approved by the OSC.

5.2 Study Criteria

- 5.2.1 The PWG establishes the planning criteria by which the study results will be measured, in accordance with NERC and SERC Reliability Standards and individual Transmission Provider criteria. TAG participants may review and comment on the planning criteria.
- 5.2.2 Transmission System planning documents of Duke and Progress will be posted on their respective OASIS sites. Some planning documents may not be posted due to CEII and confidentiality concerns, but will be identified such that they can be requested via the methodology posted on the relevant OASIS.

- 5.3 Data Collection and Case Development
 - 5.3.1 The most current Multi-Regional Modeling Working Group (MMWG) or SERC Long-Term Study Group model will be used for the systems external to Duke and Progress as a starting point for the base case to be used by both Progress and Duke. The base case will include the detailed internal models for Progress and Duke and will include current transmission additions planned to be in-service for given years.
 - 5.3.2 The following data are relevant to the development of internal models for Progress and Duke:

Load and resource projections provided by network customers (including the native load of the NCTPC Participants);

Confirmed, firm point-to-point transmission service reservations (including rollover rights);

Generation real and reactive capacity data;

Generation dispatch priority data;

Transmission facility impedance and rating data; and

Interchange data adjusted to correctly model transfers associated with designated network resources from outside the Transmission Providers' Control Areas.

- 5.3.3 The Transmission Providers collect the necessary planning data and information that are not already in their possession. One element of this data collection process will be the annual collection of data from Network Customers required by this Tariff. Any guidelines, data formats, and schedules for any data and information exchanges will be established by the PWG. Aside from the annual submission of data by Network Customers, the timing of this data collection process is established as part of the development of the annual study work plan that is prepared by the PWG, reviewed with the TAG participants, and approved by the OSC.
- 5.3.4 TAG participants may provide additional input into the data collection process (i.e., the provision of data not required to be submitted under this Tariff), such as providing information on future point-to-point transmission service scenarios. Such non-required information may be used in the appropriate study process.
- 5.3.5 Transmission customers should provide the Transmission Providers with timely written notice of material changes in any information previously provided relating to load, resources, or other aspects of their facilities or operations affecting the Transmission Provider's ability to provide service. Network customers may provide revised versions of previously submitted annual data reporting forms.

- 5.3.6 Additional cases will be developed as required for different scenarios to evaluate other options to meet load demand forecasts in the study, including where fictitious or as yet undesignated network resources are deemed to be designated. Other cases may be developed and approved by the OSC to evaluate enhanced access scenarios, such as predicted future point-to-point transmission uses, as submitted by the TAG participants.
- 5.3.7 The Case Development details will be identified in the annual *Study Scope Document*.
- 5.3.8 Sufficient information will be made available, subject to CEII and confidentiality restrictions, to enable TAG participants to replicate the results of planning studies. A TAG participant seeking data and information that would allow it to replicate the NCTPC planning studies should provide such request to the ITP, who will verify that confidentiality requirements described in Section 9 have been met before providing such information.

5.4 Methodology

5.4.1 The PWG determines the methodologies that will be used to carry out the technical analysis required for the approved studies. The PWG also determines the specific software and models that will be utilized to perform the technical analysis. The study methodology will be identified in the annual *Study Scope Document*. TAG participants may review and comment on the study methodology.

5.5 Technical Analysis and Study Results

- 5.5.1 The PWG performs the technical study analysis in accordance with the OSC approved study methodology and produces the study results.
- 5.5.2 Results from the technical analysis are reported to identify transmission elements approaching their limits such that all NCTPC Participants are made aware of potential issues and appropriate steps can be identified to correct these issues, including the potential of identifying previously undetected problems.
- 5.5.3 Study results are made available to the TAG participants for review and comment.

5.6 Assessment and Problem Identification

5.6.1 The Transmission Providers provide the summary data identifying the reliability problems and causes resulting from their assessments and comprehensively review the information with the PWG. The PWG evaluates the technical results provided by the Transmission Providers to identify problems and issues and reports to the OSC.

5.6.2 TAG participants are provided information relating to technical assessments and problem identification.

5.7 Solution Development

- 5.7.1 The PWG identifies potential solutions to the transmission problems identified and will test the effectiveness of the potential solutions through additional analysis as required and ensure that the solutions meet the study criteria previously developed.
- 5.7.2 TAG participants will have the opportunity to propose alternative transmission, generation and/or demand response solutions. TAG participants shall provide the necessary information (cost, performance, lead time to install, etc.) for proposed generation and/or demand response alternative solutions so that they may be compared with other alternatives.
- 5.7.3 All options that satisfactorily resolve an identified reliability problem would be given consideration on a comparable basis.
- 5.7.4 The Transmission Providers estimate the costs for each of the proposed solutions (e.g., cost, cash flow, present value) and develop a rough schedule estimate to implement the solution. This information is reviewed and discussed by the PWG.

5.8 Selection of Preferred Transmission Plan

- 5.8.1 The PWG compares all of the alternatives and selects the preferred solution by balancing the solutions' costs, benefits, and associated risks. Competing solutions will be evaluated against each other based on a comparison of their relative economics, timing, feasibility, and effectiveness of performance.
- 5.8.2 The PWG selects a preferred set of solutions that provides the most reliable and cost effective solution while prudently managing the associated risks.
- 5.8.3 The PWG provides the OSC and the TAG participants with their recommendations based on this selection process in order to obtain their input.

5.9 Collaborative Transmission Plan Report

5.9.1 The PWG prepares a draft "Collaborative Transmission Plan Report" based on the study results and the recommended solutions and provides the draft to the OSC for review. The draft Report describes the plan in a manner that is understandable to the TAG participants (e.g., describing any needs, the underlying assumptions, applicable planning criteria, and methodology used to determine the need), rather than simply reporting engineering results. The report includes a comprehensive summary of all

- the study activities as well as the recommended solutions including estimates of costs and construction schedules.
- 5.9.2 The OSC forwards the draft report to the TAG participants for their review and discussion. The PWG members are the technical points of contact that can respond to questions regarding modeling criteria, assumptions, and data underlying the Report. The TAG participants may discuss, question, or propose alternatives for any upgrades identified by the draft Report.
- 5.9.3 The OSC evaluates the results and the PWG recommendations and the TAG participants' input. The OSC approves the final Collaborative Transmission Plan for posting on the NCTPC Website. The Plan also is posted on the Transmission Providers' OASIS and distributed to the TAG participants.
- 5.9.4 The Collaborative Transmission Plan Report allows the NCTPC Participants to identify alternative, least-cost resources to include with their respective Integrated Resource Plans. Others can similarly use this information for their own resource planning purposes.
- 5.9.5 The Collaborative Transmission Plan, and the associated models, serve as the basis for the models that the Transmission Providers provide as input to the development of the SERC-wide model as described in Section 10.

5.10 Status Reports

5.10.1 As part of the NCTPC Process, the Transmission Providers periodically provide the TAG participants a report on the status of the transmission upgrades presented in the previous Collaborative Transmission Plans. The update is posted on the NCPTC Website and includes the following information: the name of the project, the issue it resolves, the name of the relevant Transmission Provider(s), the original planned in-service date and the current expected in-service date.

6. DISPUTE RESOLUTION MECHANISM

- 6.1 NCTPC Process Disputes
 - 6.1.1 The OSC voting structure allows the ITP to cast a tie breaking vote if necessary to decide on a particular issue.
 - 6.1.2 A Transmission Provider has the right to reject an OSC decision if it believes that it would harm reliability.
 - 6.1.3 Any NCTPC Participant or TAG participant has the right to seek assistance from the North Carolina Utilities Commission (NCUC) Public

- Staff to mediate an issue and render a non-binding opinion on any disputed decision.
- 6.1.4 If the Participants cannot resolve a disputed decision by NCUC Public Staff facilitation, they may seek review from a judicial or regulatory body that has jurisdiction.

6.2 Transmission Siting Disputes

- 6.2.1 The South Carolina Code of Laws Section 58, Chapter 33 addresses disputes involving utilities' transmission projects that require South Carolina authorization through the certificates of public convenience and necessity process.
- 6.2.2 NCUC Rule R8-62 addresses disputes involving utilities' transmission projects that require North Carolina authorization through the certificates of public convenience and necessity process.

6.3 Integrated Resource Planning Disputes

- 6.3.1 The NCUC allows public participation in and may hold hearings regarding matters related to integrated resource planning.
- 6.3.2 The South Carolina Public Service Commission allows public participation in and may hold hearings regarding matters related to integrated resource planning.

6.4 Tariff Disputes

- 6.4.1 The dispute resolution process provisions included in this Tariff apply to disputes involving compliance with the Commission's transmission planning obligations set forth in Order No. 890. Any TAG participant, not just a TAG participant that is a Transmission Customer, may avail itself of the dispute resolution provision of the Tariff, as that process is modified below.
- 6.4.2 If a TAG participant has completed the negotiation step set forth in Section 12.1 of this Tariff, a TAG participant may ask to have the issue mediated on a non-binding basis before the next step (i.e., arbitration) commences. A request for mediation must be made within thirty days of the agreed-upon conclusion of the negotiation step. If the mediation step is concluded without resolution, the disputing party has thirty days to inform the Transmission Provider that it seeks to commence the arbitration step set forth in Section 12.2. If this mediation option is selected, the parties to the dispute will use the Commission's Dispute Resolution Service as the forum for mediation.

- 6.4.3 Matters over which the Commission does not have jurisdiction, including planning to meet retail native load of the Transmission Providers shall not be within the scope of the dispute resolution process of this Tariff.
- 6.5 Regional Reliability Project Planning Disputes
 - 6.5.1 The Commission's Dispute Resolution Service would be used to settle any issues arising from the cost allocation related to Regional Reliability Projects, discussed *infra*, that involve transmission providers outside the NCTPC.

7. TRANSMISSION COST ALLOCATION

7.1 OATT Cost Allocation

With the exception of "Regional Reliability Projects" and "RETPs," nothing in this Attachment is intended to alter the cost allocation policies of the Tariff.

- 7.2 Regional Reliability Project Cost Allocation
 - 7.2.1 An "avoided cost" cost allocation methodology will apply to reliability projects where there is a demonstration that a regional transmission solution and regional approach to cost allocation results in cost savings.
 - 7.2.2 The NCTPC Planning Process results in a set of projects that satisfy the reliability criteria of the Transmission Providers who are parties to the Participation Agreement (i.e., Reliability Projects). Through this process, a project may be identified that meets a reliability need in a more cost-effective manner than if each Transmission Provider were only considering projects on its system to meet its reliability criteria. A Regional Reliability Project can be defined as any reliability project that requires an upgrade to a Transmission Provider's system that would not have otherwise been made based upon the reliability needs of the Transmission Provider. A Regional Reliability Project must have a cost of at least \$1 million to be subject to the avoided-cost cost allocation methodology. The costs of a Regional Reliability Project with a cost of less than \$1 million would be borne by each Transmission Provider based on the costs incurred on its system.
 - 7.2.3 Unless a Regional Reliability Project is determined by the NCTPC to be the most cost-effective solution to a reliability need, it will not be selected to be included in the Collaborative Transmission Plan. But, if a Regional Reliability Project is cost effective, it will have its costs allocated based on an avoided cost approach, whereby each Transmission Provider looks at the stand-alone approach to maintaining reliable service and shares the savings of not implementing the stand-alone approach on a pro-rata basis. The avoided cost approach formula can be expressed as follow:

(Transmission Provider_x's Avoided Cost/Total Avoided Cost) * cost of Regional Reliability Project = Transmission Provider_x's Cost Allocation

(Transmission Provider_y's Avoided Cost/Total Avoided Cost) * cost of Regional Reliability Project = Transmission Provider_y's Cost Allocation

These cost responsibility determinations will then be reflected in transmission rates. The avoided cost approach also will take into account in determining avoided costs, the acceleration or delay of Reliability Projects. Examples of the application of the avoided-cost approach may be found in *NCTPC Transmission Cost Allocation*.

7.2.4 If a Regional Reliability Project that is suitable for this alternate cost allocation approach involves a Transmission System(s) outside the NCTPC, the costs should be fairly allocated among the affected Transmission Providers based on good-faith negotiation among the parties involved using the "avoided cost" approach outlined above as a starting point in the negotiations. The resulting transmission costs and the associated revenue requirements of each Transmission Provider will be recovered through their respective existing rate structures at the time.

7.3 RETP Cost Allocation

- 7.3.1 The costs of upgrades or facilities that result from RETPs are allocated on a "requestor pays" basis.
- 7.3.2 Transmission customer(s) that are subscribing to the RETP would provide the up-front funding of any transmission construction that was required to ensure that the path was available for the relevant time period. These "requestor(s)" would be the transmission customers that were awarded the MW as a result of the successful subscription during the Open Season process. On the Duke and/or Progress systems, the transmission customer would receive a levelized repayment of this initial funding amount from Duke and/or Progress in the form of monthly transmission credits over a maximum 20-year period. The Transmission Providers will be permitted to work with the transmission customers to provide shorter or different crediting. As credits are paid, Duke and Progress would have the opportunity to include the costs of upgrades that were needed for the RETP in transmission rates, similar to the Generator Interconnection pricing/rate approach.
- 7.3.3 As part of the RETP process, a network customer may ensure that power can be delivered from an interface on an RETP to network load. Such network transmission service would not be subject to the requestor pays

- approach. This transmission cost allocation would be in accordance with OATT provisions for network service.
- 7.3.4 No compensation is provided to the "requestors" of the RETPs for any "head-room" that would be created on the Transmission Systems. The total project cost for the transmission expansion required due to an RETP will be adjusted to provide compensation for the positive transmission impacts that the RETP would provide, given the existing Collaborative Transmission Plan.
- 7.3.5 This RETP concept and cost allocation methodology applies to the NCTPC footprint, which consists of the Duke and Progress Control Areas. Pursuant to Order No. 890, other regions will adopt cost methodologies that apply to the costs of facilities located in their region.

7.4 SIRPP Cost Allocation

The cost allocation for Inter-Regional Economic Upgrade projects described in Appendix 1 will be determined in accordance with the cost allocation principles adopted by each Regional Planning Process in which each portion of the construction of such upgrades (in whole or in part) would occur. Thus, for the portion of an Inter-Regional Economic Upgrade project that is located in the NCTPC footprint, the cost allocation principles set forth in this Tariff and Section 7 would apply.

8. COST ALLOCATION FOR PLANNING COSTS

- 8.1 NCTPC-Related Planning Costs
 - 8.1.1 Each NCTPC Participant bears its own expenses.
 - 8.1.2 TAG participants bear their own expenses.
 - 8.1.3 The costs of the NCTPC base reliability studies are born by Duke and Progress.
 - 8.1.4 Costs associated with incremental reliability studies, the ITP's costs, and the costs of the ETAP are all allocated to NCTPC Participants in the manner set forth in the *Participation Agreement*.
 - 8.1.5 Pursuant to Section 4, costs associated with economic studies that are outside the scope of the ETAP, will be borne by the study requestor.
 - 8.1.6 NCTPC Participants may challenge the correctness of NCTPC cost allocations.
 - 8.1.7 For the Transmission Providers, transmission planning costs are a routine cost-of-service item that would be reflected in both wholesale and retail transmission rates. There is no plan to allocate planning costs to

customers, other than as described above, or as contemplated by this Tariff when a customer makes a specific request that must be studied.

8.2 Non-NCTPC-Related Planning Costs

Each Transmission Provider will bear its own costs of planning-related activities that are not occurring through the rubric of the NCTPC Process, which costs may be recovered in rates, pursuant to the then-applicable ratemaking policies.

9. CONFIDENTIALITY

- 9.1 The Transmission Providers will take appropriate steps to protect CEII information, which is one form of Confidential Information.
- 9.2 Identification of Confidential Information

The confidentiality of information is determined in the first instance by a NCTPC Participant or TAG participant providing the information. Examples of Confidential Information, other than CEII, include commercially sensitive information and customer-related information that is proprietary to a particular wholesale or retail customer. The NCTPC Participant or TAG participant providing Confidential Information acknowledges that such Confidential Information may be released to the representatives of TAG participants that have abided by the procedures in Section 9.4.3. If the information is Confidential Information only because it is CEII, the NCTPC Participant or TAG participant should indicate that such information may be released to TAG participants eligible to receive CEII.

9.3 Availability of Confidential Information

- 9.3.1 The NCTPC Participants will mask all Confidential Information in documents that are released to the public.
- 9.3.2 Confidential Information will be made available, to the extent not prohibited by law or government policy, to the NCTPC Participants, as limited by the *Participation Agreement*. Each NCTPC Participant is restricted from sharing or giving access to Confidential Information with any employee, representative, and/or organization directly involved in the sale and/or resale of electricity in the wholesale electricity such that they do not receive preferential treatment or a competitive advantage.
- 9.3.3 TAG participants may be provided Confidential Information, in accordance with Section 9.4.3/9.4.4. In cases where the information is Confidential Information only because it is CEII, the TAG participants may be provided such information in accordance with Section 9.4.4.

9.4 Obtaining Confidential Information

- 9.4.1 The ITP is tasked with ensuring that no marketing/brokering organizations receive preferential treatment or achieve competitive advantage through the distribution of any transmission-related information in the TAG.
- 9.4.2 The ITP ensures that the confidentiality of information principles reflected in Order No. 890 as well as any Standards of Conduct or Code of Conduct requirements are being adhered to within the TAG process, to the extent applicable and/or necessary.
- 9.4.3 If a TAG participant seeks non-CEII Confidential Information, s/he must formally request the data from the ITP and demonstrate that s/he:
 - 9.4.3.1 Is a representative of a TAG Sector Entity that has signed the SERC Confidentiality Agreement or is an Individual that has signed the SERC Confidentiality Agreement.
 - 9.4.3.2 Is listed on Attachment A to a TAG Sector Entity's TAG
 Confidentiality Agreement as a representative of a TAG Sector
 Entity or is an Individual that has signed the TAG Confidentiality
 Agreement.
- 9.4.4 If a TAG participant seeks CEII, s/he must formally request the data from the ITP and demonstrate that s/he:
 - 9.4.4.1 Is a representative of a TAG Sector Entity that has signed the SERC Confidentiality Agreement or is an Individual that has signed the SERC Confidentiality Agreement.
 - 9.4.4.2 Is listed on Attachment A of a TAG Sector Entity's TAG Confidentiality Agreement as a representative of a TAG Sector Entity or is an Individual that has signed the TAG Confidentiality Agreement.
- 9.4.5 The NCTPC ITP will process the above requests, approve/deny the request, and if approved, provide the data to a TAG participant.

10. INTER-REGIONAL COORDINATION

The NCTPC will coordinate with other transmission systems primarily through Duke and Progress participating in SERC (as Transmission Planners), other inter-regional study groups, and bilateral agreements between Duke and/or Progress and transmission systems to which they are interconnected.

10.1 Coordination Activities Within SERC

Duke and Progress are members of the SERC Reliability Corporation (SERC) and coordinate with other SERC members registered as Transmission Planners. SERC is the entity responsible for promoting and improving the reliability, adequacy, and critical infrastructure of the bulk power supply systems in the area served by its member systems. SERC membership is open to any entity that is a user, owner, or operator of the Bulk-Power System and is subject to the jurisdiction of FERC for the purpose of complying with Reliability Standards. SERC membership is comprised of investor-owned, municipal, cooperative, state and federal systems, RTOs/ISOs, merchant electricity generators, and power marketers. SERC has in place various committees and subcommittees that perform the identified SERC functions, including the promotion of the reliability and adequacy of the bulk power system as related to the planning and engineering of the electric systems. The SERC committees are identified on SERC's website. The particular activities that are coordinated among the Transmission Planners include the creation of a SERC-wide model and the preparation of a simultaneous feasibility assessment, which are discussed in further detail below.

10.1.1 Regional Reliability Planning by Transmission Planners Located in SERC: A Transmission Planner's 10-year transmission expansion plan is the basis for models used for its own regional reliability planning process, such as the NCTPC, as well as serving as a Transmission Planner's input into the development of the SERC-wide model.

Substantive transmission planning occurs as Transmission Planners develop regional reliability transmission expansions plans through their regional planning process, such as the NCTPC. In this regard, the reliability plan for each region is generally developed by determining the required 10-year transmission expansion plan to satisfy load, resources, and transmission service commitments throughout the 10-year reliability planning horizon. The development of each regional reliability plan is facilitated through the creation of transmission models (base cases) that incorporate the current 10-year transmission expansion plan, load projections, resource assumptions (generation, demand response, and imports), and transmission service commitments within the region. The transmission models also incorporate external regional models (at a minimum the current SERC models) that are developed using similar assumptions.

The transmission models created for use in developing the regional reliability 10-year transmission expansion plan are analyzed to determine if any planning criteria concerns are projected. In the event one or more planning criteria concerns are identified at the regional level, the relevant Transmission Planners will develop solutions for these projected limitations in accordance with the regional process to which they belong. As a part of this study process, the Transmission Planners, in accordance with the regional process to which they belong, will reexamine the current

- regional reliability 10-year transmission expansion plan (determined through the previous year's regional reliability planning process) to determine if the current plan can be optimized based on the updated assumptions and any new planning criteria concerns identified in the analysis. The optimization process may include the deletion and/or modification of any of the existing reliability transmission enhancements identified in the previous year's reliability planning process.
- 10.1.2 Coordination by Transmission Planners with Affected Regions: Once a planning criteria concern is identified and the optimization process identifies the potential solution (at the regional level), the Transmission Planner(s), here Duke and Progress, determine if any transmission system in another region is potentially impacted by the projected solution. Potentially impacted regions are then contacted to determine if there is a need for an inter-regional ad hoc coordinated study. In the event one or more neighboring regions agrees that they would be impacted by the projected limitation or identifies the potential for a superior inter-regional reliability solution, based on transmission enhancements in their current regional reliability plan, an inter-regional ad hoc coordinated study is initiated. In the event that no inter-regional impacts are identified, or if once contacted the potentially impacted regions(s) determine that they will not actually be impacted, the initiating Transmission Planner will move forward to conduct a reliability study to determine the solution for the projected planning criteria concern. In either case, once the study has been completed, the identified reliability transmission enhancements will then be incorporated into the region's(s') 10-year transmission expansion plan as a reliability project.
- 10.1.3 SERC-Wide Reliability Assessment by Transmission Planners: After the transmission models are developed through the regional planning processes, the Transmission Planners within SERC create a SERC-wide transmission model and conduct a long-term reliability assessment. The intent of the SERC-wide reliability assessment is to determine if the different regional reliability transmission expansion plans are simultaneously feasible and to otherwise ensure that these regional processes are using consistent models and data. Additionally, the reliability assessment measures and reports the transfer capabilities between regions within SERC. The SERC-wide assessment serves as a valuable tool for each of the regions to reassess the need for additional inter-regional reliability joint studies.

10.1.4 Other Coordination Activities Within SERC

10.1.4.1 Transmission Model Development: SERC transmission models are developed by the Transmission Planners in SERC through an annual model development process. Each Transmission Planner in SERC, incorporating input from their regional planning

process, develops and submits their 10-year transmission models to a model development databank. The databank then joins the models to create SERC-wide models for use in reliability assessment. Additionally, the SERC-wide models are then used in each regional planning process as an update (if needed) to the current transmission models and as a foundation (along with the MMWG models) for the development of next year's transmission models.

10.1.4.2 Additional Inter-Regional Reliability Joint Studies: As mentioned above, the SERC-wide reliability assessment serves as a valuable tool for the Transmission Planners, in accordance with their regional planning process, to reassess the need for additional inter-regional reliability joint studies. If the SERC-wide reliability model projects additional planning criteria concerns that were not identified in the regional reliability studies, then the impacted Transmission Planners may initiate one or more ad hoc interregional coordinated study(ies) (in accordance with existing Reliability Coordination Agreements) to better identify the planning criteria concerns and determine the optimal inter-regional reliability transmission enhancements to resolve the limitations. Once the study(ies) is completed, required reliability transmission enhancements will be incorporated into the region's 10-year expansion plan as a reliability project. Accordingly, planning criteria concerns identified at the SERC-wide level are "pushed down" to the regional level for detailed resolution.

10.1.5 Stakeholder Participation in Planning and Coordination Activities:

Since the bulk of the reliability transmission planning occurs at the regional level as a "bottom up" process in the development of the various regions' 10-year transmission expansion plans, stakeholders in the NCTPC footprint may provide input into the coordination activities by participating in the NCTPC process and any other regional planning processes that they choose to participate in. Specifically, the 10-year transmission expansion plan developed in the NCTPC process described in this Attachment is the basis for Duke's and Progress' input into the SERC model development. As discussed in Sections 4 and 5, the TAG participants are provided a number of opportunities to review and comment on and allowed to propose alternatives concerning the development of this transmission expansion plan. The results of interregional coordination activities will be shared and discussed with TAG participants. If the results of coordination activities are to be shared at a TAG participant meeting, the meeting notice will indicate that such results will be shared and discussed and will either provide the results or indicate how the results can be obtained if the results include Confidential Information.

10.2 ERAG & SERC-RFC East Coordination Activities

- 10.2.1 SERC is a Member of the Eastern Interconnection Reliability Assessment Group (ERAG) along with the Florida Reliability Coordinating Council, Inc., the Midwest Reliability Organization, the Northeast Power Coordinating Council, Inc., ReliabilityFirst Corporation, and the Southwest Power Pool. ERAG augments the reliability of the bulk-power system through periodic reviews of generation and transmission expansion programs and forecasted system conditions within the regions served by ERAG members.
- 10.2.2 The Eastern Interconnection Reliability Assessment Group (ERAG) Multi-Regional Modeling Working Group (MMWG) administers the development of a library of power-flow base case models for the benefit of members.
- 10.2.3 The SERC-RFC East study group was established in 2006 and is a subgroup within the ERAG structure. Through the SERC-RFC East study group, coordination of plans, data and assumptions is achieved between Tennessee Valley Authority, VACAR, and the transmission systems of the eastern portion of PJM.

10.3 VACAR Coordination Activities

- 10.3.1 The Transmission Providers both participate with Fayetteville, NCEMC, North Carolina Municipal Power Agency #1, North Carolina Eastern Municipal Power Agency, South Carolina Electric & Gas Company, South Carolina Public Service Authority, Southeastern Power Administration, Dominion Virginia Power, and Alcoa Power Generating, Inc. in the VACAR Planning Task Force.
- 10.3.2 A VACAR contract agreement provides for coordination between the various entities within the VACAR region.
- 10.3.3 Duke and Progress will engage in studies of the bulk power supply system. VACAR typically analyzes the performance of their proposed future transmission systems based on five- or ten-year projections. VACAR studies are similar to those conducted for SERC, but are focused on the VACAR region, although VACAR coordinates with Southern and TVA under existing agreements.

10.4 Bilateral Coordination Activities

Through bilateral interconnection agreements or joint operating agreements with the interconnected transmission systems of American Electric Power, TVA, Southern Companies, PJM, Dominion, SCE&G, Santee Cooper, and Yadkin, Duke and Progress perform coordinated studies on an as-needed basis.

10.5 Southeast Inter-Regional Participation Process Activities

Duke and Progress have joined with a group of southeast utilities to develop the Southeast Inter-Regional Participation Process. This process provides valid stakeholders the ability to request economic studies that would be evaluated on an inter-regional basis. The framework for this process is provided in a document entitled "Southeast Inter-Regional Participation Process" which is attached as Appendix 1. The purpose of the Southeast Inter-Regional Participation Process is to facilitate the development of inter-regional economic planning studies.

10.5.1 Stakeholder Participation Through the SIRPP: As shown on the Southeast Inter-Regional Participation Process Diagram contained in Appendix 1, the particular activity that the SIRPP sponsors coordinate is the preparation of the inter-regional Economic Planning Studies addressed in Appendix 1. In addition, the SIRPP sponsors will review with stakeholders the data, assumptions, and assessment that are then being conducted on a SERC-wide basis at the following SIRPP meetings: the 1st Inter-Regional Stakeholder Meeting; and the 3rd Inter-Regional Stakeholder Meeting.

10.6 Timelines and Milestones

The general timelines and milestones for the performance of both the reliability planning and coordination activities are provided in Appendix 2.

11. INTEGRATED RESOURCE PLANNING

In addition to the NCTPC Process, the Transmission Providers must abide by state laws regarding Integrated Resource Planning (IRP). The information provided below is intended to assist persons who may want to participate in state IRP and siting proceedings.

11.1 North Carolina

The NCUC analyzes the probable growth in the use of electricity and the long-range need for future generating capacity in North Carolina. Duke and Progress annually furnish the NCUC a report of their respective resource plans, which contain a 15-year forecast of loads and generating capacity. The report describes all generating facilities and known transmission facilities with operating voltage of 161 kV or more which, in the judgment of the utility, will be required to supply system demands during the 15-year forecast period. Such filings must include a section containing a comprehensive analysis of their Demand-Side Management (DSM) plans and activities.

11.2 South Carolina

Section 58-37-40 of the South Carolina Code of Laws requires that all electrical utilities prepare integrated resource plans and submit them to the State Energy Office. The plans must be submitted every three years and must be updated on an annual basis. For

electrical utilities subject to the jurisdiction of the SC PSC, submission of the IRP plans required by the SC PSC (which similarly are submitted triennially and updated at

least annually) constitutes compliance with the state law. The SC PSC requires that the plans submitted cover 15 years and evaluate the cost effectiveness of supply-side and demand-side options in an economic and reliable manner that considers relevant costs and benefits.

12. LOCAL PLANNING

The Transmission Providers coordinate with their network and native load customers to ensure adequate and reliable electric service to all points of delivery within their control areas. The focus of the NCTPC is planning higher-voltage facilities and transfers of bulk power and thus "local planning" focuses on lower-voltage facilities and the delivery of energy to customer locations. Customer meetings may be held, when necessary, to discuss the respective plans of the customer and the provider and how such plans impact local areas. Any local area plans developed by a Transmission Provider are rolled into the power system models of the transmission providers and these models subsequently roll up to the NCTPC transmission models. The same data and assumptions would be used in local planning as are used in the NCTPC Process.

Appendix 1 Southeast Inter-Regional Participation Process

Introduction:

In an effort to more fully address the regional participation principle outlined in the Order 890 Attachment K Tariff requirements and the related guidance contained in the FERC Transmission Planning Process Staff White Paper (dated August 2, 2007), this Southeast Inter-Regional Participation Process expands upon the existing processes for regional planning in the Southeast. This document outlines an inter-regional process among various Southeastern interconnected transmission owners. The inter-regional process described herein is incorporated into each Participating Transmission Owner's¹ planning process and OATT Attachment K (for those transmission owners that have a regulatory requirement to file an Attachment K).

Purpose:

This inter-regional process complements the regional planning processes developed by the Participating Transmission Owners in the Southeast. For the purpose of this document, the term "Southeast Inter-Regional Participation Process" ("SIRPP") is defined as a new process to more fully address the regional participation principle of Order 890 for multiple transmission systems in the Southeast. The term "Regional Planning Processes" refers to the regional transmission planning processes a Transmission Owner has established within its particular region for Attachment K purposes. Importantly, the Economic Planning Studies discussed herein are hypothetical studies that do not affect the transmission queue for purposes of System Impact Studies, Facilities Studies, or interconnection studies performed under other portions of the OATT.

Current Inter-Regional Planning Process:

Each Southeastern transmission owner currently develops a transmission plan to account for service to its native load and other firm transmission service commitments on its transmission system. This plan development is the responsibility of each transmission planner individually and does not directly involve the Regional Reliability Organization (e.g., SERC). Once developed, the Participating Transmission Owners collectively conduct inter-regional reliability transmission assessments, which include the sharing of the individual transmission system plans, providing information on the assumptions and data inputs used in the development of those plans and assessing whether the plans are simultaneously feasible.

Participating Transmission Owners:

Due to the additional regional planning coordination principles that have been announced in Order 890 and the associated Transmission Planning White Paper, several transmission owners

The sponsors of the Southeast Inter-Regional Participation Process are referred to as transmission owners, rather than transmission providers, because not all of the sponsors are "Transmission Providers" for purposes of the proforma OATT.

have agreed to provide additional transmission planning coordination, as further described in this document. The "Participating Transmission Owners" are listed on the SIRPP website (http://www.southeastirpp.com).

Southeast Inter-Regional Participation Process:

The Southeast Inter-Regional Participation Process is outlined in the attached diagram. As shown in that diagram, this process will provide a means for conducting stakeholder requested Economic Planning Studies across multiple interconnected systems. In addition, this process will build on the current inter-regional, reliability planning processes required by existing multiparty reliability agreements to allow for additional participation by stakeholders.

The established Regional Planning Processes outlined in the Participating Transmission Owners' Attachment Ks will be utilized for collecting data, coordinating planning assumptions, and addressing stakeholder requested Economic Planning Studies internal to their respective regions. The data and assumptions developed at the regional level will then be consolidated and used in the development of models for use in the Inter-Regional Participation Process. This will ensure consistency in the planning data and assumptions used in local, regional, and inter-regional planning processes.

These established Attachment K processes may also serve as a mechanism to collect requests for inter-regional Economic Planning Studies by a participant's stakeholders group. The Economic Planning Studies requested through each participant's Attachment K process that involve impacts on multiple systems between Regional Planning Processes will be consolidated and evaluated as part of the Southeast Inter-Regional Participation Process. Stakeholders will also be provided the opportunity to submit their requests for inter-regional Economic Planning Studies directly to the Inter-Regional process.

The Participating Transmission Owners recognize the importance of coordination with neighboring (external) planning processes. Therefore, seams coordination will take place at the regional level where external regional planning processes adjoin the Southeast Inter-Regional Participation Process (e.g. Southeastern Regional Planning Process coordinating with FRCC Regional Planning Process, Entergy coordinating with SPP, TVA coordinating with MISO and PJM, and the North Carolina Transmission Planning Collaborative coordinating with PJM). External coordination is intended to include planning assumptions from neighboring processes and the coordination of transmission enhancements and stakeholder requested Economic Planning Studies to support the development of simultaneously feasible transmission plans both internal and external to the Southeast Inter-Regional Participation Process.

With regard to the development of the stakeholder requested inter-regional Economic Planning Studies, the Participating Transmission Owners will each provide staff (transmission planners) to serve on the study coordination team. The study coordination team will lead the development of study assumptions (and coordinate with stakeholders, as discussed further below), perform model development, and perform any other coordination efforts with stakeholders and impacted external planning processes. During the study process, the study coordination team will also be responsible for performing analysis, developing solution options, evaluating stakeholder suggested solution options, and developing a report(s) once the study(ies) is completed. Once

the study(ies) is completed, the study coordination team will distribute the report(s) to all Participating Transmission Owners and the stakeholders.

With regard to coordinating with stakeholders in the development of the inter-regional Economic Planning Study(ies), in each cycle of the Southeast Inter-Regional Participation Process, the Participating Transmission Owners will conduct three inter-regional stakeholder meetings. The information to be discussed at such meetings will be made available in final draft form for stakeholder review prior to any such meeting by posting on the SIRPP website and/or e-mails to SIRPP Stakeholder Group ("SIRPPSG") members. The Participating Transmission Owners will use reasonable efforts to make such information available at least 10 calendar days prior to the particular meeting. The Participating Transmission Owners will conduct the "1st Inter-Regional Stakeholder Meeting", as shown in the attached diagram. At this meeting, a review of all of the Economic Planning Study(ies) submitted through the participants' Regional Planning Processes or directly to the Inter-Regional process, along with any additional Economic Planning Study requests that are submitted at this 1st meeting, will be conducted. During this meeting, the stakeholders will select up to five studies that will be evaluated within the planning cycle. The study coordination team will coordinate with the stakeholders regarding the study assumptions underlying the identified stakeholder requested inter-regional Economic Planning Study(ies). Through this process, stakeholders will be provided an opportunity to comment and provide input regarding those assumptions. Following that meeting, and once the study coordination team has an opportunity to perform its initial analyses of the inter-regional Economic Planning Study(ies), the Participating Transmission Owners will then conduct the "2nd Inter-Regional Stakeholder Meeting." At this meeting, the study coordination team will review the results of such initial analysis, and stakeholders will be provided an opportunity to comment and provide input regarding that initial analysis. The study coordination team will then finalize its analysis of the inter-regional study(ies) and draft the Economic Planning Study(ies) report(s), which will be presented to the stakeholders at the "3rd Inter-Regional Stakeholder Meeting." Stakeholders will be provided an opportunity to comment and provide input regarding the draft report(s). Subsequent to that meeting, the study coordination team will then finalize the report(s), which will be issued to the Participating Transmission Owners and stakeholders.

In addition to performing inter-regional Economic Planning Studies, the Southeast Inter-Regional Participation Process will also provide a means for the Participating Transmission Owners to review, at the Southeast Inter-Regional Participation Process stakeholder meetings, the regional data, assumptions, and assessments that are then being performed on an inter-regional basis.

Southeast Inter-Regional Participation Process Cycle:

The Southeast Inter-Regional Participation Process will be performed annually. Due to the expected scope of the requested studies and size of the geographical region encompassed, the Participating Transmission Owners will perform up to five (5) inter-regional Economic Planning Studies annually, which could encompass both Step 1 and Step 2 evaluations. A Step 1 evaluation will consist of a high level screen of the requested transfer and will be performed during a single year's planning cycle. The high level screen will identify transfer constraints and likely transmission enhancements to resolve the identified constraints. The Participating Transmission Owners will also provide approximate costs and timelines associated with the

identified transmission enhancements to facilitate the stakeholders' determination of whether they have sufficient interest to pursue a Step 2 evaluation. Once a Step 1 evaluation has been completed for a particular transfer, the stakeholders have the option to request a Step 2 evaluation for that transfer to be performed during the subsequent year's Inter-Regional Participation Process Cycle. If the stakeholders opt to not pursue Step 2 evaluation for the requested transfer during the subsequent year's Inter-Regional Participation Process Cycle, an Economic Planning Study of that request may be re-evaluated in the future by being submitted for a new Step 1 evaluation. In the event that the stakeholders request a Step 2 evaluation, the Participating Transmission Owners will then perform additional analysis, which may include additional coordination with external processes. The Participating Transmission Owners will then develop detailed cost estimates and timelines associated with the final transmission enhancements. The Step 2 evaluation will ensure that sufficient coordination can occur with stakeholders and among the impacted Participating Transmission Owners. In addition, the Step 2 evaluation will provide sufficient time to ensure that the inter-regional study results are meaningful and meet the needs of the stakeholders.

It is important to note that the Participating Transmission Owners expect that a Step 2 evaluation will be completed prior to interested parties requesting to sponsor transmission enhancements identified in an Economic Planning Study. However, the Participating Transmission Owners will work with stakeholders if a situation develops where interested parties attempt to sponsor projects identified in a Step 1 evaluation and there is a compelling reason (e.g., where time is of the essence).

Inter-Regional Cost Allocation:

The cost allocation for Inter-Regional Economic Upgrade projects will be determined in accordance with the cost allocation principle adopted by each Participating Transmission Owner's Regional Planning Process in which each portion of the construction of such upgrades would occur. The cost allocation principle for each SIRPP Regional Planning Process is posted on the SIRPP website. Typically, since Inter-Regional Economic Upgrade projects will likely consist of improvements that will be physically located in the footprints of multiple Regional Planning Processes, this approach means the cost allocation for each part of the Inter-Regional Economic Upgrade project or each project within a set of projects will be governed by the cost allocation principle adopted by the Regional Planning Process in which that part of the project or set is physically located. For example, should an Inter-Regional Economic Upgrade project consist of a single, 100 mile 500 kV transmission line, with 30 miles physically located in Regional Planning Process "A" and the remaining 70 miles located in Regional Planning Process "B," then the cost allocation for the 30 miles of 500 kV transmission line located in Regional Planning Process "A" would be governed by that Regional Planning Process' cost allocation principle, and the cost allocation for the other 70 miles of 500 kV transmission line would be governed by the cost allocation principle of Regional Planning Process "B." Should an Inter-Regional Economic Upgrade project be physically located entirely within one Regional Transmission Planning process, the costs of the project would be governed by that region's cost allocation principle.

Inter-Regional Coordination of Economic Transmission Project Development:

Once an Economic Planning Study report has been finalized, multiple stakeholders may be interested in jointly participating in the project development. An Inter-Regional process addressing each such economic upgrade request will be developed that will formalize the process of determining if there is sufficient stakeholder interest to pursue economic project development and the coordination that will be required of the impacted Transmission Owners to support this process. The Participating Transmission Owners and the stakeholders will support this process development activity beginning in 2008.

Stakeholder Participation in the Southeast Inter-Regional Participation Process:

Purpose

The purpose of the Southeast SIRPPSG is to provide a structure to facilitate the stakeholders' participation in the Southeast Inter-Regional Participation Process. Importantly, the SIRPPSG shall have the flexibility to change the "Meeting Procedures" section discussed below but cannot change the Purpose, Responsibilities, Membership, or Data and Information Release Protocol sections absent an appropriate filing with (and order by) FERC to amend the OATT.

Responsibilities

In general, the SIRPPSG is responsible for working with the Participating Transmission Owners on Inter-Regional Economic Planning Study requests so as to facilitate the development of such studies that meet the goals of the stakeholders. The specific responsibilities of this group include:

- 1. Adherence to the intent of the FERC Standards of Conduct requirements in all discussions.
- 2. Develop the SIRPPSG annual work plan and activity schedule.
- 3. Propose and select the Economic Planning Study(ies) to be evaluated (five annually).
 - a. Step 1 evaluations
 - b. Step 2 evaluations
- 4. The SIRPPSG should consider clustering similar Economic Planning Study requests. In this regard, if two or more of the Economic Planning Study requests are similar in nature and the Participating Transmission Owners conclude that clustering of such requests and studies is appropriate, the Participating Transmission Owners may, following communications with the SIRPPSG, cluster those studies for purposes of the transmission evaluation.
- 5. Provide timely input on the annual Economic Planning Study(ies) scope elements, including the following:
 - a. Study Assumptions, Criteria and Methodology
 - b. Case Development and Technical Analysis
 - c. Problem Identification, Assessment and Development of Solutions (including proposing alternative solutions for evaluation)
 - d. Comparison and Selection of the Preferred Solution Options
 - e. Economic Planning Study Results Report.
- 6. Providing advice and recommendations to the Participating Transmission Owners on the Southeast Inter-Regional Participation Process.

Membership

The SIRPPSG membership is open to any interested party.

Meeting Procedures

The SIRPPSG may change the Meeting Procedures criteria provided below pursuant to the voting structure in place for the SIRPPSG at that time. The currently effective Meeting Procedures for the SIRPPSG shall be provided to the Participating Transmission Owners to be posted on the SIRPP website and shall become effective once posted on that website (http://www.southeastirpp.com), which postings shall be made within a reasonable amount of time upon receipt by the Transmission Owners. Accordingly, the following provisions contained under this Meeting Procedures heading provide a starting-point structure for the SIRPPSG, which the SIRPPSG shall be allowed to change.

Meeting Chair

A stakeholder-elected member of the SIRPPSG will chair the SIRPPSG meetings and serve as a facilitator for the group by working to bring consensus within the group. In addition, the duties of the SIRPPSG chair will include:

- 1. Developing mechanisms to solicit and obtain the input of all interested stakeholders related to inter-regional Economic Planning Studies.
- 2. Ensuring that SIRPPSG meeting notes are taken and meeting highlights are posted on the SIRPP website (http://www.southeastirpp.com) for the information of the participants after all SIRPPSG meetings.

Meetings

Meetings of the SIRPPSG shall be open to all SIRPPSG members interested in interregional Economic Planning Studies across the respective service territories of the Participating Transmission Owners. There are no restrictions on the number of people attending SIRPPSG meetings from any interested party.

Quorum

Since SIRPPSG membership is open to all interested parties, there are no quorum requirements for SIRPPSG meetings.

Voting

In attempting to resolve any issue, the goal is for the SIRPPSG to develop consensus solutions. However, in the event consensus cannot be reached, voting will be conducted with each SIRPPSG member's organization represented at the meeting (either physically present or participating via phone) receiving one vote. The SIRPPSG chair will provide notices to the SIRPPSG members in advance of the SIRPPSG meeting that specific votes will be taken during the SIRPPSG meeting. Only SIRPPSG members participating in the meeting will be allowed to participate in the voting (either physically present or participating via phone). No proxy votes will be allowed. During each SIRPP cycle, the SIRPPSG members will propose and select the inter-regional Economic Planning Studies that will be performed during that particular SIRPP cycle. The SIRPPSG will annually select up to five (5) inter-regional Economic Planning Studies, including both Step 1 evaluation(s) and any Step 2 evaluations, with any such Step 2 evaluations being performed for the previous years Step 1 studies for the pertinent transfers. Each

organization represented by their SIRPPSG members will be able to cast a single vote for up to five Economic Planning Studies that their organization would like to be studied within the SIRPP cycle. If needed, repeat voting will be conducted until there are clear selections for the five Economic Planning Studies to be conducted.

Meeting Protocol

In the absence of specific provisions in this document, the SIRPPSG shall conduct its meetings guided by the most recent edition of *Robert's Rules of Order*, *Newly Revised*.

Data and Information Release Protocol

SIRPPSG members can request data and information that would facilitate their ability to replicate the SIRPP inter-regional Economic Planning studies while ensuring that CEII and other confidential data is protected.

CEII Data and Information

SIRPPSG members may be certified to obtain CEII data used in the SIRPP by following the confidentiality procedures posted on the SIRPP website (e.g., making a formal request for CEII, authorizing background checks, executing the SIRPP CEII Confidentiality Agreement, etc.). The SIRPP Participating Transmission Owners reserve the discretionary right to waive the certification process, in whole or in part, for anyone that the SIRPP Participating Transmission Owners deem appropriate to receive CEII. The SIRPP Participating Transmission Owners also reserve the discretionary right to reject a request for CEII; upon such rejection, the requestor may pursue the SIRPP dispute resolution procedures set forth below.

Non-CEII Confidential Information

The Participating Transmission Owners will make reasonable efforts to preserve the confidentiality of information that is confidential but not CEII in accordance with the provisions of the Tariff and the requirements of (and/or agreements with), NERC and/or SERC as well as agreements with the other Participating Transmission Owners and any other contractual or legal confidentiality requirements.

Without limiting the applicability of the foregoing, to the extent confidential non-CEII information is provided in the transmission planning process and is needed to participate in the transmission planning process and/or to replicate transmission planning studies, it will be made available to those SIRPPSG members who have executed the SIRPP Non-CEII Confidentiality Agreement, which is posted on the SIRPP website. Importantly, if information should prove to contain both confidential and non-CEII information and CEII, then the requirements of both this section and the previous section would apply.

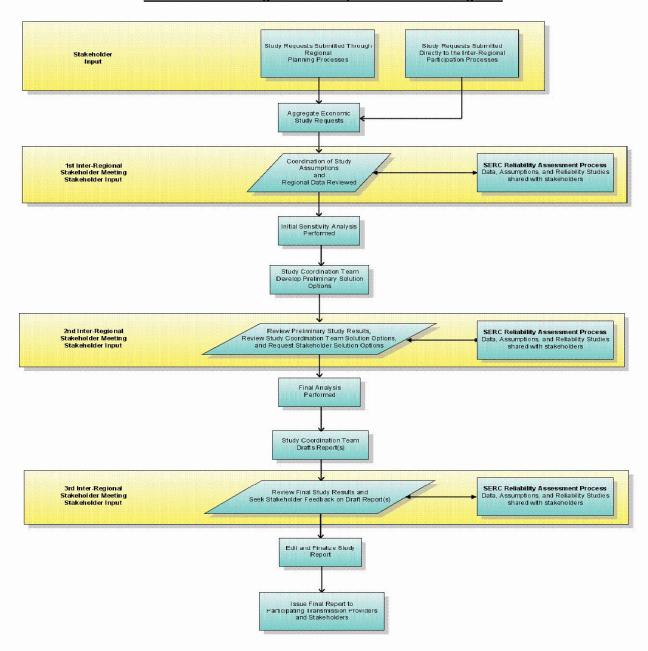
Dispute Resolution

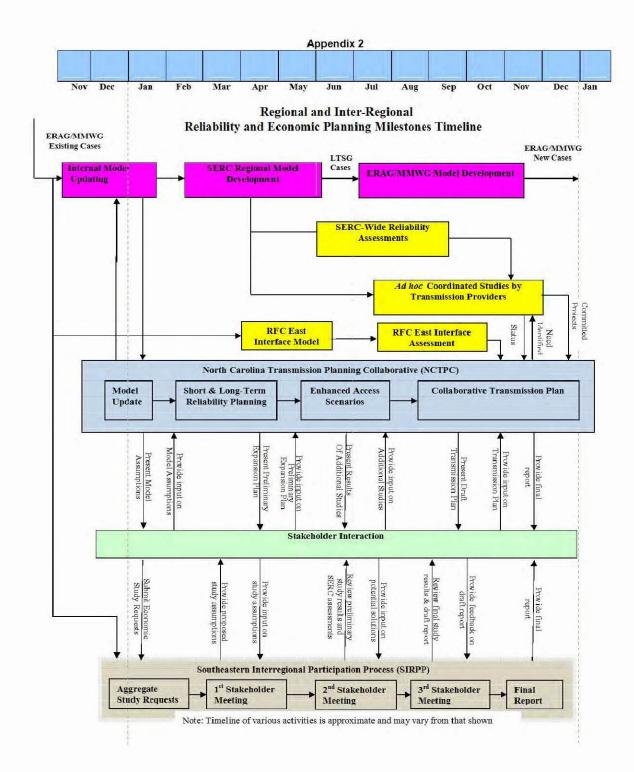
Any procedural or substantive dispute between a stakeholder and a Participating Transmission Owner that arises from the SIRPP will be addressed by the Participating Transmission Owner's dispute resolution procedures in its respective Regional Planning Process. In addition, should the dispute only be between stakeholders with no Participating Transmission Owner involved (other than its ownership and/or control of the underlying facilities), the stakeholders will be encouraged to utilize the Commission's alternative means of dispute resolution.

Should dispute resolution proceedings be commenced in multiple Regional Planning Processes involving a single dispute among multiple Participating Transmission Owners, the affected Participating Transmission Owners, in consultation with the affected stakeholders, agree to use reasonable efforts to consolidate the resolution of the dispute such that it will be resolved by the dispute resolution procedures of a single Regional Planning Process in a single proceeding. If such a consensus is reached, the Participating Transmission Owners agree that the dispute will be addressed by the dispute resolution procedures of the selected Regional Transmission Planning Process.

Nothing herein shall restrict the rights of any party to file a Complaint with the Commission under relevant provisions of the Federal Power Act.

Southeast Inter-Regional Participation Process Diagram:





Appendix 3

Sector Voting Example

The example below illustrates the TAG Sector Voting Process. For purposes of explaining the example, we assume that the General Public (GP) Sector has 10 Individuals present. In addition to the 10 Individuals, there are 17 other TAG Sector Entities present, spread across four TAG Sectors (Cooperative LSEs (Coop LSE); Municipal LSEs (Muni LSE); Investor-Owned LSEs (IOU LSE); and Transmission Customers (TC)). These 17 TAG Sector Entities may each have several TAG participants present but only one may vote in one sector. Each Individual and TAG Sector Entity casts their vote, which vote is then weighted based on the number of persons/entities voting in the TAG Sector of which they are a member. E.g., since there are six Coop LSEs is present, each Coop LSE's vote is worth 1.00/6 or .166 (see Columns 4 and 5 for weighted vote). As the final step, the votes are weighted again, based on the number of TAG Sectors present. With five TAG Sectors present, each Sector Yes Vote and Sector No Vote is multiplied by 1.00/5 = .20. The weighted total is reported in columns 6 and 7. In the example, the No votes have won .53 to .47.

Column	1	2	3	4	5	6	7
Sector	No. of Voters	Yes Votes	No Votes	Sector Yes Vote	Sector No Vote	Weighted Sector Yes	Weighted Sector No Vote
Coop LSE	6	6	0	1.00	0	.20	0
Muni LSE	8	2	6	.25	.75	.05	.15
IOU LSE	2	1	1	.50	.50	.10	.10
TP/TO	0	0	0	0	0	0	0
TCs	1	0	1	0	1.00	0	.20
GICs	0	0	0	0	0	0	0
ECs	0	0	0	0	0	0	0
GP	10	6	4	.60	.40	.12	.08
Total Vote						0.47	0.53

ATTACHMENT N-2

TRANSMISSION PLANNING PROCESS (FPC Zone)

Transmission Provider plans for the existing and future requirements of all customers of Transmission Provider's transmission system in a coordinated, open, comparable, non-discriminatory and transparent manner both at the local and regional level. The Transmission Planning Process described herein includes Transmission Service for Transmission Provider's Native Load Customers, Network Customers, Firm Point-to-Point Transmission Customers, and Generator Interconnection Service for Interconnection Customers. The Transmission Planning Process is intended to provide transmission customers the opportunity to interact with the transmission planning personnel of the Transmission Provider in order for transmission customers to provide timely and meaningful input into the development of the transmission plan. Transmission Provider's Transmission Planning Process works in conjunction with and is an integral part of the *Florida Reliability Coordinating Council's ("FRCC") Regional Transmission Planning Process* (reference the FRCC website for this document¹) which facilitates coordinated planning by all transmission providers, owners and stakeholders within the FRCC Region.

The FRCC is one of the North American Electric Reliability Corporation ("NERC") Regional Reliability Organizations, with responsibility for maintaining grid reliability in Peninsular Florida, east of the Apalachicola River. This region is electrically unique because it is a peninsula and is tied to the Eastern Interconnection only on one side. FRCC's members include investor owned utilities, cooperative utilities, municipal utilities, a federal power agency, power marketers, and independent power producers. The FRCC Board of Directors has the responsibility to ensure that the FRCC Regional Transmission Planning Process is fully implemented. The FRCC Planning Committee, which includes representation by all FRCC members, directs the FRCC Transmission Working Group, in conjunction with the FRCC Staff, to conduct the necessary studies to fully implement the FRCC Regional Transmission Planning Process. The descriptions of the FRCC Regional Transmission Planning Process set forth herein summarize the elements of that process as they relate to Transmission Provider and the principles of the Final Rule in Docket No. RM05-25-000.

The Florida Public Service Commission ("FPSC") is an integral part of the planning process by providing input, guidance, regulatory oversight and decision-making under this process. Additionally, the FPSC conducts workshops on an annual basis to review the transmission and generation expansion plans for Florida. The FPSC, under Florida law, has the authority to ensure an adequate and reliable electric system for Florida.

The FRCC provides a page on its website where all of the FRCC documents referenced in this Attachment N-2 are listed along with their URL addresses. The URL address for this FRCC webpage is: https://www.frcc.com/Planning/Shared%20Documents/FRCC_Reference_Documents.pdf. This provides flexibility for the FRCC to change the URL addresses for these individual FRCC documents without requiring the modification of tariff language.

As set forth below, Transmission Provider's Transmission Planning Process is a seamless process that fully integrates both the local and regional transmission planning and is designed to satisfy the following principles, as defined in the FERC Final Rule in Docket No. RM05-25-000: (1) coordination, (2) openness, (3) transparency, (4) information exchange, (5) comparability, (6) dispute resolution, (7) regional coordination, (8) economic planning studies, and (9) cost allocation for new projects. Descriptions of the FRCC Regional Transmission Planning Process are contained herein as they relate to Transmission Provider's Transmission Planning Process.

Section 1. Coordination

1.1 Transmission Provider consults and interacts directly with its customers in providing transmission service and generator interconnection service as well as with its neighboring transmission providers, on a regular basis. A transmission customer may request and/or schedule a meeting with Transmission Provider to discuss any issue related to the provision of transmission service at any time. Transmission Provider consults and interacts with its customers any time during the study process that either the transmission customer or the Transmission Provider deem necessary and/or at various stages of the planning process (e.g., Scoping Meeting, Feasibility, System Impact and Facilities Studies). An open dialogue between the transmission customer and the Transmission Provider takes place regarding customer needs. This interaction and dialogue between the customer and Transmission Provider are further described under the Local Transmission Network Planning Process as set forth in Appendix 1 to this Attachment N-2. Topics such as load growth projections, planned generation resource additions/deletions, new delivery points and possible transmission alternatives are discussed. This dialogue is intended to provide timely and meaningful input and participation of customers during the early stages of development of the transmission plan. Additionally, the transmission customer shall have an opportunity to comment at any time during the evaluation process and/or when study findings (Feasibility, System Impact and Facilities Studies) are communicated by the Transmission Provider to the customer. Transmission Provider communicates with its neighboring transmission providers on a regular basis, and Transmission Provider facilitates communication and consultation between its customers and its neighboring transmission service providers/owners, specifically, if during the transmission service study process, a neighboring system's facilities are identified as being affected. This coordination process continues in a seamless manner at the local as well as the regional level, leading to each Transmission Provider providing an initial transmission plan which, when consolidated, becomes the initial regional transmission plan. The initial transmission plan submitted to the FRCC by the Transmission Provider, which results from the Local Transmission Network Planning Process as set forth in Appendix 1 to this Attachment N-2, will be posted by the FRCC in accordance with the FRCC Regional Transmission Planning Process (reference link to Initial *Plans* on the FRCC website). This initial transmission plan is reviewed by the FRCC as well as all interested transmission customers/users. The Transmission Provider relies on the FRCC Committee process to finalize its initial transmission plan as submitted to the FRCC. In addition to transmission customers/users being provided timely and meaningful input and participation during the planning process with the Transmission Provider, the transmission customers/users are also given an additional opportunity to raise any issues, concerns or minority opinions that they believe have not been adequately addressed by any Transmission Providers' initial transmission plan submittal during the FRCC review process. This FRCC review process normally commences shortly after the submittal of the Ten Year Site Plans to the FPSC on April 1 of each year. Once issues raised by interested stakeholders are addressed, the Planning Committee approves the proposed regional transmission plan and presents it to the FRCC Board for approval. Upon approval by the Board, which is expected in December of each year, the FRCC sends the final regional transmission plan to the FPSC. Unresolved issues may be referred to the FRCC Dispute Resolution Process as described below.

1.2 The FRCC Regional Transmission Planning Process is intended to ensure the long-term reliability and economic needs of the bulk power system in the FRCC Region.² An objective of the FRCC Regional Transmission Planning Process is to ensure coordination of the transmission planning activities within the FRCC Region in order to provide for the development of a reliable and economically robust transmission network in the FRCC Region. The process is intended to develop a regional transmission plan to meet the existing and future requirements of all customers/users, providers, owners, and operators of the transmission system in a coordinated, open and transparent manner.

The FRCC obtains and posts transmission owners' 10-year expansion plans on the FRCC website. All transmission providers/owners provide their long-term firm transmission service requests and generator interconnection service requests to the FRCC in a common format. The FRCC consolidates all requests for coordination purposes, and posts the consolidated requests available for viewing by all FRCC members.

1.2.1 This coordinated FRCC Regional Transmission Planning Process offers many opportunities for transmission providers to interact with customers and neighboring systems during the development of the transmission plan. The schedule of committee and working group meetings related to transmission planning is posted on the FRCC website under FRCC Calendar.

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Nothing in the FRCC Regional Transmission Planning Process is intended to limit or override rights or obligations of transmission providers, owners and/or transmission customers/users contained in any rate schedules, tariffs or binding regulatory orders issued by applicable federal, state or local agencies. In the event that a conflict arises between the FRCC process and the rights and obligations included in those rate schedules, tariffs or regulatory orders, and the conflict cannot be mutually resolved among the appropriate transmission providers, owners, or customers/users, any affected party may seek a resolution from the appropriate regulatory agencies or judicial bodies having jurisdiction.

FRCC meeting notices, meeting minutes and documents of FRCC Planning Committee and/or FRCC Board meetings in which transmission plans or related study results are exchanged, discussed or presented, are distributed by the FRCC. Detailed evaluation and analysis of the transmission providers/owners plans are conducted by the FRCC Transmission Working Group ("TWG") and Stability Working Group ("SWG") in concert with the FRCC Staff. The TWG and SWG are further described below.

- 1.3 A general scope of the Planning Committee and the respective working groups related to transmission planning is described below. The scope of these committees is subject to change in the future in order to address evolving needs. The members of the Planning Committee and the working groups related to transmission planning are posted on the FRCC website under FRCC Committees. Contact with the Planning Committee and transmission working groups can be made through FRCC staff or through the chair of the respective committee or working group.
 - 1.3.1 The Planning Committee promotes the reliability of the Bulk Power System in the FRCC, and assesses and encourages generation and transmission adequacy. The Planning Committee reports to the Board of Directors. Rules and procedures governing the Planning Committee are posted on the FRCC website under Rules of Procedure for FRCC Standing Committees. Working Groups related to transmission planning reporting to the Planning Committee are described below.
 - 1.3.2 The Transmission Working Group engages in active coordination of transmission planning within the FRCC Region under the direction of the FRCC Planning Committee, and performs the duties as required by the FRCC Regional Transmission Planning Process. Some of the responsibilities and objectives of the Transmission Working Group are: 1) Maintain, update and provide summer and winter database cases for the FRCC including the bulk power transmission and generation systems, projected loads and any facility additions for an eleven year period; 2) Put together the FERC Form 715 filing and EIA-411 for FRCC members, prepare State of Florida electrical maps, etc.
 - 1.3.3 The Stability Working Group engages in the active coordination of transmission planning in the FRCC Region, assesses stability of the FRCC bulk electric system under various conditions, and provides support to the other FRCC working groups as needed. Some of the responsibilities and objectives of the Stability Working Group are: 1) Maintain and update a dynamic data base for the FRCC Region; this data base is coordinated with selected FRCC planning horizon power flow cases as required by NERC Multi-regional Modeling Working Group and other FRCC study needs; 2) Assess dynamic performance of the FRCC bulk power system

in response to Category B, C and D contingencies which includes special protection systems, under frequency load shedding programs, oscillatory stability, disturbances involving separation, etc.

Section 2 Openness

- 2.1 Transmission Provider provides notice and schedules meetings with its transmission customers as deemed necessary by the transmission customer and/or Transmission Provider. Transmission Provider schedules meetings with its customers to interact, exchange perspectives or share findings from studies. Transmission Provider communicates and interacts with its transmission service customers on a regular basis to discuss loads, generation/network resource additions/deletions, new facility additions and upgrades, demand resource information, customer's projections of future needs, and related subjects that have an impact on the provision of transmission service to a customer. Transmission Provider provides a status update to its customers on a regular basis or at any time, if requested by a customer. Additionally, Appendix 1 to this Attachment N-2 describes the customer and Transmission Provider interaction in the flow diagram and outlines the steps of the Local Transmission Network Planning Process.
- 2.2 This openness principle is also incorporated in the FRCC Regional Transmission Planning Process by which the Transmission Provider participates in along with other parties in the committee and working processes at the FRCC as described below. The participants in the planning process at the FRCC are the sector representative of the Planning Committee. A list of representatives may be found on the FRCC website under the FRCC Planning Committee Member List. The Rules of Procedure for FRCC Standing Committees document on the FRCC website describes the Planning Committee structure and processes as they relate to Organization Structure, Standing Committee Representation, Standing Committee Quorum and Voting, Duties of Officers and Representatives, General Procedures for Standing Committees, FRCC Representation on NERC Committees, Procedures of Minutes of Meetings and Conduct of the Meeting. Interested entities or persons may participate in the committees via participation within one of the identified sectors (Supplier Sector, Non-Investor Owned Utility Wholesale Sector, Load Serving Entity Sector (including municipals and cooperatives), Generating Load Serving Entity Sector, Investor Owned Utility Sector, and General Sector (this sector provides for any entity or individual's participation)). Moreover, at the FRCC regional level interested entities have an opportunity to raise any special requirements that they have and believe have not been addressed at the local level. For ease of reference, the FRCC quorum and voting provisions are shown in Appendix 2 of Attachment N-2.
 - 2.2.1 The FRCC meeting dates are provided in the FRCC Calendar document on the FRCC website and the chairs and member representatives for the various committees are posted on the FRCC website under the FRCC Committees. The meeting agenda for the Planning Committee is normally provided two weeks prior to the meeting to the committee members.

- FRCC meeting notices, meeting minutes and documents of FRCC Planning Committee and/or FRCC Board meetings in which transmission plans or related study results will be exchanged, discussed or presented, are distributed by the FRCC.
- The FRCC developed the FERC Standards of Conduct Protocols for the 2.2.2 FRCC document for the purpose of ensuring proper disclosure of transmission information in accordance with FERC requirements. The primary rule is that a transmission provider must treat all transmission customers, affiliated and non-affiliated on a non-discriminatory basis, and it cannot operate its transmission system to give a preference to any transmission customer or to share non-public transmission or customer information with any transmission customer. The rules also prevent transmission function employees from sharing with their merchant employees and certain affiliates non-public transmission information about the transmission provider's transmission system or any other transmission system, which is information that the affiliated merchant employee receiving the information could use to commercial advantage. Reference the FERC Standards of Conduct Protocols for the FRCC posted on the FRCC website.
- 2.3 Customer input is included in the early stages of the development of the transmission plans, as well as during and after plan evaluation processes. Detailed evaluation and analysis of the transmission providers/owners plans are conducted by the FRCC Transmission Working Group and Stability Working Groups under the direction of the Planning Committee. Such evaluation and analysis provides the basis for possible changes to the transmission providers/owners plans that could result in a more reliable and more robust transmission system for the FRCC Region. The FRCC Planning Committee meets on a regular basis, usually monthly, with two weeks' prior notice.
- 2.4 The FRCC conducts the FRCC planning process in an open manner in such a way that it ensures fair treatment for all customers/users, owners and operators of the transmission system. Stakeholders have access to and participate in the FRCC planning process. The committees and working groups described in this document are stakeholder groups. The Planning Committee consists of six stakeholder sectors: Suppliers, Non-Investor Owned Utility Wholesalers, Load Serving Entities, Generating Load Serving Entities, Investor Owned Utilities, and General. The rules of procedure governing the Planning Committee in conducting the FRCC Regional Transmission Planning Process are posted under the Rules of Procedure for FRCC Standing Committees on the FRCC website. The FPSC is encouraged to and does participate in the FRCC Regional Transmission Planning Process.
- 2.5 The FRCC Regional Transmission Planning Process provides for the overall protection of all confidential and proprietary information that is used to support the planning process. A customer/user may enter into a confidentiality agreement

with the FRCC and/or applicable transmission provider/owner, as appropriate, to be eligible to receive transmission information that is restricted due to Critical Energy Infrastructure Information ("CEII"), security, business rules and standards and/or other limitations. The procedure for requesting this type of information is delineated at the FRCC website under the *Request of CEII Data*.

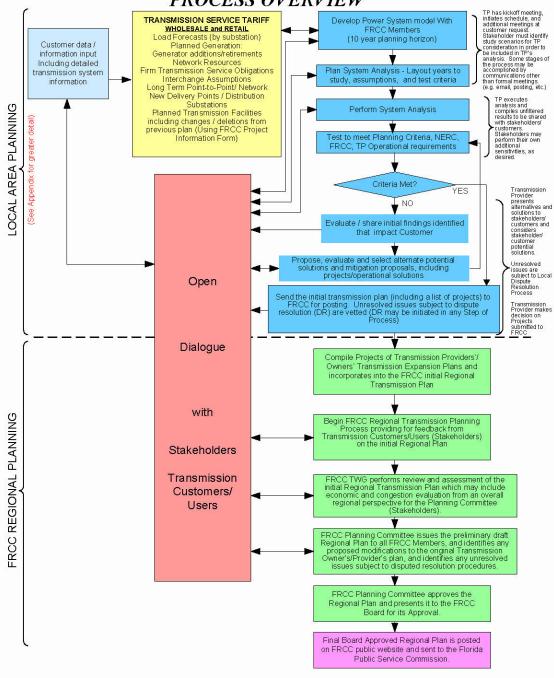
Section 3 Transparency

- 3.1 Transmission Provider plans its transmission system in accordance with the NERC and FRCC Planning Reliability Standards, along with Transmission Provider's own design, planning and operating criteria which it utilizes for all customers on a comparable and non-discriminatory basis. These standards/criteria are also referred to in the Transmission Provider's FERC Form 715. In addition, Transmission Provider makes available Facility Connection Requirements, Capacity Benefit Margin ("CBM") Methodology and other pertinent information used in the transmission planning process and posts this information on the Transmission Provider's OASIS website.
- 3.2 During the Transmission Provider's local area planning process the Transmission Provider utilizes the FRCC databanks which contain information provided by the Transmission Provider and customers of projected loads as well as all planned and committed transmission and generation projects, including upgrades, new facilities and changes to planned-in-service dates over the planning horizon, as the base case for Transmission Provider's studies. Transmission Provider makes available to a transmission service customer the underlying data, assumptions, criteria and underlying transmission plans utilized in the study process. Transmission Provider provides written descriptions of the basic methodology, criteria and processes used to develop plans. In order to get a better understanding, a transmission customer may inquire about the assumptions, data and/or underlying methods, criteria, etc. and the customer will be provided a response by the Transmission Provider's qualified technical representative. Dialogue during the study process is encouraged. The dialogue during the Transmission Providers local area planning process between the Transmission Provider and customers involves discussions of the initial findings that affect customers, potential alternatives including feasibility of mitigating any adverse findings, and third party impacts. Discussion of initial findings in areas of the system that affect customers is intended to communicate and validate with the customer issues or concerns identified by the Transmission Provider or conversely, issues not specifically identified by the Transmission Provider that may be of concern to the customers. As part of the process of identifying potential alternatives to mitigate any adverse issue or concern, the dialogue with the customer should facilitate the identification of the most effective solution. This dialogue during the different stages of the planning process provides for meaningful input and participation of transmission customers in the development of the transmission plan. The goal of this interaction between the Transmission Provider and customers is to develop a transmission expansion plan that meets the needs of the Transmission Provider and customer in a reliable cost effective

manner. This planning process between the Transmission Provider and customers is described in the process flow diagram below and in the more detailed description of the Local Transmission Network Planning Process as set forth in Appendix 1 to this Attachment N-2.

3.3 An overview of the Transmission Provider's local area planning process and how it relates to the *FRCC Regional Transmission Planning Process* is shown in the flow chart below:

TRANSMISSION PROVIDER'S (TP) LOCAL / REGIONAL COORDINATED TRANSMISSION NETWORK PLANNING PROCESS OVERVIEW



- 3.4 Once the results of the Transmission Provider's local area planning process are reflected in the FRCC Regional Transmission Planning Process, the FRCC seeks input and feedback from transmission customers/users for any issues or concerns that are identified and independently assesses the initial Regional Plan from a FRCC regional perspective. A dialogue among the FRCC, transmission customers/users, and transmission owners/providers occurs to address any issues identified during this process. When the FRCC Regional Transmission Plan has been approved by the FRCC Planning Committee, it is sent to the FRCC Board for approval. After the FRCC Board approves the FRCC Regional Transmission Plan, it is posted on the FRCC website and sent to the FPSC. Additionally, the FRCC compiles all of the individual transmission providers/owners FERC Form 715's within the FRCC region, including Transmission Provider's, and files all FERC Form 715's for its members with the FERC on an annual basis.
- 3.5 Studies conducted pursuant to the FRCC Regional Transmission Planning Process utilize the applicable reliability standards and criteria of the FRCC and NERC that apply to the Bulk Power System as defined by NERC. Such studies also utilize the specific design, operating and planning criteria used by FRCC transmission providers/owners. The transmission planning criteria are available to all customers and stakeholders. Transmission planning assumptions, transmission projects/upgrades and project descriptions, scheduled in-service dates for transmission projects and the project status of upgrades will be available to all customers through the FRCC periodic project update process. The FRCC updates and distributes transmission projects/upgrades project descriptions, schedule in-service dates, and project status on a regular basis, no less than quarterly. The FRCC also updates and distributes on a periodic basis the load flow data base. The FRCC publishes the individual transmission providers' system impact study schedules so that other potentially impacted transmission owners can assess whether they are affected and elect to participate in the study analysis. The FRCC planning studies are also distributed by the FRCC and updated as needed.
- 3.6 The FRCC also produces the following annual reports which are submitted to the FPSC:
 - The Regional Load and Resource Plan contains aggregate data on demand and energy, capacity and reserves, and proposed new generating unit and transmission line additions for Peninsular Florida as well as statewide.
 - The *Reliability Assessment* is an aggregate study of generating unit availability, forced outage rates, load forecast methodologies, and gas pipeline availability.
 - The Long Range Transmission Reliability Study is an assessment of the adequacy of Peninsular Florida's bulk power and transmission system. The study includes both short-term (1-5 years) detailed analysis and long-term (6-10 years)

evaluation of developing trends that would require transmission additions or other corrective action. Updates on regional areas of interest and/or constraints (e.g., Central Florida) are also addressed.

Section 4 Information Exchange

- 4.1 Transmission Provider participates in information exchange on a regular and ongoing basis with the FRCC, neighboring utilities, and customers. Transmission customers are required to submit data for the planning process described in this Attachment N-2 to the Transmission Provider in order for the Transmission Provider to plan for the needs of network and point-to-point customers. This data/information shall be provided by the transmission customer by no later than January 1 of each year. Such data/information includes load growth projections, planned generation resource additions/upgrades (including network resources), any demand response resources, new delivery points, new or continuation of longterm firm point-to-point transactions with specific receipt (i.e., source or electrical location of generation resources) and delivery points, (i.e., the electrical location of load or sink where the power will be delivered to), and planned transmission facilities. This data/information shall be provided over the 10 year planning horizon to the extent such information is known. Additionally, the transmission customer shall provide timely written notice of any material changes to this data/information as soon as practicable due to the possible effect on the transmission plan or the ability of the Transmission Provider to provide service.
- 4.2 The Transmission Provider utilizes the information provided in modeling and assessing the performance of its system in order to develop a transmission plan that meets the needs of all customers of the transmission system. The Transmission Provider exchanges information with a transmission customer to provide an opportunity for the transmission customer to evaluate the initial study findings or to propose potential alternative transmission solutions for consideration by the Transmission Provider. If the Transmission Provider and transmission customer agree that the transmission customer's recommended solution is the best over-all transmission solution then such solution will be incorporated in the Transmission Provider's plan. Through this information exchange process the transmission customer has an integral role in the development of the transmission plan. This process is described in greater detail in Appendix 1 to this Attachment N-2. Consistent with the Transmission Provider's obligation under federal and state law, and under NERC and FRCC reliability standards, the Transmission Provider is ultimately responsible for the transmission plan.
- 4.3 The FRCC TWG sets the schedule for data submittal and frequency of information exchange which starts at the beginning of each calendar year.

 Updates and revisions are discussed at the FRCC Planning Committee meetings by the members. This process requires extensive coordination and information exchange over a period of several months as the FRCC develops electric power

system load-flow databank models for the FRCC Region. The models include data for every utility in peninsular Florida and are developed and maintained by the FRCC. The TWG is responsible for developing and maintaining power flow base cases. The FRCC power flow base case models contain the data used by the FRCC and transmission providers for intra- and inter-regional assessment studies, and other system studies. The models created also are the basis for the FRCC submittal to the NERC Multi-regional Modeling Working Group ("MMWG"). TWG members support the data collection requirements and guidelines related to the accurate modeling of generation, transmission and load in the power flow cases. The data collected includes:

For power flow models:

- Bus data; (name, base voltage, type, area assignment, zone assignment, owner)
- Load data; (bus, MW, MVAR, area assignment, zone assignment, owner)
- Generator data; (bus, machine number, MW, MVAR, status, PMAX, PMIN, QMAX, QMIN, MVA base, voltage set-point, regulating bus)
- Branch data; (from bus, to bus, circuit number, impedances, ratings, status, length, owner)
- Transformer data; (from bus, to bus, to bus, circuit number, status, winding impedances, ratings, taps, voltage control bus, voltage limits, owner)
- Area interchange data; (area, slack bus, desired interchange, tolerance)
- Switched shunt data
- Facts device data

For dynamic stability models (in addition to power flow model data):

- Generator models; (turbine, generator, governor, exciter, power system stabilizers)
- Relay models; (distance, out of step, underfrequency)
- Special protection scheme models

For short circuit models (in addition to power flow model data):

• Zero and negative sequence impedances;

The databank models are compiled and incorporate load projections by substations, firm transmission services, and transmission expansion projects over

the 10 year planning horizon. Transmission Provider utilizes the FRCC databanks which contain projected loads as well as all planned and committed transmission and generation projects, including upgrades, new facilities and changes to planned in-service dates over the planning horizon, as the base case for Transmission Provider's studies. These databanks are maintained by the FRCC Transmission Working Group and are updated on a periodic basis to ensure that the assumptions are current. Transmission Provider makes available to a transmission service customer the underlying data, assumptions, criteria and transmission plans utilized in the study process. If information is deemed confidential, Transmission Provider requires the customer to enter into a confidentiality agreement prior to providing the confidential information.

4.4 The FRCC maintains databanks of all FRCC members' projected loads and planned and committed transmission and generation projects, including upgrades, new facilities, and changes to planned in-service dates. These databanks are updated on a periodic basis. The FRCC maintains and updates the load flow, short circuit, and stability models. All of this above information is distributed by the FRCC, along with the FRCC transmission planning studies, subject to possible redaction of user sensitive or critical infrastructure information consistent with market and business rules and standards.

Section 5 Comparability

- This comparability principle is applied in all aspects of the transmission planning process including each of the respective principles in this Attachment N-2. Transmission Provider incorporates into its transmission plans on a comparable basis all firm transmission obligations, both retail and wholesale. The retail obligations consist of load growth, interconnection and integration of new network resources, firm power purchases and new distribution substations. Transmission Provider wholesale obligations are existing firm wholesale power sales, existing long-term firm transmission service including firm point-to-point and network (interconnection and integration of network resources), projected network load, generator interconnections, and new delivery points.
- 5.2 Transmission Provider plans for forecasted load, generation additions/upgrades which include network resources and new distribution substations associated with retail service obligations. A network transmission customer provides corresponding data as part of the provision of service, such as load forecast data, generation additions/upgrades including network resource forecast, new delivery points, and other information needed by the Transmission Provider to plan for the needs of the customer. Both Transmission Provider and the transmission customers reflect their demand response resources within the information that is input within this planning process. The data required for planning the transmission system for both retail and wholesale customers is comparable. Transmission customers/users (retail and wholesale) accurately reflect their demand response resources appropriately in their load forecast projections. To the extent a customer/stakeholder has a demand response resource or a generation

resource that is not incorporated into its submitted plans and such customer/stakeholder desires the Transmission Provider to specifically consider on a comparable basis such demand response resource or generation resource as an alternative to transmission expansion, or in conjunction with the Transmission Provider's transmission expansion plan, such customer/stakeholder sponsoring such demand response resource or generation resource shall provide the necessary information (cost, performance, lead time to install, etc.) in order for the Transmission Provider to consider such demand response resource or generation resource alternatives comparably with other alternatives. Any customer/stakeholder sponsoring a demand response resource or generation alternative should participate in the planning process. The Transmission Provider shall treat customer/stakeholder resources and its own resources on a comparable basis for transmission planning purposes. This comparability principle is also further described under the Local Transmission Planning Process as set forth in Appendix 1 to this Attachment N-2. The data/information is also provided to the FRCC for their use in databank development and analysis under the FRCC Regional Transmission Planning Process. These data requirements are generally communicated by OASIS, email, letter or combination thereof.

5.3 Transmission providers/owners submit to the FRCC their latest 10-year expansion plans for their transmission systems, which incorporate the transmission expansion needed to meet the transmission customer requirements, including a list of transmission projects that provides for all of the firm obligations based on the best available information. The FRCC compiles and distributes a list of projects distributed from the transmission providers/owners and updates the project status to keep the list current. FRCC compiles and distributes the transmission providers/owners' 10-year expansion plans. All transmission users and other affected parties are asked to submit to the FRCC any issues or special needs that they believe are not adequately addressed in the expansion plans.

Section 6 Dispute Resolution

6.1 If a dispute arises between a transmission customer and the Transmission Provider under the local transmission planning process set forth in Appendix 1 to this Attachment N-2 or involving Transmission Service under the Tariff, the senior representatives of the Transmission Provider and the customer shall attempt to resolve the dispute and may mutually agree to utilize a mediation service for that purpose. However, if such dispute is not resolved, then the Dispute Resolution Procedures set forth in Article 12 of the Tariff shall govern. If a dispute arises among or between Transmission Provider and another transmission owner(s) involving a cost allocation issue regarding the Cost Allocation Methodology and Principles, then the dispute resolution process set forth below under the cost allocation principle of this Attachment N-2 shall govern. If a dispute arises among or between Transmission Provider and another transmission provider/owner(s), regarding the FRCC Regional Transmission Planning Process, then the dispute resolution procedures that are contained in the

- FRCC Regional Transmission Planning Process as set forth below in this Attachment N-2 shall govern.
- 6.2 The FRCC Regional Transmission Planning Process has two alternative dispute resolution processes. Any party raising an unresolved issue may request the Mediator Dispute Resolution Process, which involves a mediator being selected jointly by the disputing parties. If the Mediator Dispute Resolution Process is completed, and the issue is still unresolved, by mutual agreement between the parties, the Independent Evaluator Dispute Resolution Process may be utilized. The Independent Evaluator is selected by the FRCC Board of Directors. If the issue is unresolved by either of the dispute resolution processes, the transmission owners, affected parties, or the FRCC may request that the FPSC address such unresolved dispute. Notwithstanding the foregoing, any unresolved issue(s) may be submitted to any regulatory or judicial body having jurisdiction.

Described below are the two alternative dispute resolution processes:

- 6.2.1 Alternative 1 Mediator Dispute Resolution Process (Non-Binding) The Mediator Process shall be completed within 60 days of commencement. A mediator shall be selected jointly by the disputing parties. The mediator shall: (1) be knowledgeable in the subject matter of the dispute, and (2) have no official, financial, or personal conflict of interest with respect to the issues in controversy, unless the interest is fully disclosed in writing to all participants and all participants waive in writing any objection to the interest. The disputing parties shall attempt in good faith to resolve the dispute in accordance with the procedures and timetable established by the mediator. In furtherance of the mediation efforts, the mediator may:
 - Require the parties to meet for face-to-face discussions, with or without the mediator;
 - Act as an intermediary between the disputing parties;
 - Require the disputing parties to submit written statements of issues and positions; and
 - If requested by the disputing parties, provide a written recommendation on resolution of the dispute.

If a resolution of the dispute is not reached by the 30th day after the appointment of the mediator or such later date as may be agreed to by the parties, the mediator shall promptly provide the disputing parties with a written, confidential, non-binding recommendation on resolution of the dispute, including the mediator's assessment of the merits of the principal positions being advanced by each of the disputing parties. At a time and place specified by the mediator after delivery of the foregoing recommendation, but no later than 15 days after issuance of the mediator's recommendation, the disputing parties shall meet in a good faith attempt to resolve the dispute in light of the mediator's recommendation. Each

disputing party shall be represented at the meeting by a person with authority to settle the dispute, along with such other persons as each disputing party shall deem appropriate. If the disputing parties are unable to resolve the dispute at or in connection with this meeting, then: (1) any disputing party may commence such arbitral, judicial, regulatory or other proceedings as may be appropriate; and (2) the recommendation of the mediator shall have no further force or effect, and shall not be admissible for any purpose, in any subsequent arbitral, administrative, judicial, or other proceeding.

The costs of the time, expenses, and other charges of the mediator and of the mediation process shall be borne by the parties to the dispute, with each side in a mediated matter bearing one-half of such costs. Each party shall bear its own costs and attorney's fees incurred in connection with any mediation.

6.2.2 Alternative 2 - Independent Evaluator Dispute Resolution Process (Non-Binding).

The Independent Evaluator Dispute Resolution Process shall be completed within 90 days.

An assessment of the unresolved issue(s) shall be performed by an Independent Evaluator that will be selected by the FRCC Board. The Independent Evaluator shall evaluate the disputed issue(s) utilizing the same criteria that the Planning Committee is held to, that is, "the applicable reliability criteria of FRCC and NERC, and the individual transmission owner's/provider's specific design, operating and planning criteria."

The Independent Evaluator shall be a recognized independent expert with substantial experience in the field of transmission planning with no past business relationship to any of the affected parties within the past two years from the date the Dispute Resolution Process is started.

The Board shall retain an Independent Evaluator within 15 days of the request to utilize the Independent Evaluator Dispute Resolution Process.

The Independent Evaluator shall prepare a report of its findings, with recommendations on the unresolved issue(s), to the Board and the Planning Committee within 45 days from the date the Board selected the Independent Evaluator. The Independent Evaluator's findings and recommendations shall not be binding. The Board, with the assistance of the Planning Committee and the Independent Evaluator's report, shall attempt to resolve the unresolved issue(s) within 30 days from receipt of the Independent Evaluator's report. If the Board fails to resolve the issue(s)

to the satisfaction of all parties, any disputing party may commence such arbitral, judicial, regulatory or other proceedings as may be appropriate.

The costs of the Independent Evaluator shall be borne by the parties to the dispute with each party bearing an equal share of such costs. The FRCC shall be one of the parties. Each party shall bear its own costs and attorney fees incurred in connection with the dispute resolution.

Section 7 Regional Participation

- 7.1 The FRCC Regional Transmission Planning Process begins with the consolidation of the long term transmission plans of all of the transmission providers/owners in the FRCC Region. Such transmission plans incorporate the integration of new firm resources as well as other firm commitments. Any generating or transmission entity not required to submit a 10 year plan to the FPSC submits its 10 year expansion plan to the FRCC, together with any issues or special needs they believe are not adequately addressed by the transmission providers/owners' 10 year plans. The FRCC process requires that the FRCC Planning Committee address any issue or area of concern not previously or adequately addressed with emphasis on constructing a more robust regional transmission system.
- 7.2 Each transmission provider/owner furnishes the FRCC with a study schedule for each system impact study so that other potentially affected transmission providers/owners can independently assess whether they may be affected by the request, and elect to participate in or monitor the study process. If a transmission provider/owner believes that it may be affected, it may participate in the study process.
- 7.3 FRCC has a reliability coordination arrangement with Southern Company Services, Inc. ("Southern"), which is located in the Southeastern Subregion of SERC Reliability Corporation ("SERC"). The purpose of the reliability coordination arrangement is to safeguard and augment the reliability on an interregional basis for Southern and the FRCC bulk power supply systems. This arrangement provides for exchanges of information and system data between Southern and the FRCC for the coordination of planning and operations in the interest of reliability. The arrangement also provides the mechanism for interregional joint studies and recommendations designed to improve the reliability of the interconnected bulk power system. The arrangement contributes to the safeguarding and augmenting of reliability through: (1) coordination of generation and transmission system planning, construction, operating, and protection to maintain maximum reliability; (2) coordination of interconnection lines and facilities for full implementation of mutual assistance in emergencies; (3) initiation of joint studies and investigations pertaining to the reliability of bulk power supply facilities; (4) coordination of maintenance schedules of generating units and transmission lines; (5) determination of requirements for necessary communication between the parties; (6) coordination of load relief measures and

restoration procedures; (7) coordination of spinning reserve requirements; (8) coordination of voltage levels and reactive power supply; (9) other matters relating to the reliability of bulk power supply required to meet customer service requirements; and (10) exchange of necessary information, such as magnitude and characteristics of actual and forecasted loads, capability of generating facilities, programs of capacity additions, capability of bulk power interchange facilities, plant and system emergencies, unit outages, and line outages.

- 7.4 Southern, PowerSouth Energy Cooperative (formally known as Alabama Electric Cooperative), Dalton Utilities, Georgia Transmission, MEAG Power, and South Mississippi Electric Power Association also sponsor the Southeastern Regional Transmission Planning ("SERTP") forum. These SERTP sponsors are located within the Southeastern Subregion of SERC. The FRCC and the SERTP have established their respective links to transmission providers and FRCC/SERTP websites as applicable that contain study methodologies, joint transmission studies, inter-regional transmission service and generator interconnection service related studies, and the FRCC/SERTP process for requesting inter-regional economic studies. The FRCC website link that contains this type of information can be found under the Florida-SERC Inter-Regional Transmission Information folder. In this folder please refer to a document entitled FRCC Inter-regional Coordination Process that describes how information, modeling data and expansion plans are shared. The SERTP website link is http://www.southeasternrtp.com. Transmission providers within the FRCC and SERTP coordinate with each other as necessary in the performance of economic studies. The FRCC SE Region Economic Study Request document posted under the Florida-SERC Inter-Regional Transmission Information folder on the FRCC website describes the process and procedures for requesting inter-regional economic studies. FRCC and SERTP transmission providers plan to attend transmission planning forums when study findings are presented to stakeholders that impact their respective transmission systems.
- 7.5 The FRCC is a member of the Eastern Interconnection Reliability Assessment Group ("ERAG") which includes other Eastern Interconnection reliability regional entities, the Midwest Reliability Organization, the Northeast Power Coordinating Council, Inc., Reliability First Corporation, SERC Reliability Corporation, and Southwest Power Pool. The purpose of ERAG is to ensure reliability of the interconnected system and the adequacy of infrastructure in their respective regions for the benefit of all end-users of electricity and all entities engaged in providing electric services in the region.

Section 8 Economic Planning Studies

8.1 In the performance of an economic sensitivity study that is identified as part of the FRCC Regional Transmission Planning Process, Transmission Provider plans to participate in such study utilizing the procedures that are contained in the FRCC Regional Transmission Planning Process. If Transmission Provider receives a specific request to perform economic studies for a transmission customer,

Transmission Provider plans to utilize the OASIS for such requests. To the extent an economic study would involve other transmission providers/owners, Transmission Provider will coordinate with these providers/owners in performing the study. Stakeholders will collectively be allowed to request the performance of up to five (5) economic planning studies annually, at no charge to the individual requesting customer(s). The cost of the sixth and subsequent economic planning studies requested in a calendar year shall be assessed to the individual customer(s) requesting such studies. If there are similar interests for certain economic studies, stakeholders can coordinate with each other and the Transmission Provider during the transmission planning process to collectively select the five no-charge economic studies. If more than five economic planning studies are requested and the stakeholders are unable to agree on the selection of the five no-charge economic planning studies, then the Transmission Provider will select the five nocharge economic planning studies by selecting one study per stakeholder based on the time the economic planning study was submitted on OASIS (up to a maximum of five stakeholders) and continuing this iterative process until the five no-cost economic planning studies have been selected. In the event the Transmission Provider receives more than one request for an economic planning study which the Transmission Provider determines: (i) will have overlapping time periods of study; (ii) may involve the same facilities; and (iii) can be reasonably performed on a clustered basis, then the Transmission Provider will, either at the request of transmission customer(s) requesting the studies or if the Transmission Provider deems it to be appropriate, offer to cluster two or more qualifying study requests which meet the aforementioned criteria for an economic planning study. Transmission customers agreeing to the clustering must also agree: (i) to remain in the cluster throughout the performance of the study; and (ii) to share equally in the cost of the study, to the extent that there are such costs (i.e., for economic planning study requests beyond the first five in any calendar year). The Transmission Provider will consider an economic planning cluster study under this section as a single study in the context of the number of studies done at no cost each year.

The FRCC Regional Transmission Planning Process includes both economic and 8.2 congestion studies. One of the sensitivities may include evaluating the FRCC Region with various generation dispatches that test or stress the transmission system, including economic dispatch from all generation (firm and non-firm) in the region. Other sensitivities may include specific areas where a combination/cluster of generation and load serving capability involving various transmission providers/owners in the FRCC experiences or may experience significant and recurring transmission congestion on their transmission facilities. Members of the FRCC Planning Committee may also request specific economic analyses that would examine potential generation resource options, demand resource options, or other types of regional economic studies, and to the extent information is available, may request a study of the cost of congestion. The FRCC Planning Committee may consider clustering studies as appropriate. Economic analyses should reflect the upgrades to integrate necessary new generation resources and/or loads on an aggregate or regional (cluster) basis.

Section 9 Cost Allocation

- [9.1 9.3 refers to third party impacts resulting from the FRCC Regional Planning Process; 9.4 refers to economic transmission improvements. The Cost Allocation provisions contained in the Section relate to cost allocation procedures for specific circumstances as described herein. All other transmission cost allocation not specifically described below is provided in accordance with OATT provisions for generation interconnection, network and point-to-point service.]
- 9.1 If a transmission expansion is identified as needed under the FRCC Regional Transmission Planning Process and such transmission expansion results in a material adverse system impact upon a third party transmission owner, the third party transmission owner may choose to utilize the FRCC Principles for Sharing of Certain Transmission Expansion Costs as outlined below in this Attachment N-2. The FPSC is involved in this process and provides oversight, guidance and may exercise its statutory authority as appropriate. A more detailed description of the FRCC Principles for Sharing of Certain Transmission Expansion Costs can be found on the FRCC website.
- 9.2 The FRCC Principles for Sharing of Certain Transmission Expansion Costs: (i) sets forth certain principles regarding the provision of financial funding to Transmission Owners³ that undertake remedial upgrades to, or expansions of, their systems resulting from upgrades, expansions, or provisions of services on the systems of *other* Transmission Owners, and (ii) procedures for attempting to resolve disputes among Transmission Owners and other parties regarding the application of such principles. These principles shall not apply to transmission upgrades or expansions if, and to the extent that, the costs thereof are subject to recovery by a Transmission Owner pursuant to FERC Order 2003 or Order 2006.

9.3 Principles

9.3.1 Each Transmission Owner in the FRCC Region shall be responsible for upgrading or expanding its transmission system in accordance with the FRCC Regional Transmission Planning Process consistent with applicable NERC and FRCC Reliability Standards and shall participate, directly or indirectly (as the member of a participating Transmission Owner, e.g., Seminole Electric Cooperative, Inc. and Florida Municipal Power Agency), in the FRCC Regional Transmission Planning Process in planning all upgrades and expansions to its system.

9.3.2 If, and to the extent that, the need for a 230 kV or above upgrade to, or expansion of, the transmission system of one Transmission Owner (the

For this purpose, "Transmission Owner" means an electric utility owning transmission facilities in the FRCC Region.

"Affected Transmission Owner") is reasonably expected to result from, upgrade(s) or expansion(s) to, or new provisions of service on, the system(s) of another Transmission Owner or Transmission Owners (hereinafter "Precipitating Events"), and if such need is reasonably expected to arise within the FRCC planning horizon, the Affected Transmission Owner shall be entitled to receive Financial Assistance (as defined herein) from each other such Transmission Owner and other parties, to the extent consistent with the other provisions hereof. Such upgrade or expansion to the Affected Transmission Owner's system shall hereinafter be referred to as the "Remedial Upgrade." Upgrade(s), expansion(s), or provisions of service on another Transmission Owner's system that may result in the need for a Remedial Upgrade on the Affected Transmission Owner's system for which Financial Assistance is to be provided hereunder include the following Precipitating Events:

- A new generating unit(s) to serve incremental load
- A new or increased long-term sale(s)/purchase(s) to or by others (different uses)
- A new or modified long-term designation of Network Resource(s)
- A new or increased long-term, firm reservation for point-to-point transmission service Specific non-Precipitating Events are as follows: 1) Transmission requests that have already been confirmed prior to adoption of these principles; 2) Qualifying rollover agreements that are subsequently rolled over; 3) Redirected transmission service for sources to the extent the redirected service does not meet the Threshold Criteria described in paragraph 9.3.5.1. Existing flows would not be considered "incremental."; and 4) Repowered generation if the MW output of the facility is not increased, regardless of whether the repowered unit is used more/less hours of the year.
- 9.3.3 Except to the extent that an Affected Transmission Owner is entitled to Financial Assistance from other parties as provided herein, each Transmission Owner shall be responsible for all costs of upgrades to, and expansions of, its transmission system; provided, however, that nothing herein is intended to affect the right of any Transmission Owner or another party from obtaining remuneration from other parties to the extent allowed by contract or otherwise pursuant to applicable law or regulation (including, for example, through rates to a Transmission Owner's customers).
- 9.3.4 Each Transmission Owner shall be solely responsible for the execution, or acquisition, of all engineering, permitting, rights-of-way, materials, and equipment, and for the construction of facilities comprising upgrades or expansions, including Remedial Upgrades, of its transmission system; provided, however, that nothing herein is intended to preclude a

- Transmission Owner from seeking to require another party to undertake some or all of such responsibilities to the extent allowed by contract or otherwise pursuant to applicable law.
- 9.3.5 Threshold Criteria: The following criteria ("Threshold Criteria") must be satisfied in order for an Affected Transmission Owner to be entitled to receive Financial Assistance from another party or parties in connection with a Remedial Upgrade:
 - 9.3.5.1 A change in power flow of at least a 5% or 25 MW, whichever is greater, on the Affected Transmission Owner's facilities which results in a NERC or FRCC Reliability Standards violation;
 - 9.3.5.2 The Transmission Expansion must be 230 kV or higher voltage; and
 - 9.3.5.3 The costs associated with the Transmission Expansion must exceed \$3.5 million.
- 9.3.6 In order for a Transmission Owner to be entitled to receive Financial Assistance from another party or parties hereunder in connection with a particular Remedial Upgrade, that Transmission Owner must: (i) participate, directly or indirectly, in the FRCC Regional Transmission Planning Process, and (ii) identify itself as an Affected Transmission Owner and identify the subject Remedial Upgrade in a timely manner once it learns of the need for that Remedial Upgrade.
- 9.3.7 The following principles govern the nature and amount of Financial Assistance that an Affected Transmission Owner is entitled to receive from one or more other parties with respect to a Remedial Upgrade:
 - 9.3.7.1 A recognition of the reasonably determined benefits that result from the Remedial Upgrades due to the elimination or deferral of otherwise planned transmission upgrades or expansions.
 - 9.3.7.2 Remedial Upgrade costs, net of recognized benefits, shall be allocated fifty-fifty, respectively, based on:
 - The sources or cluster of sources which are causing the need for the transmission expansion; and
 - The load in the area or zone associated with the need for the Transmission Expansion. (For these purposes, network customer loads embedded within a transmission provider's service area in the Transmission Zone would not be separately allocated any costs as such loads would be paying their load ratio share of the affected transmission provider's costs.)

- 9.3.7.3 Initially, there are six zones in the FRCC region. A request by a party to modify one or more zones should be substantiated on its merits (e.g., technical analysis, area of limited transmission capability). Below are principles that will guide how the boundaries of zones are determined:
 - Electrically, a substantial amount of the generation within a zone is used to serve load also within that zone.
 - Transmission facilities in a zone are substantially electrically independent of other zones.
 - Zones represent electrical demarcation areas in the FRCC transmission grid that can be supported from a technical perspective.
- 9.3.7.4 The Financial Assistance provided to an Affected Transmission Owner related to one or more transmission service requests keyed to new sources of power is subject to repayment without interest over a ten year period through credits for transmission service charges by the funding party and at the end of ten years through payment of any outstanding balance.
- 9.3.8 Implementation and Dispute Resolution Process:
 - 9.3.8.1 As soon as practical after a Transmission Owner shall have identified itself as an Affected Transmission Owner because of the need for a Remedial Upgrade, that Transmission Owner and parties whose actions shall have contributed, or are reasonably expected to contribute, to the need for that Remedial Upgrade which may be responsible for providing Financial Assistance in connection therewith in accordance herewith shall enter into good faith negotiations to: (i) confirm the need and cause for the Remedial Upgrade and their respective responsibilities for providing Financial Assistance to the Affected Transmission Owner, and (ii) establish a fair and reasonable schedule and means by which such Financial Assistance is to be provided to the Affected Transmission Owner.
 - 9.3.8.2 In the event the parties identified in the foregoing paragraph are unable to reach agreement on the determination or assignment of cost responsibility within a sixty (60) day period, the dispute shall be referred to the parties' designated senior representatives, who have been previously identified, for resolution as promptly as practicable and written notice shall be provided to the Florida Public Service Commission.
 - 9.3.8.3 In the event the senior designated representatives are unable to resolve the dispute within sixty (60) days by mutual agreement,

- such dispute may be submitted to any bodies having jurisdiction over the matter.
- 9.3.8.4 Nothing in this document is intended to abrogate or mitigate any rights a party may have before any regulatory or other body having jurisdiction.
- 9.3.8.5 During those circumstances in which this Section 9.3.8 pertaining to Dispute Resolution Process is being utilized due to parties being unable to reach agreement on the determination or assignment of cost responsibility associated with a Remedial Upgrade(s), the parties shall continue in parallel with the Dispute Resolution Process with the engineering, permitting and siting associated with the Remedial Upgrade(s). The fact that a matter is subject to Dispute Resolution hereunder shall not be a basis for any party being relieved of its obligations under this document.
- 9.4 Costs of economic transmission facility improvements that are specifically related to economic projects that were evaluated in the economic planning study process (versus transmission facility improvements undertaken, for example, pursuant to a transmission service request or to resolve reliability issues) will be subject to the following cost allocation methodology. The costs of the economic transmission projects will be allocated proportionally to the project participant(s) (based on the MW requested by a participant(s)) which elect to proceed with the installation of such transmission improvements. The project participant(s) which commit to the transmission improvements will receive firm transmission service. The project participant(s) which take firm transmission service will be entitled to a monthly credit against its transmission service bill. If after twenty years of taking transmission service the project participant(s) has not fully offset the initial investment with transmission service credits, such participant(s) shall receive the balance of the outstanding credits for the initial transmission investment. The Transmission Provider may seek approval from appropriate state and federal regulatory bodies to incorporate, at the appropriate times, the credits that are provided to the project participant(s) in taking transmission service into retail and wholesale rates respectively.

Section 10 Recovery of Planning Costs

10.1 Planning study costs incurred by the Transmission Provider in the performance of studies requested by a customer/stakeholder associated with transmission service or generator interconnection service are separately addressed in this tariff under provisions that require the customer/stakeholder to pay the cost of such studies. Planning study costs incurred by the Transmission Provider in the performance of the first five economic planning studies will be absorbed by the Transmission Provider

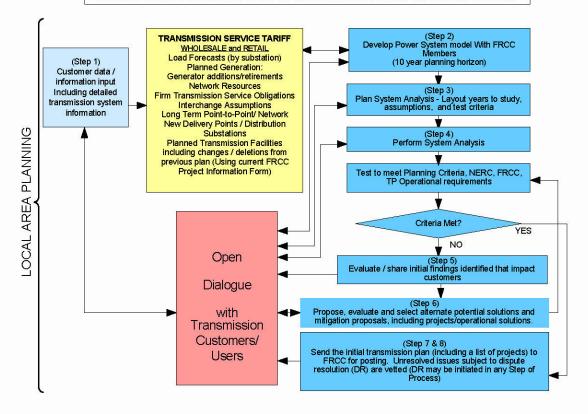
in its normal course of business of performing its obligations under this Attachment N-2. The cost of the sixth and additional economic planning studies in a calendar year will be assessed to the requesting entity as set forth in Section 8.1. Other general transmission planning costs not associated with the above studies are routine cost-of-service items that would be reflected in both wholesale and retail transmission rates as appropriate.

Appendix 1 to Attachment N-2

Local Transmission Network Planning Process – Process Description

The Local Transmission Network Planning Process ("Local Process") is performed annually with the Transmission Provider's plan being finalized on or about April 1st of each calendar year. The times shown (in months) for each of the steps contained in the Local Process are target dates that recognize some potential overlapping of the various activities. The Transmission Provider may develop a different timeline where warranted with the concurrence of the Transmission Provider's Customers/Stakeholders. The timelines and dates in this Appendix 1 to Attachment N-2 are to be used as guidelines subject to modification (modified or expedited) as warranted. It is also recognized and understood that under the Transmission Provider's OATT, there are certain FERC mandated timelines that are applied to Transmission Service Requests ("TSRs") and Generator Interconnection Service Requests ("GISRs") that may conflict and be of higher priority than the Local Process. Therefore, Transmission Provider's receipt of TSRs and/or GISRs may require the modification, from time to time, of the timelines described below.

TRANSMISSION PROVIDER'S (TP) LOCAL TRANSMISSION NETWORK PLANNING PROCESS



(Proceed to FRCC Regional Planning)))Process)

Local Transmission Network Planning Process – Process Description Overview:

- The Transmission Provider, which is ultimately responsible for the development of the Transmission Provider's annual 10 Year Expansion Plan, will lead the Local Process on a coordinated basis with the Customers/Stakeholders. This Local Transmission Planning Process will be implemented in such a manner as to ensure the development of the Local Transmission Plan in a timely manner. The Transmission Provider will facilitate each meeting throughout the process. The Transmission Provider will encourage an open dialogue and the sharing of information with Customers/Stakeholders (subject to confidentiality requirements and FERC Standards of Conduct⁴) in the development of the Local Transmission Plan.
- Customers/Stakeholders are invited to participate in the Transmission Provider's Local Process.

The provision for handling of information also applies to all steps of the Local Process.

- The Local Process will comply with the FERC nine principles as well as the provisions below.
- All annual initial kick-off meetings will be open to all Customers/Stakeholders and noticed by the Transmission Provider to all Customers/Stakeholders with sufficient time to arrange for travel planning and attendance (two week minimum). The annual initial kick-off meeting will be a face-to-face meeting; otherwise, with the consent of the Customers/Stakeholders, meetings may be organized as face-to-face meetings, conference calls, web-ex events, etc., wherein the dialogue and communications will be open, direct, detailed, and consistent with the FERC Standards of Conduct and confidentiality requirements.
- The Customers/Stakeholders may initiate the dispute resolution process at any point in the Local Process where agreement between the Transmission Provider and Customer(s)/Stakeholder(s) cannot be reached.
- The entities generally responsible for undertaking the tasks described below are designated as the TP (Transmission Provider) and/or the S (Customers/Stakeholders).

The study process will include the following steps:

A. Data Submission Requirements (STEP 1 – 3 months)

In order for The Transmission Provider to carry out its responsibility of developing the Transmission Provider's annual 10 Year Expansion Plan and leading the Local Process on a coordinated basis with the Customers/Stakeholders, data submission by the Customer/Stakeholder on a timely manner (on or before January 1st of each year) is essential. As such, the following data submission requirements from Customers/Stakeholders to the Transmission Provider are established. The Customers/Stakeholders will submit data to the Transmission Provider in a format that is compatible with the transmission planning tools in common use by the Transmission Provider. The Transmission Provider will identify the data format to be used by the Customers/Stakeholders for all data submissions, or absent a Transmission Provider identified data format, the Customers/Stakeholders will use their discretion in selection of data format. Examples of data that may be required are:

- Load forecasts, if appropriate:
- Coincident and non-coincident Peak load forecasts will be provided for the subsequent 11 years, for each summer and winter peak season, with real power and reactive power values for each load serving substation (reflected to the transformer high-side) or delivery Point, as applicable.
- Transmission Delivery Points, if appropriate:
- Delivery Point additions and/or Delivery Point modifications that have not previously been noticed to the Transmission Provider will be communicated by the Customer/Stakeholder to the Transmission Provider via the standard Delivery Point Request letter process.

- Delivery Point additions and/or Delivery Point modifications that have not previously been included in the FRCC Databank
 Transmission Planning models will be provided by the
 Customers/Stakeholders to the Transmission Provider via the
 standard FRCC Project Information Sheet ("PIF") per the attached
 Transmission Provider provided form and by the Siemens PTI
 PSS/E IDEV file format, compatible with the Siemens PTI PSS/E
 version in common use throughout the FRCC Region at that time.
- Network Resource Forecast, if appropriate:
- Network Resource forecasts will be provided for the subsequent 11 years, for each summer and winter peak season. At a minimum, the following data will be provided: 1. the name of each network resource; 2. the total capacity of each network resource; 3. the net capacity of. each resource; 4. the designated network capacity of each resource; 5. the Balancing Authority Area wherein each network resource is interconnected to the transmission grid; 5. the transmission path utilized to deliver the capacity and energy of each network resource to the Transmission Provider's transmission system; 6. the Transmission Provider's point of receipt of each network resource; 7. the contract term of each network resource, if not an owned network resource; and 8. the dispatch order of the entire portfolio of network resources (subject to confidentiality requirements and Standards of Conduct).
- How, where, and to whom, the data will be submitted to:
- If hardcopy, the Transmission Provider will provide the mailing address;
- If faxed, the Transmission Provider will provide the fax number,
- If e-mailed, the Transmission Provider will provide the e-mail address;
- If delivered to a password protected FTP site or e-vault, the Transmission Provider will provide the folder for the data, the contact person to be notified of the data delivery, etc. consistent with confidentially requirements and FERC Standards of Conduct. The Transmission Provider will provide the name and contact details for the Transmission Provider point of contact for data submittal questions.

B. Stakeholder Data Submissions (S) (STEP 1 – con't)

• On or before January 1st of each calendar year, the Customers/Stakeholders will submit the required data (as directed by the Transmission Provider procedures communicated in A. above), plus any additional data that they believe is relevant to the process.

- On or before January 1st of each calendar year, the Customers/Stakeholders will submit to the Transmission Provider the name(s) and contact details for those individuals that will represent them as the point(s) of contact for resolution of any data submittal or study questions/conflicts.
- On or before January 1st of each calendar year, the Customers/Stakeholders will submit the name(s) of those individuals that will represent them during the FRCC Data Bank Transmission Planning Model development process and throughout the Local Process. Name(s), contact details, and their FERC Standards of Conduct status (i.e., Reliability Only, Merchant function, etc.) will be provided. The contact individuals can be changed by the Customers/Stakeholders with notice to Transmission Provider.

C. FRCC Data Bank Transmission Planning Model Development Process (TP/S) (STEP 2 – 2 months)

 The FRCC Regional Data Bank Development Process will control the model development schedule and work product as established by the applicable FRCC Working Group.

D. Kick-off for Transmission Provider's Local Transmission Network Planning Process (STEP 2 – con't - 1 month)

- The Transmission Provider will, approximately two (2) weeks prior to the second quarter initial kick-off meeting (or other date, if Transmission Provider and Customers/Stakeholders agree), communicate via e-mail with all Customers/Stakeholders the schedule/coordination details of the Transmission Provider's Local Process kick-off meeting(s). Customer/Stakeholder shall provide to Transmission Provider a confirmation of their intent to participate in the initial kick-off meeting at least three (3) days prior to such meeting. (TP)
- The Transmission Provider will, in advance of the Kick-off meeting(s), with sufficient time for Customer/Stakeholder review, provide to the Customers/Stakeholders a proposed study schedule, the NERC and FRCC Reliability Standards that will apply to the study, and/or guidelines that will apply to the study and Transmission Provider developed criteria that will apply to the study. (TP)
- The initial Kick-off meeting in the second quarter of the calendar year will begin the Transmission Provider's Local Process. The Transmission Provider will review and validate the input data assumptions received from each Customer/Stakeholder, discuss the proposed study schedule, and discuss the study requirements, which will include, but not be limited to, the following:
- The methodologies that will be used to carry out the study (TP/S)
- The specific software programs that will be utilized to perform the analysis (TP)
- The Years to study (TP/S)

- The load levels to be studied (e.g., peak, shoulder and light loads) (TP/S)
- The criteria for determining transmission contingencies for the analysis (i.e., methods, areas, zones, voltages, generators, etc.) (TP/S)
- The Individual company criteria (i.e., thermal, voltage, stability and short circuit) by which the study results will be measured (TP/S)
- The NERC reliability standards by which the study results will be measured (TP/S)
- The FRCC reliability standards and requirements by which the study results will be measured (TP/S)
- Customer/Stakeholder proposed study scenarios for Transmission Provider consideration in the analysis (TP/S)
- The kick-off process will be complete when the schedule, standards, criteria, rules, tools, methods and Customer/Stakeholder participation are finalized for the study process to (described below) begin. (TP/S)

E. Case Development (TP) (STEP 3 – 1 month)

- Utilizing all of the data received from the Customers/Stakeholders during the data submission stage and the standards, criteria, rules, tools, and methods determined in the kick-off meeting(s), the Transmission Provider will develop the base case models to be used for the study. These models will be developed in the Siemens PTI PSS/E file format, compatible with the Siemens PTI PSS/E version in use by the Transmission Provider.
- Utilizing all of the data received from the Customers/Stakeholders during the data submission stage and the standards, criteria, rules, tools, and methods determine in the kick-off meeting, the Transmission Provider will develop the change case models to be used for the study. These models will be developed in the Siemens PTI PSS/E file format, compatible with the Siemens PTI PSS/E version in use by the Transmission Provider.
- The Transmission Provider will electronically post and provide notice to the Customers/Stakeholders of the posting of the base case models, the change case models and/or the IDEV files.

F. Perform System Analysis (STEP 4 - 1 to 2 months)

 The Transmission Provider will perform the study analyses (verification that thermal, voltage, stability and short circuit values meet all planning criteria) and produce the initial unfiltered, un-processed input data, output data, and files. (TP). • The Transmission Provider will electronically post and provide notice to the Customers/Stakeholders of the posting of the initial unfiltered, un-processed input data, output data, and files. (TP/S)

G. Assessment and Problem Identification (STEP 5 - 1 month)

- The Transmission Provider will evaluate the initial unfiltered, un-processed output data to identify any problems / issues for further investigation. The Transmission Provider will document, electronically post, and provide notice to the Customers/Stakeholders if there is an impact to them of the posting of the evaluation results documentation associated with the impact to the Customer/Stakeholder. (TP/S)
- The Customers/Stakeholders may perform their own additional sensitivities. (S)

H. Mitigation / Alternative Development (STEP 6 - 1 to 2 months)

- The Transmission Provider will identify potential solutions / mitigation proposals to address problems / issues. (TP)
- The Transmission Provider will document, electronically post, and provide notice to the Customers/Stakeholders of the posting of the identified potential solutions / mitigation proposals to address problems / issues related to the impacted Customer(s)/Stakeholder(s).
- The Customers/Stakeholders may provide alternative potential solutions / mitigation proposals for the Transmission Provider to consider. Such information shall be provided in IDEV format and posted. (TP/S)
- The Transmission Provider will determine the effectiveness of the potential solutions through additional studies (thermal, voltage, stability and short circuit). The Transmission Provider may modify the potential solutions, as necessary, such that required study criteria are met. (TP)
- The Transmission Provider will identify feasibility, timing and costeffectiveness of proposed solutions that meet the study criteria. (TP/S)

I. Selection of Preferred Transmission Plan (STEP 6 con't - 1 to 2 months)

- The Transmission Provider, in consultation with the Customers/Stakeholders, will compare the alternatives and select the preferred solution / mitigation alternatives based on feasibility, timing and cost effectiveness that provide a reliable and cost-effective transmission solution, taking into account neighboring transmission providers' transmission plans. (TP/S)
- In case of Transmission Provider and Customer/Stakeholder dispute, the dispute resolution process described in Section 6.1 will be utilized. (TP/S)

- J. Send Selected Local Transmission Network Plan Results (Transmission Provider's Ten Year Expansion Plan) to the FRCC (STEPS 7 & 8 1 to 2 months)
 - The Transmission Provider will submit the Transmission Provider's proposed local transmission network plan results (the Transmission Provider's 10 Year Expansion Plan) to the FRCC for posting with other transmission plans as the FRCC's initial regional transmission expansion plan (reference the *Initial Plans* on the FRCC website), along with an indication whether there are any pending disagreements regarding the Plan (and if there are, will elicit from the dissenting entity(ies), and provide, a minority report regarding such differences of opinion). The Transmission Provider's 10 Year Expansion Plan will include all transmission system projects without differentiation between bulk transmission system projects and lower voltage transmission system projects (i.e., all projects 69 kV and above). This Transmission Provider submittal to the FRCC will be made on or about April 1 and will become part of the Initial FRCC Regional Plan. (TP)
 - The FRCC Regional Planning Process will now start and the FRCC Regional Planning Process rules and guidelines will now control the transmission planning process. (TP/S)
 - Following completion of the Transmission Provider's submission of the local transmission network plan results (the Transmission Provider's 10 Expansion Plan) to the FRCC, the Transmission Provider will, either directly or through the FRCC project status reporting process, make available to the Customers/Stakeholders project descriptions, project scheduled in-service dates, project status, etc. for all projects. This information should be updated no less often than quarterly. (TP)

Appendix 2 to Attachment N-2

FRCC Quorum and Voting Sectors

Note: The below descriptions of the FRCC's Quorum and Voting provisions were extracted from the FRCC *Rules of Procedure for FRCC Standing Committees*. The Planning Committee is one of the Standing Committees within the FRCC.

A Quorum

Representation at any meeting of the standing committees of 60% or more of the total voting strength of the Standing Committee, shall constitute a quorum for the transaction of business at such meeting; provided, however, that action on matters dealing with the scope or funding of Member Services shall require sixty percent (60%) or more of the total voting strength of members of the Standing Committee representing Voting Members that are Services Members; and provided further that a quorum shall require that at least three (3) Sectors are represented, all three of which shall be Sectors, a majority of the members of which are Services Members in the case of a quorum for action on matters governing Member Services.

If a quorum is not present at any meeting of the standing committees, then no actions may be taken for the purpose of voting. The representatives present may decide to have discussions concerning agenda items as long as voting is not called.

B. Voting

Voting is by Sector. Each voting representative present at a meeting is assigned a vote equal to the voting strength of their Sector, as provided in this section, divided by the number of voting representatives present in that Sector, except that no voting representative present at a meeting shall have more than one (1) vote, except an Investor Owned Utility Sector voting representative who may have up to 1.167 votes. Action by the Standing Committee shall require an affirmative vote equal to or greater than sixty percent (60%) of the total voting strength of the Standing Committee.

Sector Votes

(1) Suppliers Sector		2.5 Votes
(2) Non-Investor Owned Utility Wholesale S	Sector	2 Votes
(3) Load Serving Entity Sector		
Municipal		0.5 Vote
Cooperative		0.5 Vote
(4) Generating Load Serving Entity Sector		3.0 Votes
(5) Investor Owned Utility Sector		3.5 Votes
(6) General		1 Vote
	Total	13 Votes

ATTACHMENT O

CREDITWORTHINESS PROCEDURES

1. CP&L Zone and FPC Zone

1.1 Credit Review:

For the purpose of determining the ability of the Transmission Customer to meet its obligations related to service hereunder, the Transmission Provider may require reasonable credit review procedures. The credit review procedures shall consist of an evaluation of the Transmission Customer's ability to meet the creditworthiness criteria set out in Section 1.2. A credit review shall be conducted for each Transmission Customer not less than annually, or upon reasonable request by the Transmission Customer.

1.2 Creditworthiness:

A Transmission Customer that meets the following requirements shall not be required to provide any form of security against the risk of nonpayment for any type of service, including deposits that otherwise would be required pursuant to Sections 17.3, 29.2 and 37.4:

- (i) The Transmission Customer is not in default of its payment obligations under Section 7.3 of this Tariff; and
- (ii) It meets one of the following criteria:
 - a. The Transmission Customer has been in business at least one year and has a credit rating of at least Baa2 (Moody's) or BBB (Standard & Poors); or
 - b. The Transmission Customer has been in business at least one year, and provides its most recent financial statement to the Transmission Provider which demonstrates that the Transmission Customer meets standards that are at least equivalent to the standards underlying credit ratings of Baa2

(Moody's) or BBB (Standard and Poors), provided that if the Transmission Customer is found to be not creditworthy pursuant to this paragraph b, the Transmission Provider will inform the Transmission Customer of the reasons for that determination; or

- c. The Transmission Customer is a borrower from the Rural Utilities Service

 ("RUS") and has a Times Interest Earned Ratio of 1.05 or better and a

 Debt Service Coverage Ratio of 1.00 or better in the most recent calendar

 year, or is maintaining the Times Interest Earned Ratio and Debt Service

 Coverage Ratio as established in the Transmission Customer's RUS

 Mortgage; or
- d. The Transmission Customer is a municipality or a rural electric cooperative that has taken transmission service from the Transmission Provider for at least one year; or
- e. The Transmission Customer's parent company meets the criteria set out in

 (i) and (ii)(a), (b), (c) or (d)) above, and the parent company provides a

 written guarantee that the parent company will be unconditionally
 responsible for all financial obligations associated with the Transmission

 Customer's receipt of transmission service.

1.3 <u>Requirements for Non-Creditworthy Customers:</u>

A Transmission Customer that does not meet the creditworthiness criteria set out in Section 1.2 above shall comply with one of the following:

(i) Not less than five days prior to the commencement of service, the Transmission

Customer shall provide an unconditional and 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 established by the Uniform Commercial Code that is equal to the lesser of the total charge for service or the charge for 90 days of service; or

- (ii) For service for one month or less, the Transmission Customer shall pay the total charge for service by the later of five business days prior to the commencement of service or the time when it makes the request for transmission service; or
- (iii) for service of greater than one month, the Transmission Customer shall pay for each month's service not less than five business days prior to the beginning of the month. For Network Integration Transmission Service customers, the advance payment for each month shall be based on a reasonable estimate by the Transmission Provider of the charge for that month.

The Transmission Provider shall pay interest on any prepayments made pursuant to this Section 1.3 at the rates established pursuant to 18 C.F.R. § 35.19a(a)(2)(iii). The deposits provided for in Sections 17.3, 29.2 and 37.4 shall not be required.

1.4 <u>Changes in Creditworthiness Status</u>:

If a Transmission Customer that originally meets the requirements of Section 1.2 subsequently fails to meet those requirements at any time after it requests transmission service but before the termination of that service, it shall within five business days of notification in writing by the Transmission Provider either prepay for the next 30 days of transmission service or provide an unconditional and irrevocable letter of credit or alternative form of security acceptable to the Transmission Provider in an amount equal to the charge for the next 30 days of transmission service; and within 30 days of such notification shall meet the requirements of

Section 1.3. The Transmission Customer has 5 days from the notification date to challenge the credit findings of the Transmission Provider.

1.5 Suspension of Service:

The Transmission Provider may suspend service to a Transmission Customer who does not meet the creditworthiness standards of Section 1.2 under the following circumstances;

- (i) If the Transmission Customer qualifies for service pursuant to Section 1.3 as a result of providing a letter or credit or alternative form of security, it does not pay its bill within 20 days of receipt as required by Section 7.1, and it has not initiated a billing dispute in accord with Section 7.3, the Transmission Provider may suspend service 30 days after written notice to the Transmission Customer and the Commission that the service will be suspended unless the Transmission Customer pay its bills.
- (ii) If the Transmission Customer qualifies for service as a result of committing to prepay for service pursuant to Section 1.3(ii) or Section 1.3(iii) above, and it fails to prepay for service as provided in such section, the Transmission Provider may suspend service immediately upon written notice to the Transmission Customer and the Commission.
- (iii) If the Transmission Customer loses its creditworthy status as a result of circumstances other than a default of its payment obligations and it fails to meet the credit security requirements of Section 1.4, but it either pays its bills within the time period provided in Section 7.1 or initiates a billing dispute in accord with Section 7.3, the Transmission Provider may suspend service 30 days after written notice to the Transmission Customer and the Commission that the service will be

- suspended unless the Transmission Customer meets the credit security requirements of Section 1.3.
- (iv) If the Transmission Customer loses its creditworthy status because it is in default of its payment obligations under Section 7.3 and it fails to meet the requirements of Section 1.4, the Transmission Provider may suspend service five business days after written notice to the Transmission Customer and the Commission that service will be suspended if the Transmission Customer does not meet the requirements of Section 1.4.

The suspension of service shall continue only for as long as the circumstances that entitle the Transmission Provider to suspend service continue. A Transmission Customer is not obligated to pay for Transmission Service that is not provided as a result of a suspension of service.

2. DEC Zone

2.1 Credit Review:

A Transmission Credit Limit will be established for each Transmission Customer pursuant to Section 2.2. For the purpose of determining the creditworthiness of a Transmission Customer, the Transmission Provider will conduct a credit review to evaluate the Transmission Customer's ability to meet the creditworthiness standard set out in Section 2.3 of this document. A credit review will be conducted at the time that a new Transmission Customer submits a Completed Application or an existing Transmission Customer seeks to increase its established Transmission Credit Limit. In addition, the Transmission Provider may perform credit reviews on a periodic basis to ensure continuing compliance.

2.2 Transmission Credit Limit:

- (i) A Transmission Credit Limit will be established for each Transmission Customer based on a reasonable estimate of the maximum amount of transmission service that the Transmission Customer expects it will use over any five consecutive month period during the duration of its Service Agreement.
- (ii) A Transmission Customer may seek to establish a new Transmission Credit Limit based on changed circumstances regarding the estimated maximum amount of transmission service that the Transmission Customer expects it will use over any given five consecutive month period, as long as it meets the creditworthiness standard set forth in Section 2.3.

2.3 Creditworthiness Standard:

In order to be found creditworthy, the Transmission Customer must meet the following standard:

- (i) The Transmission Customer is not in default of its payment obligations, if any, under Part I, Section 7.3 of the Tariff; and
- (ii) The Transmission Customer meets one of the following four criteria:
 - a. The Transmission Customer has been in business at least one year and has a credit rating on senior unsecured debt of at least Baa3 (Moody's) or BBB- (Standard & Poors) where, if rated by both agencies, the lower of the two ratings controls (see Appendix A for credit rating scales); or
 - b. The Transmission Customer is a borrower from the Rural Utilities Service ("RUS") and demonstrates to the Transmission Provider that it is maintaining the times interest earned ratio and debt service coverage ratio as established in the Transmission Customer's RUS Mortgage (or if not specified in the Mortgage, has a times interest earned ratio of 1.10x or better and a debt service coverage ratio of 1.10x or better in the most recent calendar year); or
 - c. The Transmission Customer's parent company meets the criteria set out in (i) and (ii)(a) or (b) above, and the parent company provides a written

guarantee (in a form acceptable to the Transmission Provider), that the parent company will be unconditionally responsible for all financial obligations associated with the Transmission Customer's receipt of transmission service; or

d. The Transmission Customer:

- 1. Has been in business at least one year;
- 2. Provides reasonably current audited annual financial statements (and current quarterly financial statements if available) to the Transmission Provider; and
- Demonstrates to the Transmission Provider's satisfaction that it meets standards that are at least equivalent to the standards underlying the credit ratings of Baa3 (Moody's) or BBB- (Standard and Poors) on senior unsecured debt. For purposes of making this determination, the Transmission Provider will provide the audited financial statements and other relevant information concerning the Transmission Customer to the Credit Risk Management group, which will assign the Customer an "Internal Risk Rating" as further described in Appendix A. Based on the overall information garnered by the Transmission Provider, including but not limited to the Internal Risk Rating and information provided by the Transmission Customer, the Transmission Provider will determine the creditworthiness of the Transmission Customer.

If a Transmission Customer is determined to not meet the creditworthiness standard, the Transmission Provider will inform the Transmission Customer of the reasons for that determination and the Transmission Customer may dispute this finding pursuant to Section 2.6.

2.4 Security Requirements:

A Transmission Customer that does not meet one of the creditworthiness standards set out in Section 2.3 above shall comply with one of the following:

(i) Not less than five days prior to the commencement of service, the Transmission

Customer shall provide in a form acceptable to the Transmission Provider, an

unconditional and irrevocable letter of credit issued by a financial institution rated

at least A- by S&P (for senior unsecured debt) with greater than \$10 billion in

- assets or an alternative form of security that is equal to the lesser of the total charge for service or the charge for five months of service; or
- (ii) For service of one month or less, the Transmission Customer shall pay the total charge for service by the later of five business days prior to the commencement of service or the time when it makes the request for transmission service; or
- (iii) For service of greater than one month, the Transmission Customer shall pay for each month's service not less than five business days prior to the beginning of the month. For Network Integration Transmission Service customers, the advance payment for each month shall be based on a reasonable estimate by the Transmission Provider of the charge for that month.

2.5 Changes in Creditworthiness Status:

- (i) If a Transmission Customer that originally meets the creditworthiness standard of Section 2.3 subsequently fails to meet those requirements at any time after it submits a Completed Application but before the termination of service, it shall within five business days of notification by the Transmission Provider either prepay for the next 30 days of transmission service or provide an unconditional and irrevocable letter of credit meeting the standards noted in 2.4(i) above or an alternative form of security acceptable to the Transmission Provider in an amount equal to the charge for the next 30 days of transmission service; and within 30 days of such notification shall meet the requirements of Section 2.4.
- (ii) If requested by the Transmission Customer, the Transmission Provider, within three business days, must provide a written explanation detailing the justification for a change in the Transmission Customer's creditworthiness status.

2.6 Procedures for Contesting Determination of Creditworthiness Status:

Within 5 business days of receiving notice of the need for security, or if a finding is made that the Transmission Customer does not satisfy the creditworthiness standard of Section 2.3, a Transmission Customer may, in good faith, contest this determination by providing additional information addressing the Transmission Provider's concerns. If after reviewing the additional information submitted by the Transmission Customer, the Transmission Provider continues to require security and the Transmission Customer contests this determination, the Transmission Customer must provide the required security and the matter shall be referred to dispute resolution pursuant to Section 12 of the Tariff.

Appendix A

The following table shows the credit rating scales of the major rating agencies.

Credit Rating Scales*	S&P	Moody's
Investment Grade	AAA	Aaa
	AA+	Aal
	AA	Aa2
	AA-	Aa3
	A+	A1
	A	A2
	A-	A3
	BBB+	Baa1
	BBB	Baa2
	BBB-	Baa3
	BB+	Ba1
Below	BB	Ba2
Investment	BB-	Ba3
Grade	etc	etc

^{*} For purposes of establishing a Transmission Credit Limit, the rating referenced will be the rating for senior unsecured obligations (or the overall issuer rating if senior unsecured rating is not available), rather than that assigned to secured indebtedness. Debt ratings based on the acquisition by the issuer of insurance on the underlying debt shall not be considered as reflective of the creditworthiness of the issuer.

Internal Risk Ratings will be developed by the Duke Energy Corporation Credit Risk Management group based on an entity's audited financial statements and other available relevant information. Factors likely to have an impact on the Internal Risk Rating assigned to a customer include the following:

- Strength of balance sheet, as indicated by degree of financial leverage, interest coverage ratios, etc.;
- Strength of earnings and cash flow indicators;
- Market structure within which the entity operates, and its competitive positioning within that structure;
- Impact of regulation, including overall regulatory environment;
- Ability to establish and/or maintain adequate levels of customer rates;
- Overall size of entity relative to expected credit requirements;

- Adequacy of access to capital given capital expenditure requirements and/or other financing needs (including debt refunding);
- Volatility of earnings, cash flow, interest, and overall performance;
- Degree of exposure to adverse business, financial, or economic conditions;
- Susceptibility to business concentration risk; and
- Indications of potential bankruptcy, payment default, or other signs of financial distress.

ATTACHMENT P

METHODOLOGY FOR CLUSTERING TRANSMISSION STUDIES

1. CP&L Zone and FPC Zone

Cluster Study Determination

The Transmission Provider may decide, either on its own initiative or in response to a request from an Eligible Customer, to perform a System Impact Study and/or a Facilities Study of multiple requests for transmission service in a single study to determine what transmission facilities are necessary to provide the requested service (a "Cluster Study") if the following criteria are met: (1) the Transmission Provider has received more than one request for Long-Term Firm Point-to-Point Transmission Service and/or Network Integration Transmission Service that will require a System Impact Study; (2) the requests are for overlapping time periods of service; and (3) the requested service will be limited by some of the same facilities. The Transmission Provider will not include in a Cluster Study any request for service as to which the Transmission Provider has already provided to the Eligible Customer the first draft of a System Impact Study with respect to that request. If the Transmission Provider determines that it will not perform a Cluster Study that has been requested by an Eligible Customer, it will post on the OASIS a brief statement explaining the reasons that it cannot accommodate an Eligible Customer's request.

Procedures for Clustered System Impact Studies and Facilities Studies

If the Transmission Provider decides to perform a Cluster Study, it will notify each affected Eligible Customer, provide a brief explanation of the reasons why it has decided to perform a Cluster Study, and tender a System Impact Study Agreement or a Facilities Study Agreement, as appropriate, that states that the Eligible Customer's request for service will be part of a Cluster Study. The procedures of Sections 19 and 32 of the Tariff shall apply to Cluster Study

Agreements and Cluster Studies, except that the 60-day periods for the completion of System Impact Studies and Facilities Studies established in Sections 19.3, 19.4, 32.3 and 32.4 shall be computed based on the last date on which an Eligible Customer whose request for service is studied in the Cluster Study must either execute and return a System Impact Study Agreement or a Facilities Study Agreement, as applicable.

The costs of the Cluster Study shall be shared equally among the Eligible Customers whose requests for service are included in the Cluster Study. If the Transmission Provider includes in a Cluster Study a request for service as to which it has already commenced a System Impact Study, the Eligible Customer must pay: (1) the Eligible Customer's share of the cost of the Cluster Study; and (2) if the Eligible Customer requested inclusion in the Cluster Study, the cost that the Transmission Provider has incurred with respect to the System Impact Study.

If an Eligible Customer whose request for service is studied in a Cluster System Impact Study does not execute a Facilities Study Agreement, execute a Service Agreement or request the filing of an unexecuted Service Agreement within the time established in Sections 19.3, 19.4, 32.3 or 32.4, as applicable; or an Eligible Customer whose request for service is studied in a Cluster Facilities Study does not execute a Service Agreement or request the filing of an unexecuted Service Agreement within the time established in Sections 19.4 or 32.4, as applicable, that Eligible Customer's Application shall be deemed terminated and withdrawn. In such event, the Transmission Provider shall re-study the requests for service for the remaining Eligible Customers in the Cluster Study. The remaining Eligible Customers shall bear equal shares of the costs of the re-study.

Transmission Service Cost Determination

The Transmission Provider will determine whether the facilities to be constructed are Network Upgrades or Direct Assignment Facilities based on the Commission policies. Transmission Customers shall be responsible for paying for transmission service based on the terms of Sections 27 and 34 of the Tariff.

Network Upgrades: Each Transmission Customer whose request for service has been studied in the Cluster Study and whose request for service contributes to the need for Network Upgrade(s) shall be deemed to be responsible for a pro rata share of the cost of those Network Upgrade(s) based on the amount of MW of service that it has requested. The Transmission Provider shall determine whether the Transmission Customer pays for transmission service at the embedded cost of service or at the incremental cost of the Network Upgrades based on the Commission's transmission pricing policies for Network Upgrades.

Direct Assignment Facilities: In the event a Direct Assignment Facility is identified and assigned to specific Transmission Customers whose requests for service are included in the Facilities Study, the cost of such Direct Assignment Facilities shall be borne by the specific Transmission Customers in accord with the Commission's transmission pricing policies for Direct Assignment Facilities.

2. DEC Zone

An Eligible Customer may request that the Transmission Provider cluster specific long-term transmission requests provided that the requests are in sequential order. Prior to submitting a cluster request to the Transmission Provider, the Eligible Customer must contact all of the Eligible Customers whose requests it proposes to be clustered and obtain their written consent that they are willing to have their request clustered with the other identified requests. The

Transmission Provider will determine whether to cluster the requests of the Eligible Customers that have provided consent to a proposed cluster. In determining whether to cluster, the Transmission Provider will offer clustering if the Transmission Provider determines that there are potential economic benefits in clustering because the potential transmission upgrades are large enough that the upgrades can accommodate more than one transmission service request, but the overall cost of upgrades may otherwise be prohibitive for only one or two customers. The Eligible Customers in the cluster will execute a single System Impact Study Agreement and will be given a single queue date (the date of the last Completed Application in the cluster). The cost of the System Impact Study will be shared equally among the Eligible Customers in the cluster.

If the Transmission Provider determines to cluster the identified requests, it will perform a single System Impact Study for the clustered requests. After the results of the System Impact Study have been provided, an Eligible Customer may opt out of the cluster prior to signing a Facilities Study Agreement and its Application will be deemed terminated and withdrawn. The Eligible Customer opting out must pay for any revised System Impact Study caused by its decision to opt out. If the System Impact Study determines that transmission system additions are required, the remaining clustered Eligible Customers will execute a single Facilities Study Agreement. The cost of the Facility Study will be shared equally among the Eligible Customers in the cluster. After the results of the Facilities Study have been provided, an Eligible Customer may opt out of the cluster prior to signing a Service Agreement and its Application will be deemed terminated and withdrawn. The Eligible Customer opting out must pay for any revised System Impact Study and revised Facilities Study caused by its decision to opt out after the Facilities Study is completed.

Those Transmission Customers that have not opted out must agree to compensate the Transmission Provider for any necessary transmission facility additions pursuant to the terms of Section 27 (Point-to-Point Customers) or Section 34 (Network Customers) of the Tariff. For purposes of compensation, all requests that are clustered are treated as simultaneous transmission service requests and cost responsibility allocated pro rata based on the amount of MW requested. Nothing in this Attachment impacts the "higher of" pricing policy applicable to service under the Tariff.

ATTACHMENT Q

Procedures For Changing The Real Power Loss Factor [FPC Zone Only]

The Real Power Loss Factors applicable to delivery at transmission voltages and delivery at distribution voltages are set out in Sections 15.7, 28.5 and 36.11 of the Tariff. The Transmission Provider shall separately state the losses related to Generation Step-Up Transformers. The procedures for the modification of the Real Power Loss Factors are as follows:

- 1. Not later than March 15 of each year, the Transmission Provider shall provide existing Transmission Customers and intervenors in the most recent transmission rate proceeding the loss rate that the Transmission Provider proposes to place in effect beginning May 1 of that year, based on data for the prior calendar year, plus all data required to support and validate that proposed loss factor. The Transmission Provider shall respond to all reasonable requests from such Transmission Customers and intervenors for additional data.
- 2. Unless otherwise agreed, the Transmission Provider shall tender the previously provided loss factors for filing not later than April 30 of each year and shall request that the loss factors go into effect on May 1 of that year. All such filings shall be treated as Section 205 rate changes, regardless of whether the proposed loss factor is an increase, a decrease or is unchanged from the loss factor then in effect, and the Transmission Provider shall bear the burden of proof. The Transmission Customers and intervenors reserve all of their rights under Sections 205 and 206 of the Federal Power Act with regard to such annual filings,

- including the right to request a five month suspension and a hearing on the proposed loss factors.
- 3. If, as a result of Commission action or settlement of any such proceeding, the loss factor is determined to be different from the loss factor proposed by the Transmission Provider, the Party that owes additional energy to the other as a result of the change in loss factor shall at its option treat such energy as inadvertent energy and return it in kind at times mutually agreed upon or make refunds, with interest, of the excess energy it absorbed at a rate calculated at the Transmission Provider's incremental cost of energy for the hours in which such energy was delivered. Refunds and energy returns to be made pursuant to this provision shall not be limited by the "last clean rate" doctrine or by the Commission's equitable authority to waive refunds.

ATTACHMENT R

FORM OF SERVICE AGREEMENT FOR NETWORK CONTRACT DEMAND TRANSMISSION SERVICE

1.0	This Service Agreement, dated as of, is entered into, by and between Florida Power Corporation ("Transmission Provider"), and ("Transmission Customer").					
2.0	The Transmission Customer has been determined by the Transmission Provider to have a Completed Application for Network Contract Demand Transmission Service under the Tariff.					
3.0	The Transmission Customer has provided to the Transmission Provider an Application deposit in accordance with the provisions of Section 37.4 of the Tariff or has met the creditworthiness standards of Attachment O of the Tariff.					
4.0	Service under this agreement shall commence on the later of (1) the requested service commencement date, or (2) the date on which construction of any Direct Assignment Facilities and/or Network Upgrades are completed, or (3) such other date as it is permitted to become effective by the Commission. Service under this agreement shall terminate on such date as mutually agreed upon by the parties					
5.0	The Transmission Provider agrees to provide and the Transmission Customer agrees to take and pay for Network Contract Demand Transmission Service in accordance with the provisions of Part IV of the Tariff and this Service Agreement.					
	The Transmission Customer is responsible for replacing Real Power Losses associated with all transmission service in accordance with Section 36.11 of the Tariff. The Transmission Customer must identify the party responsible for supplying Real Power Losses before the transaction.					
6.0	Any notice or request made to or by either Party regarding this Service Agreement shall be made to the representative of the other Party as indicated below.					
	Transmission Provider:					

	Transmission Customer	:		
7.0	FPC Zone: The Transm set forth in OATT Attac		all comply with the pow	er factor requirements
8.0	The Tariff is incorporate	ed herein and made	a part hereof.	
execu	IN WITNESS WHEREOuted by their respective aut	•	e caused this Service Agr	reement to be
	Transmission Provider:			
By:_				
• _	Name	Title	Date	
	Transmission Customer	:		
By:_				
٠ _	Name	Title	Date	<u> </u>

Specifications For Long-Term Network Contract Demand Transmission Service

1.0	Term of Transaction:
	Start Date:
	Termination Date:
2.0	Description of capacity and energy to be transmitted by Transmission Provider including the electric Control Area in which the transaction originates.
3.0	Point(s) of Receipt:
	Delivering Party:
4.0	Point(s) of Delivery:
	Receiving Party:
5.0	Maximum amount of capacity and energy to be transmitted (Reserved Capacity):
6.0	Designation of party(ies) subject to reciprocal service obligation:
7.0	Name(s) of any Intervening Systems providing transmission service:
8.0	Service under this Agreement may be subject to some combination of the charges detailed below. (The appropriate charges for individual transactions will be determined in accordance with the terms and conditions of the Tariff.)
	8.1 Transmission Charge:

Ancillary Services Charges:

ATTACHMENT S

INDEX OF NETWORK CONTRACT DEMAND TRANSMISSION CUSTOMERS

See Transmission Provider's Electric Quarterly Report at the following Internet address: http://www.ferc.gov/docs-filing/eqr/data/spreadsheet.asp

ATTACHMENT T [RESERVED]

ATTACHMENT U

FPC's RATE TREATMENT OF NEW TRANSMISSION RADIALS

- a) <u>Transmission radial facilities commencing service after May 31, 2010 ("new transmission radials"):</u>
 - its retail customers' loads and that are not considered part of the integrated grid under FERC guidelines and the cost of any upgrades to these new transmission radials will be excluded from the base rates for transmission services under the Transmission Provider's Formula Rate. OATT

 Attachment U.1 describes the changes to the Transmission Provider's Formula Rate to exclude the costs of these facilities. If some or all of the new transmission radial is later converted to an integrated transmission facility, the Transmission Provider's cost to integrate its previously non-integrated radial facility and the unrecovered cost of the previously non-integrated radial facility, or such portion that becomes integrated with the bulk transmission grid, would be recovered in Transmission Provider's Formula Rate.
 - Transmission Customer loads (including a wholesale customer load not served under the OATT) and that are not considered part of the integrated grid under FERC guidelines and the cost of any upgrades to these new transmission radials will be excluded from the base rates for transmission services under the Transmission Provider's Formula Rate. If and to the extent that the Transmission Provider constructs and owns a new non-

integrated transmission radial to serve a Transmission Customer loads, the Transmission Provider will assess the Transmission Customer with a total lump-sum payment to recover the capital costs of such facility, unless another payment method is mutually agreeable to the Transmission Provider and Transmission Customer, plus an O&M charge pursuant to an O&M agreement. If another payment method is mutually agreeable to the Transmission Provider and Transmission Customer, the Transmission Provider will make a Section 205 filing seeking to modify the Formula Rate as necessary to exclude the costs of the new transmission radial to serve such Transmission Customer loads. If and to the extent that the Transmission Customer constructs and owns a new transmission radial line to serve its customer load, the Transmission Customer may request, and the Transmission Provider may agree, that the Transmission Provider will operate and/or maintain the Transmission Customer's new transmission radial pursuant to an O&M agreement that fully and fairly compensates the Transmission Provider for the costs associated with such undertaking. If some or all of the new transmission radial is later converted to an integrated transmission facility, the Transmission Provider's cost to integrate its previously non-integrated radial facility and the unrecovered cost of the previously non-integrated radial facility that commenced service after May 31, 2010, would be included only in Transmission Provider's Formula Rate and will not be directly or otherwise assigned to the Transmission Customer. In those situations

where the Transmission Customer had made a lump sum payment which included the previously non-integrated radial facility, appropriate refunds would be made to the Transmission Customer related to the cost of the previously non-integrated radial facility, as set forth in OATT Attachment U.2. Nothing in this OATT Attachment U interferes with the Transmission Customer's absolute right to build and own a transmission radial to serve its own load.

ATTACHMENT U.1

REVISED FPC OATT FORMULA RATE SHEETS REFLECTING FPC'S RATE TREATMENT OF TRANSMISSION RADIALS

OATT ATTACHMENT U.1

REVISED FPC OATT FORMULA RATE SHEETS REFLECTING FPC's RATE TREATMENT OF TRANSMISSION RADIALS

Exhibit PEF - 2 Page 2 of 6 Year Ending 12/31/yyyy

PROGRESS ENERGY FLORIDA, INC. OATT Transmission Non-Levelized Rate Formula Template Using Form-1 Data

Development of Rate Base and Capital Structure

Line	RATE BASE:	Reference	Beginning Balance	Ending Balance	B/E Average	Allocator	OATT Transmission
	Gross Plant In Service (Note A):						
1	Production Plant	205.46.b&g	0	0	0	N/A	
2	Transmission Plant (Note V)	207.58.b&g	0	0	0	™ 0.00000	0
<u>2A</u> 2B	Less Direct Assign Radials Trans. Plant w/o Direct Assign Radia	<u>PEF - 7, II 1&5</u> Is	<u>0</u>	<u>0</u>	<u> </u>	<u>TP</u> 0.00000	<u>0</u>
3	Distribution Plant	207.75.b&g	0	0	0	N/A	_
4 5	General Plant Intangible Plant	207.99.b&g 205.5.b&g	0	0 0	0	OATT LABOR 0.00000 OATT LABOR 0.00000	0
6	Total Gross Plant	200.0.bag	U	U	- 0	GP = 0.00000	
	Total Gross Flant				٠	0.00000	
7	Accumulated Depreciation:	240 20 thru 24 a	0	0	0	N170	
	Production Depr. Reserve	219.20 thru 24.c				N/A	_
8 8A	Transmission Depr. Reserve (Note V) Less Direct Assign Radials	219.25.c PEF - 7, II 7&10	0 <u>0</u>	0 <u>0</u>	0	TP 0.00000	0
8B	Trans. Reserve w/o Direct Assign Rad		=	2		<u>TP 0.00000</u>	0
9	Distribution Depr. Reserve	219.26.c	0	0	0	N/A	_
10	General Depr. Reserve	219.28.c	ō	ō	0	OATT LABOR 0.00000	0
11	Intangible Amort. Reserve	200.21.c	0	0	0	OATT LABOR 0.00000	0
12	Total Accumulated Depr.				0		0
	Net Plant in Service						
13	Net Production Plant	Line 1 - Line 7			0		
14	Net Transmission Plant	Line 2 - Line 8			0		0
15	Net Distribution Plant	Line 3 - Line 9			0		
16 17	Net General Plant Net Intangible Plant	Line 4 - Line 10 Line 5 - Line 11			0		0
18	Total Net Plant	Line 3 - Line 11			- 0	NP = 0.00000	
	Adjustments to Rate Base - Deferred					E	
19 20	ADIT - 190 ADIT - 281 (Negative)	234.8.b&c 273.8.b&k	0	0	0	Exhibit PEF - 5 Exhibit PEF - 5	0
21	ADIT - 281 (Negative)	275.2.b&k	0	0	0	Exhibit PEF - 5	0
22	ADIT - 283 (Negative)	277.9.b&k	ō	ō	ō	Exhibit PEF - 5	ō
23	Total Deferred Tax Adjustments				0		0
24	Unfunded Reserves	Note U	0	0	0	Exhibit PEF-5A	0
25	Net 182.1 (+) / Storm Reserve (-) -	230a.5.f	0	0	0	p. 5, I. 16 0.00000	0
	Wholesale Transmission (Note B)						
26	Plant Held for Future Use	214.47.d	0	0	0	Note C	0
27	Transmission Related CWIP - Identifie	ed Projects (Note V):	0	-	0	0.50000	0
	Rate Base Adjustments - Network Up	grade Prepayments (I	Note O):				
28	Outstanding Balance - Network Prepa		0	0	0	D/A (1.00000)	0
29	Interest Accrued/Capitalized on Netw		0	0	0	D/A 1.00000	0
30	Total Network Upgrade Prepayment	A ajustm ents					0
	Working Capital:						
31	Cash Working Capital (1/8 O&M)	Page 3, line 17					0
32	M&S - Transmission	227.8.b&c	0	0	0	# <u>TExp</u> 0.00000	0
33 34	M&S - Stores Expense Prepayments (Note L)	227.16.b&c 111.57.c&d	0	0	0	OATT LABOR 0.00000 GP 0.00000	0
35	Total Working Capital				· ·	0.0000	
36	Rate Base (Sum of Lines 18, 23 thru 2	27, 30, and 35)					0
	AVERAGE CAPITALIZATION:						
37	Long Term Debt	112.24.c&d	0	0	0		
38 39	Less Loss on Reacquired Debt Plus Gain on Reacquired Debt	111.81.c&d 113.61.c&d	0	0	0		
40	Less Securitization Bonds	Note I	Ô	ō	0		
41	Net Long Term Debt				0		
42	Preferred Stock	112.3.c&d	0	0	0		
	Common Stock Development:						
43	Proprietary Capital	112.16.c&d	0	0	0		
44	Less Preferred Stock	112.3.c&d	0	0	0		
45 46	Less Account 216.1 Common Stock	112.12.c&d	0	0			
46	Continuit Stock				U		
47	Total Capitalization (Sum of Lines 41,	, 42, and 46)			0		

PROGRESS ENERGY FLORIDA, INC. OATT Transmission Non-Levelized Rate Formula Template Using Form-1 Data

Development of Revenue Requirements

Line	EXPENSES:	Reference	Total	Total Allocator		OATT Transmission
	O&M Expense					
1	TOTAL Transmission Expenses	321.112.b	0			
2	Less Account 561	321.84-92.b	0			
3	Less Account 565	321.96.b	0			
4	Net Transmission O&M	Note H	0	ТЕхр	0.00000	0
5	Total Admin & General Expenses (Note S)	323.197.b	0			
6	Less (924) Property Insurance	323.185.b	0			
7	Less (928) Regulatory Commission Expenses	323.189.b	Ö			
8	Less (930.1) General Advertising Expenses	323.191.b	Ö			
9	Less Industry Dues and R&D Expense	335.1-3.b	Ö			
10	Net Labor Related A&G	300. I-3.D	0	OATT LABOR	0.00000	0
4.4	(00.) Provide la constant	000 405 5				
11	(924) Property Insurance	323.185.b	0			
12	Less system storm reserve funding		0			
13	Net Allocated Property Insurance		0	GP	0.00000	0
14	Trans. Related Regulatory Expense	Note D		D/A	1.00000	0
15	Trans. Related Advertising Exp.	Note D		D/A	1.00000	0
16	Adj. to Imputed Whise PBOP Exp System	Page 6	0	OATT LABOR	0.00000	0
17	Total O&M (Sum of Lines 4, 10, and 13 thru 16)					0
	Depreciation Expense					
18	Transmission Depr. Expense (Note V)	336.7.f	0	TP	0.00000	0
<u>18A</u>	Less Direct Assign Radial Depr Exp	PEF-7, line 8	<u> </u>			
<u>18B</u>	Trans Depr. w/o Direct Assign Radials		<u>0</u>	<u>TP</u>	0.00000	<u>0</u>
19	General Depr. Expense	336.10.f	0	OATT LABOR	0.00000	0
20	Intangible Amortization (Note E)	336.1.f	0	OATT LABOR	0.00000	0
21	Total Depreciation		0			0
	Taxes Other Than Income (Note F)					
22	Labor Related	263.i	0	OATT LABOR	0.00000	0
23	Property Related	263.i	Ö	GP GP	0.00000	ő
24	Total Other Taxes	200.1		01	0.00000	
24	Total Other Taxes		U			U
	Return:					_
25	Rate Base (Page 2, Line 36) * Rate of Return (Pa	ge 4, Line 27)				0
	Income Taxes:					
26	State of Florida	Note M	0.00%			
27	Federal	Note M	0.00%			
28	Composite T = State + Federal * (1 - State)	14010 101	0.00%			
20	•	Cost/P \				
29	Tax Rev.Reqt Factor = T / (1 - T) * (1 - Wtd.Debt	.Cost K ()	0.00%			
30	ITC Gross Up Factor = 1 / (1 -T)		0.000			
31	Amortized ITC (Negative)	266.8.f	0			
32	Income Taxes Calculated (Line 25 * Line 29)					0
33	ITC Adjustment (Line 30 * Line 31)		0	NP	0.00000	0
34	Total Income Taxes					0
35	TOTAL DEVENUE DECLUPERATION OF THE CO.	47 04 04 05				•
ან	TOTAL REVENUE REQUIREMENT (Sum of Lines	17, 21, 24, 25, and 34)	1			0

PROGRESS ENERGY FLORIDA, INC. OATT Transmission Non-Levelized Rate Formula Template Using Form-1 Data

Supporting Allocation Factor and Return Calculations

Line			Reference	Total
1 2 3 4 5	B/E Avg. Transmission Plant Included in OATT Total Transmission Plant w/o D/A Radials Less Gen. Step-up Transformers in 353 Less Interconnection Facilities (Order 2003) Less Energy Control Center Avg.Trans Plant for OATT Rate		p 2, line 2 <u>B</u> Exhibit PEF - 4 Exhibit PEF - 4 Note G	0 0 0 0
6	TP Allocator (Line 5 / Line 1)	0.00000		
7 <u>7A</u> 8	Add Back ECC to OATT Plant (Line 4 + Line Add back D/A Radials to Total Trans Plt (line 1 TExp Allocator (Expenses excluding 561 and 5	0 <u>0</u> 0.00000		
		oo, (Line i	, Line 1 <u>174</u>	5.5555
9 10 11 12	Labor Allocation Factor Total Direct Payroll - O&M Labor A&G Labor Adj RCO Labor in A&G Labor Adjusted Labor w/o A&G (Line 9 - Line 10 + L	.ine 11)	354.28.b 354.27.b	0 0 0
13	Transmission O&M Labor	0		
14	Trans Labor Factor (Line 13 / Line 12)			0.00000
15	OATT LABOR Allocator (Line 6 <u>5 / Line 7A</u> * Lin	0.00000		
	Return and Average Capitalization:			
16 17 18	Long Term Interest Expense Less Interest on Securitization Bonds Net Long Term Interest Expense		117.62 thru 67.c Note I	0 0 0
19	Preferred Dividends (positive)		118.29.c	0
20 21 22 23	Long Term Debt Preferred Stock Common Stock Total Capitalization (sum Lines 20, 21, 22)		p.2, line 41 p.2, line 42 p.2, line 46	0 0 0
24 25 26 27	SUMMARY CAP STRUCTURE Long term Debt Preferred Stock Common Equity Overall Return: R ₀ =	Weight 0.00% 0.00% 0.00%	<u>Cost</u> 0.00% 0.00% 10.80 %	Weighted Cost 0.00% 0.00% 0.00% 0.00%

OATT Transmission

Allocator

PROGRESS ENERGY FLORIDA, INC. OATT Transmission Non-Levelized Rate Formula Template Using Form-1 Data

Wholesale Storm Reserve Funding and Explanatory Notes

Reference Total

Line

						11 6 131111331011		
1	Whise Extraordinary Property Loss	230a.5.b	0					
2	Trans. Related Pct of Whise Loss	Note J	0.92011	WEPL-T				
3	Whise Trans. Extraordinary Propery Loss		0	TP2006	0.92366	0		
	Company of Storm Americation/Person	Eundina Adda	r (2008 2012 Bata V	oare only blo	to ND:			
	Components of Storm Amortization/Reserve	=	•	=	-			
4	Balance 2004 Loss as of Jan 1, 2008	230a.5.f	15,658,702	Fixed	0.84987	13,307,907		
_	Rebuild Reserve Equivalent to \$130MM Reta							
5 6	Whise Portion of \$6MM Funding System Total Reserve Req't = 130MM/(1-	ER95-469	434,000 140,136,543	Fixed	0.07233			
7	Whise Reserve Needed = Line 6 - \$130MM	EIIIC 0 70)	10,136,543	Fixed	0.84987	8,614,774		
8	Whise Portion of Existing Storm Accrual	ER95-469	434,000	Fixed	0.84987	368,845		
9	Levelized Storm Reserve Funding Rate \$/M\	V-Month (PEE)	- 6 Page 2)			140		
	Ecremed Storm reserve rainding race with	· Morian (1 🗀	0, 1 agc 2)			140		
	Denominator for Wholesale Transmission:							
10	Firm Network Service for Self	400.17.e	0		0.00000	0		
11	Firm Network Service for Others (Note K)	400.17.f	0		1.00000	0		
12 13	Long-Term Firm P-t-P Reservations Other Long-Term Firm Service	400.17.g 400.17.h	0		1.00000 1.00000	0		
14	Contract Demand Adjustment	400.17.11	ő		1.00000	0		
15	Total System Long Term Firm Transmissio	n Load						
	, ,							
16	Gross-up Factor for OATT Wholesale Reser	ve - System Ba	sis (Total Load/Whis	e Load * 0.849	87)	0.00000		
Note A:	Excludes Asset Retirement Obligations from pla	nt balances						
Note B:	Because the Page 2 Rate Base amounts are to							
	using the relationship between system and who	esale only transi	mission demands time	es the percent of	of the balance a	pplicable		
N 1-4- O	to the OATT. See also Notes H and J.							
Note C: Note D:	FERC Form 1 page 214 excluding non-transmis Analysis of Company books. Regulatory expens			nt to 18 CED &	382 201			
Note E:				III TO 10 CFR 9	362.201			
Note F:	Excludes all income and gross receipts taxes.			and unemploy	ment taxes. Pr	operty		
	related taxes include county and local property,					-17		
Note G:	Investment in Transmission Energy Control Cer							
Note H:	The allocator 'TP" is the percent of allocated gr							
Note I:	generator step-up transformer investment. It al							
Note I.	To the extent PEF is authorized by the Florida F recovery of extraordinary property losses, asso							
Note J:	Functionalized Transmission part 182.1 Extraor							
	described in Note H above, the OATT-related an							
Note K:								
Note L:	Beginning balance excludes \$0 and ending balance							
Note M:	If income tax rates change during a calendar y	ear, the income t	tax rates will be pro-ra	ated based on th	ne number of da	ays each income		
Note N	tax rate was in effect. Pursuant to the settlement agreement, annual a	mounte included	in line 11 will be adiu	ctod and revers	ad ac nacaccar	v to opeuro po		
NOLE IN.	overfunding of the wholesale reserve; i.e., the y							
Note O:								
	in the formula rate regardless of the accounting			(g,			
Note P:	Target percentages are fixed for 2008 - 2012 a	nd were derived	from projected OATT	LTF billing M/V	-months and the	e MVV-month equivalent		
	billings for STF and non-firm transmission rever							
Note Q:	Actual LTF OATT MW-Months are the sum of L	nes 11 and 12 a	above, as reported in f	=orm-1 for Firn	n Network Servic	ce for Others and		
Note R:	Long Term Firm Point-to-Point Service Actual STF/Non-Firm equivalent "MV-Months":	are equal to mon	thly STE/Non-firm trai	nemiesion seni	ce revenue divi	ded by the same 'Total		
1401011.	Firm Monthly Trans. \$/MW-Month" rate (Page 1					aca by the same Total		
Note S:	Section 2.12 of Schedule 10.3 states "The Forn					signable to one or more		
	particular customers, including costs directly as							
	excludes directly assignable retail costs/credits	booked to Acco	unt 935 and retail sale	estax portion of	Florida sales ta	x audit expense booked		
	to Account 930.2 from Form 1 reported value.							
Note T: Note U:	Network prepayments include interest that has to			consocil are an	ropriatok ovalu	dad from rate base in		
INOLE O.	The inclusion of Line 24, "Unfunded Reserves," the Formula Rate calculations. The specific tre							
	interested parties from making any argument in							
	Formula Rate as to the appropriate accounting							
Note V:	Adjusted to remove ADUFC accruals from CVVI	Pprojects that w	vere included in rate b	ase. Qualifyir	ng CWIP exclud	les CWIP associated with		
NI-A- 10:	direct assignment radials		-1			in a 4- annual it		
Note VV:	Should PEF construct and own radials directly Rate Template to remove the costs associated w							
	attachment (e.g., Exhibit PEF-x) shall be added							
	showing the associated monthly balances for gr							
	accumulated depreciation reserves be maintain							
	reflect the appropriate effect of the vintage of e							
	multiple wholesale customers. Exhibit PEF-2 sh	all be modified to	remove the direct as	signment whole	sale radials from	m the base rate calculations		
	in a manner consistent with retail radials, excep							
	wholesale customer's direct assignment radials advance of the first occurrence of a direct assi							
	Template to become effective with the in-service			w permit the re	qui sue i nounca	uona to trie i orifiula Rate		
	. a rigiduo do decentre en contre vitar die III-30 vie	<u>aaa o are asso</u>	Stated facility.					

PROGRESS ENERGY FLORIDA, INC.

<u>Transmission Rate Formula Support - Direct Assignment Retail Radials in Accordance with OATT Attachment U</u>

<u>Line</u>	Project Description:	Project 1	Project 2	<u></u>	<u></u>	<u></u>	<u></u>	Project N	Total Projects
	Gross Plant in Service:								
1 2 3 4 5	Beginning Balance Additions Retirements Adjustments Ending Balance	0 0 0 0	0 0 0 0					0 0 0 0	<u>o</u> <u>o</u> o
<u>6</u>	B/E Average	<u>0</u>	<u>0</u>					<u>0</u>	<u>0</u>
	Accumulated Depreciation:								
7 8 9 10	Beginning Balance Annual Deprecation Expen Adjustments Ending Balance	<u>0</u> <u>0</u> <u>0</u>	<u>o</u> <u>o</u> o					<u>0</u> 0 0	<u>0</u> <u>0</u> <u>0</u>
<u>11</u>	B/E Balance	<u>0</u>	<u>o</u>					<u>o</u>	<u>o</u>

ATTACHMENT U.2

FPC's METHODOLOGY FOR DETERMINING THE LUMP-SUM COSTS ASSOCIATED WITH NON-INTEGRATED TRANSMISSION FACILITIES WHICH COMMENCE SERVICE AFTER MAY 31, 2010

FPC's non-integrated radial transmission lines that commence service after May 31, 2010, that initially serve only the Transmission Provider's retail customers or only one affected wholesale Transmission Customer shall be the responsibility, as applicable, of the retail class or the affected wholesale Transmission Customer. The costs associated with such facilities shall be excluded from the costs of transmission facilities recoverable through the base rates for transmission services under the Transmission Provider's OATT, including, if applicable, a formula rate. If and to the extent that the Transmission Provider constructs and owns a radial transmission line to serve a Transmission Customer, the Transmission Provider will assess a total lump-sum payment ("Lump-Sum Payment") to recover the capital costs of such facility, unless another payment method is mutually agreeable to the Transmission Provider and Transmission Customer, plus an operation and maintenance ("O&M") charge pursuant to an O&M agreement. If and to the extent that the Transmission Customer elects to construct and own a radial transmission line to serve its customer load, the Transmission Customer may request, and the Transmission Provider may agree, that the Transmission Provider will operate and/or maintain the Transmission Customer's radial transmission line pursuant to an O&M agreement that fully and fairly compensates the Transmission Provider for the costs associated with such undertaking.

The Transmission Customer's Lump-Sum Payment and charge for O&M costs under the O&M Agreement shall be determined at the time such charges are implemented in accordance with accepted ratemaking principles, either by mutual agreement or, if such agreement is not

possible, by a Section 205 or Section 206 filing with the Federal Energy Regulatory Commission ("FERC") by the Transmission Provider or the Transmission Customer, as applicable.

In the case of the Transmission Customer's payment of a Lump-Sum Payment, the Lump-Sum Payment shall be grossed up for income taxes if the Transmission Provider is required under applicable law to do so. If reasonably requested by the affected Transmission Customer, the Transmission Provider shall seek a private letter ruling from the Internal Revenue Service approving tax-free treatment for the Lump-Sum Payment, and shall consult with and allow the participation of the affected wholesale Transmission Customer in the process to secure such private letter ruling. Transmission Provider shall make a Section 205 filing at the FERC to reflect any change in the income tax treatment of Lump-Sum Payments.

When a radial transmission line that was subject to a Lump-Sum Payment by a wholesale Transmission Customer experiences a change in characteristics such that it is deemed an integrated transmission line because it meets FERC's standard for holding that the facility is integrated with the Transmission Provider's Transmission System, then the undepreciated portion (based upon straight line depreciation) of the Lump-Sum Payment based on the cost of such line, grossed up for income taxes to the extent the initial payment by the Transmission Customer was grossed up for taxes (note: the gross up shall use the original income tax factor applied to the undepreciated portion of the Lump Sum Payment), determined as of the last day of the calendar month during which such change in characteristics of such facility occurs, shall be refunded to the affected wholesale Transmission Customer no later than the last day of the first full calendar month following such change in characteristics of such facility. Any O&M charges associated with such radial transmission line shall cease effective the first day of the first full calendar month following such change in characteristics of the facility. Effective on the first day of the

first full calendar month following such change in characteristics of the facility, the costs associated with the undepreciated portion of such facility (i.e., the amount of the refunded Lump-Sum Payment) shall be recovered in the base rates for transmission services(s) under the OATT. To the extent such base rates are derived based upon a formula rate, the subsequent Annual Updates thereunder, and the True-Up Adjustment(s) pursuant to Section 1.a(ii) of Schedule 10-A.1 of the OATT, shall be adjusted to reflect the effective date of such change in characteristics of the facility.

For purposes of this Attachment U.2, the following definitions shall apply:

- Affected wholesale Transmission Customer means any of the following: (a) a
 joint action agency, or other group of municipal electric utility systems, and/or
 their individual members; (b) a generation and transmission cooperative, and/or
 its individual members; or (c) any other wholesale Transmission Customer.
- 2. Radial transmission line means a transmission line that is physically radially constructed and does not meet the Commission's standard for holding that the facility is integrated with the Transmission Provider's Transmission System.
- 3. Transmission line means a facility \geq 69 kV.

Nothing in this Attachment U.2 interferes with the Transmission Customer's absolute right to build and own a transmission radial to serve its own load.

ATTACHMENT V

POWER FACTOR REQUIREMENTS

[FPC ZONE]

Transmission Provider and Transmission Customer shall each have in place in the shortest practicable time, but under no circumstances later than forty-two (42) months after the Transmission Customer's service commences under the Tariff (referred to as the "Initial Compliance Period"), sufficient reactive compensation and control necessary to meet the power factor standard set forth herein. In the event that the Transmission Customer does not meet the power factor standard by the end of the Initial Compliance Period, Transmission Provider shall provide Transmission Customer with written notice of any alleged non-compliance (along with the data upon which such assertion is based), and, unless within sixty (60) days of receipt of such notice the Transmission Customer has initiated Dispute Resolution Procedures under Tariff Section 12 to determine whether it has met the power factor standards set forth herein, then Transmission Provider shall have the right to install such necessary equipment to meet the standard; provided, however, that the exercise of such right must be on a comparable basis as to all power factor aggregation zones of all other Transmission Customers and the Transmission Provider itself. Transmission Provider shall have the right to seek to recover such expenses from the Transmission Customer, consistent with the Dispute Resolution Procedures of the Tariff, based upon a showing, among other things, that Transmission Provider and all other Transmission Customers have met the power factor standard.

Each month, the Transmission Provider shall provide to the Transmission Customer a report of the power factor information as measured at the Point of Delivery for each Point of Delivery and by power factor aggregation zones for the Transmission Provider's Monthly Transmission System Peak for both the Transmission Provider and all Transmission Customers.

For the avoidance of doubt, to ensure comparability and no undue discrimination, each Transmission Customer will be provided monthly the power factor information described above as to all other Transmission Customers and the Transmission Provider. The Transmission Provider's and Transmission Customer's power factor for distribution Points of Delivery (voltages below 69 kV) will be adjusted down by two percent (2%) to convert to the transmission voltage level and be included in the appropriate power factor aggregation zone. By January 1st of each year, Transmission Provider and Transmission Customer will each provide to the other the forecast summer and winter peak season power factor at the Point of Delivery for each of their respective Points of Delivery and by power factor aggregation zones for the Ten-Year Transmission Planning Horizon. The summer season is defined as March through September and the winter season as October through February. By February 1st of each year, Transmission Provider and Transmission Customer shall each provide to the other plans on how it will meet the power factor standard where such standard is not currently being met or is forecasted not to be met for a specific power factor aggregation zone. To assess compliance with the power factor standard, each Point of Delivery's real power (kW) and reactive power (kVar) demands shall be recorded by the Transmission Provider at the time of Transmission Provider's summer and winter transmission system peaks, which will be determined from the monthly reports. The power factor standard that the Transmission Provider and Transmission Customer must adhere to requires that each power factor aggregation zone (measured at the Point of Delivery, adjusted, where applicable, as provided above, and based on total real (kw) and reactive (kvar) integrated 60 minute clock hour demands for each zone) be between 95% lagging and 99% leading measured at the times coincident with the Transmission Provider's transmission system summer peak load and the Transmission Provider's transmission system winter peak load.

The power factor aggregation zones, which are defined on a geographic basis, for the Transmission Provider and for each Transmission Customer, shall be set forth in the Network Integration Transmission Service Agreement and/or Network Operating Agreement that is applicable to it. In addition, the Transmission Provider will post and maintain on its OASIS a list of power factor aggregation zones for the Transmission Provider and each current and pending Transmission Customer.

If, after the Transmission Customer fully complies with the power factor standard during the Initial Compliance Period, Transmission Customer then does not maintain and provide the necessary reactive compensation and control, on an on-going basis, to continue to comply with the power factor standard, Transmission Provider shall provide Transmission Customer with written notice of any alleged non-compliance, and if Transmission Customer does not resolve the matter to Transmission Provider's reasonable satisfaction within twenty-four (24) months from receipt of written notice, Transmission Provider shall have the unilateral right to install such necessary equipment to meet the standard; provided, however, that the exercise of such right must be on a comparable basis as to all power factor aggregation zones of all other Transmission Customers and the Transmission Provider itself. Transmission Provider shall have the right to seek to recover such expenses from the Transmission Customer, subject to the Dispute Resolution Procedures of the Tariff, based upon a showing, among other things, that Transmission Provider and all other Transmission Customers have met the power factor standard.